



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

RE: 2718981 - DETAILS

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

**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: State:  
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

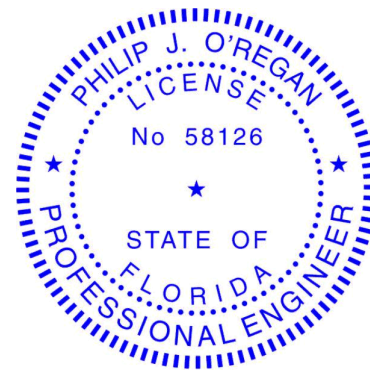
This package includes 20 individual, General Truss Details and 0 Additional Drawings.  
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

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	T23399825	MII-STRGBCK	4/2/21
7	T23399812	MII-GE140-001	4/2/21				
8	T23399813	MII-GE170-D-SP	4/2/21				
9	T23399814	MII-GE180-D-SP	4/2/21				
10	T23399815	MII-GE180-D-SP	4/2/21				
11	T23399816	MII-PIGGY-ALT-7-16	4/2/21				
12	T23399817	MII-REP01A1	4/2/21				
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.

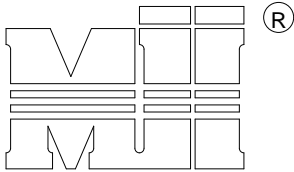


Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

**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.

April 2,2021





MiTek USA, Inc.

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.

VERTICAL STUDS @ 48" O.C.. ATTACHED  
WITH (3) - 10d (0.131" X 3") NAILS AT  
EACH END OF VERTICAL (TYP.).

VERTICAL STUDS TO BE 2 x 4 STUD GRADE  
(OR BETTER) SPF, HF, DF OR SP.  
(BOARD SIZE SPECIFIED IS MINIMUM,  
LARGER SIZE MAY BE USED)

2 x 4 NO. 2 (OR BETTER) SPF, HF,  
DF OR SP FALSE BOTTOM CHORD  
(BOARD SIZE SPECIFIED IS MINIMUM,  
LARGER SIZE MAY BE USED)

FALSE BOTTOM

TRUSS SPAN

NOTES:

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

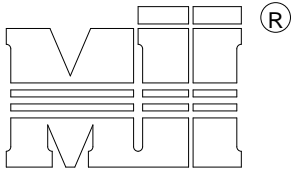
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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

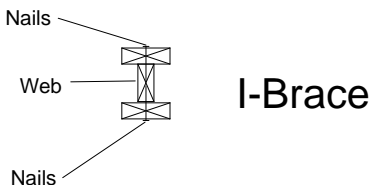
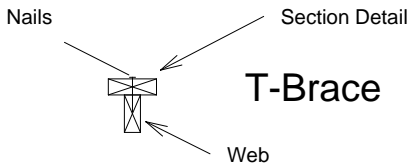
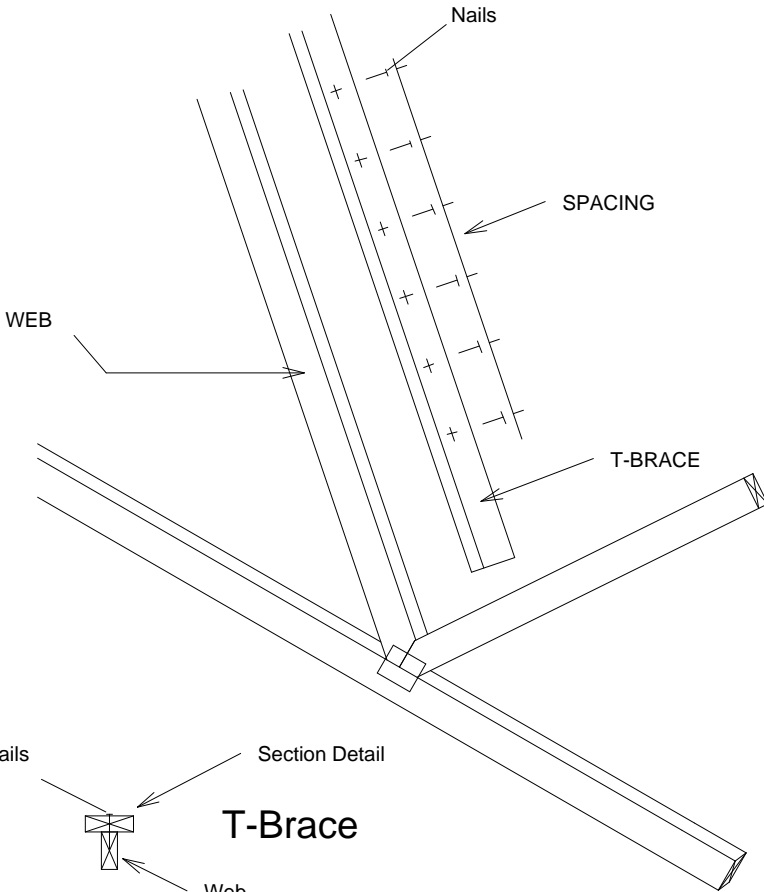
Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

Nailing Pattern		
T-Brace size	Nail Size	Nail Spacing
2x4 or 2x6 or 2x8	10d (0.131" X 3")	6" o.c.
Note: Nail along entire length of T-Brace / I-Brace (On Two-Ply's Nail to Both Plies)		

Web Size	Brace Size for One-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
	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

Web Size	Brace Size for Two-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
	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

T-Brace / I-Brace must be same species and grade (or better) as web member.



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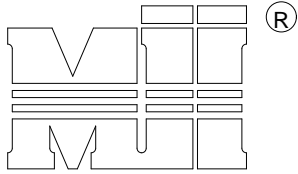
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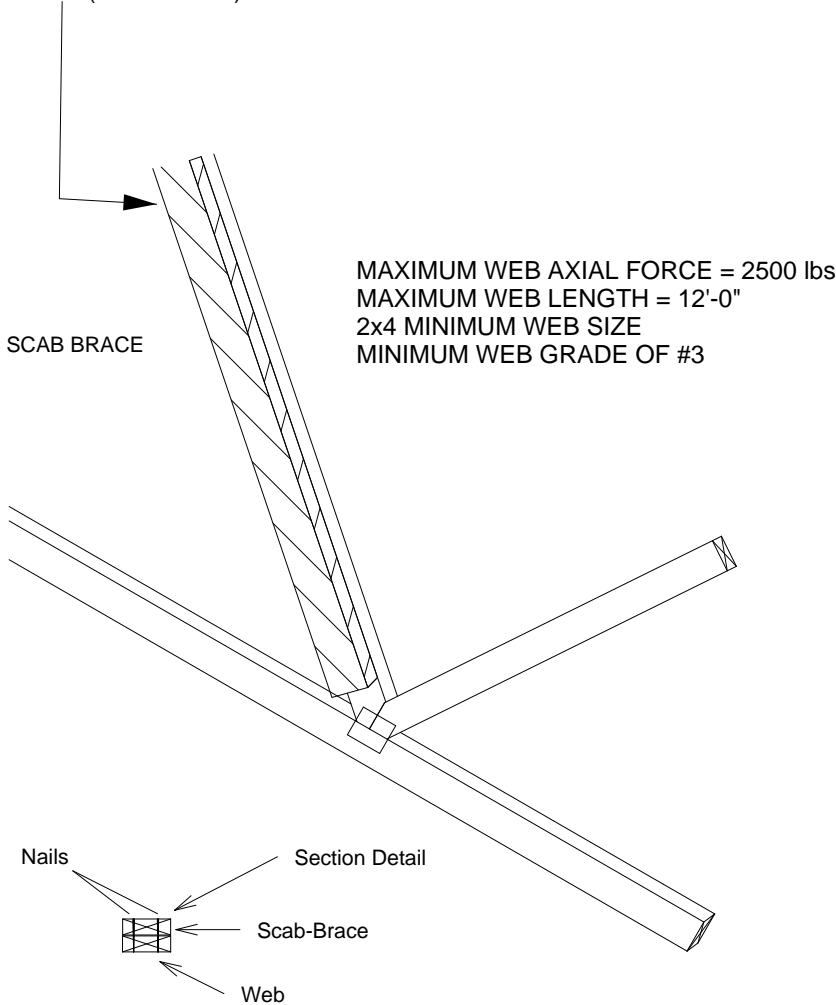


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Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.  
Scab must cover full length of web +/- 6".

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

APPLY 2x\_\_\_ SCAB TO ONE FACE OF WEB WITH 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.



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

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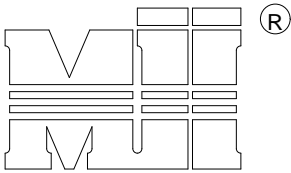
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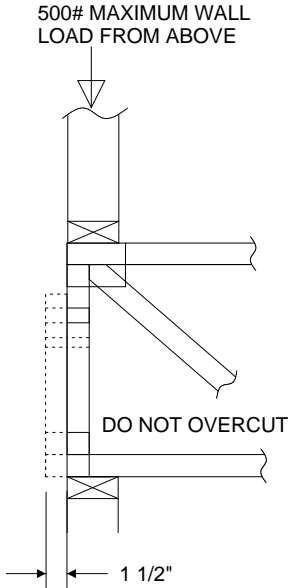


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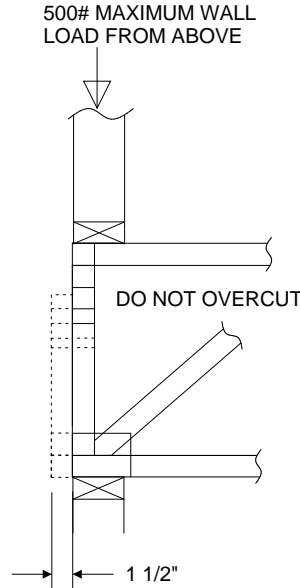


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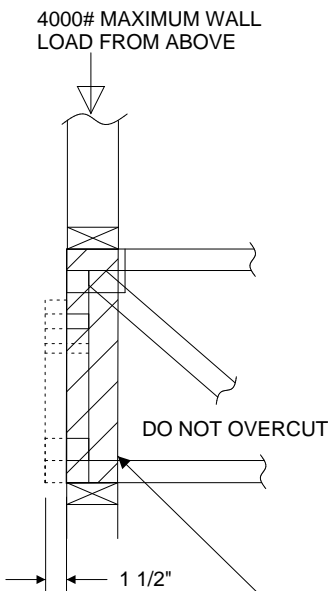
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS 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.



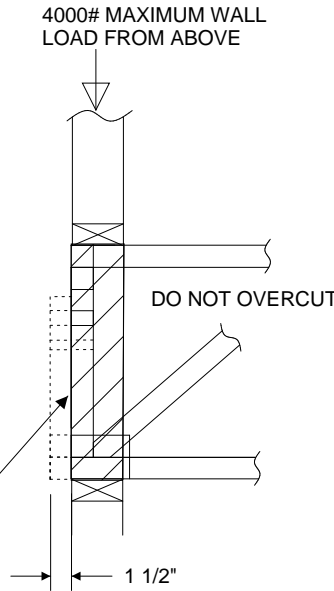
REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



TRUSSES BUILT WITH 4x2 MEMBERS



REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



TRUSSES BUILT WITH 4x2 MEMBERS

ATTACH 2x4 SQUASH BLOCK (CUT TO FIT TIGHTLY) TO BOTH SIDES OF THE TRUSS AS SHOWN WITH 10d (0.131" X 3") NAILS SPACED 3" O.C.

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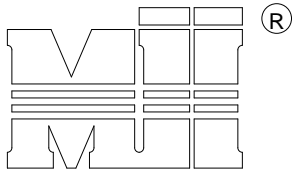
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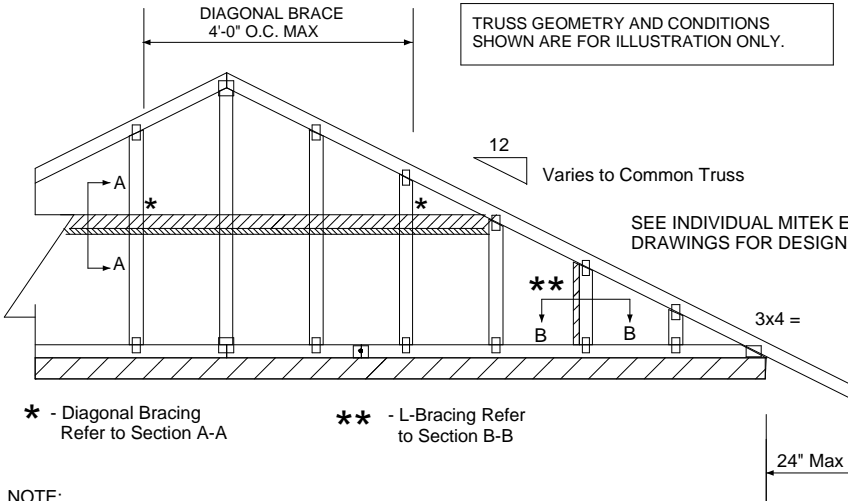
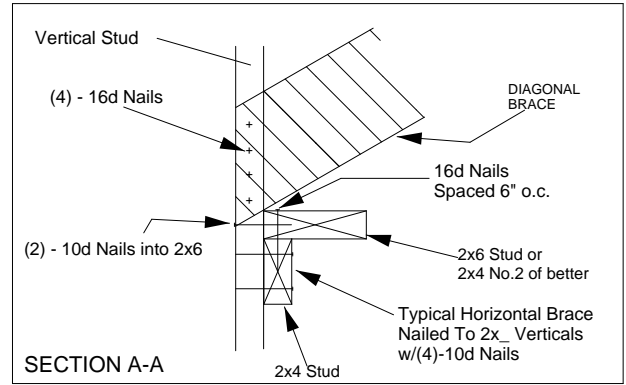
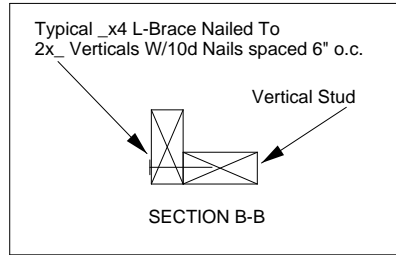
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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\* - Diagonal Bracing Refer to Section A-A

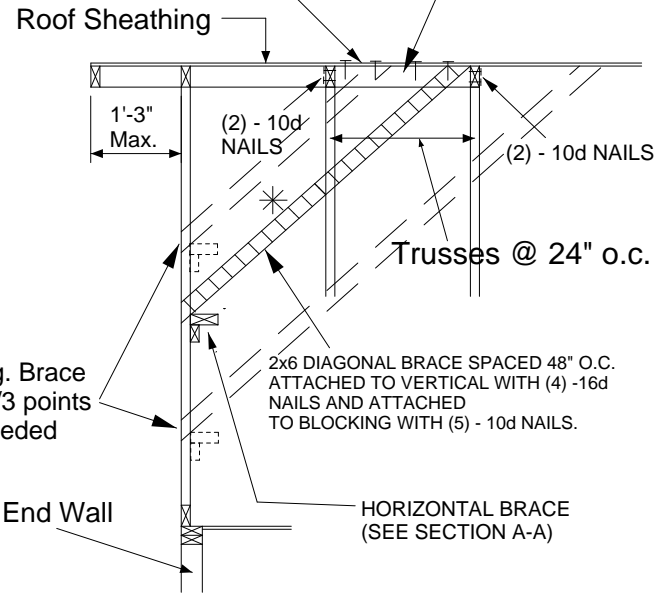
\*\* - L-Bracing Refer to Section B-B

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.
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.
9. 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")

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



Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
						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 l-braces attached to both edges. Fasten T and l 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.

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MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE D  
ASCE 7-98, ASCE 7-02, ASCE 7-05, 130 MPH  
ASCE 7-10, ASCE 7-16, 160 MPH  
DURATION OF LOAD INCREASE

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.

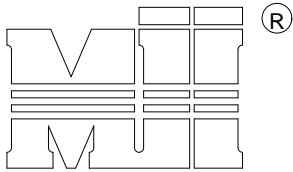
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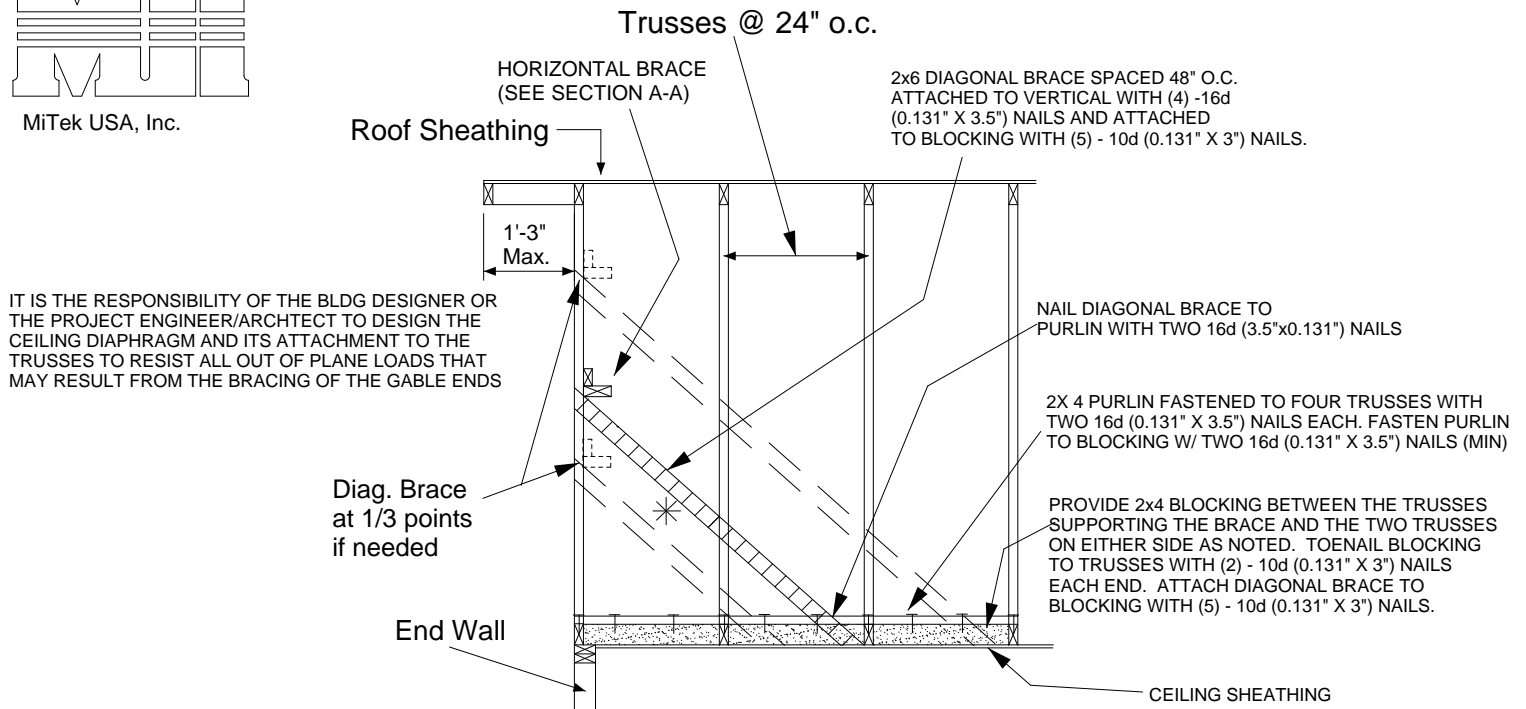


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ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD



IT IS THE RESPONSIBILITY OF THE BLDG DESIGNER OR THE PROJECT ENGINEER/ARCHTECT TO DESIGN THE CEILING DIAPHRAGM AND ITS ATTACHMENT TO THE TRUSSES TO RESIST ALL OUT OF PLANE LOADS THAT MAY RESULT FROM THE BRACING OF THE GABLE ENDS

BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

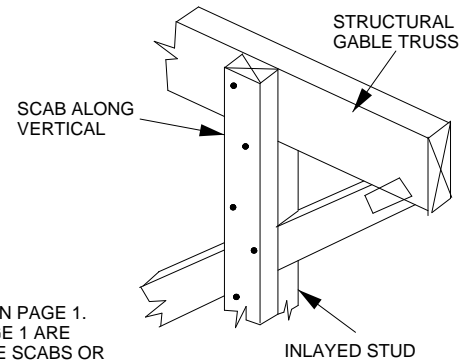
STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:

METHOD 1 : ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE FOLLOWING NAILING SCHEDULE.

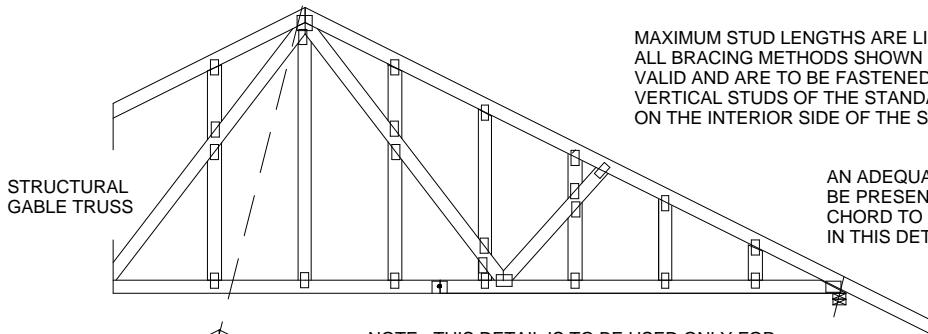
METHOD 2 : ATTACH 2X SCABS TO THE FACE OF EACH VERTICAL MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE AND SPECIES AS THE TRUSS VERTICALS

NAILING SCHEDULE:

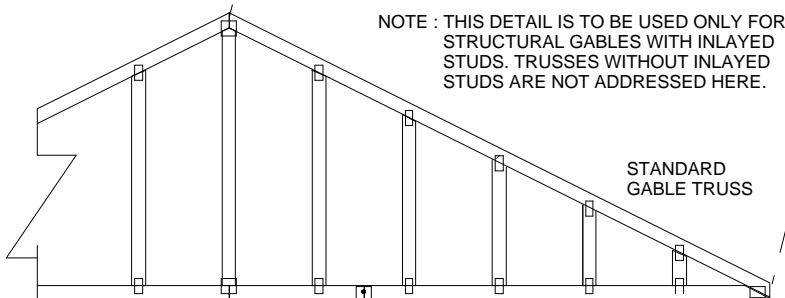
- FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10, 16) OR LESS, NAIL ALL MEMBERS WITH ONE ROW OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
- FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL MEMBERS WITH TWO ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C.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

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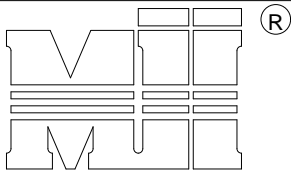
April 2,2021

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

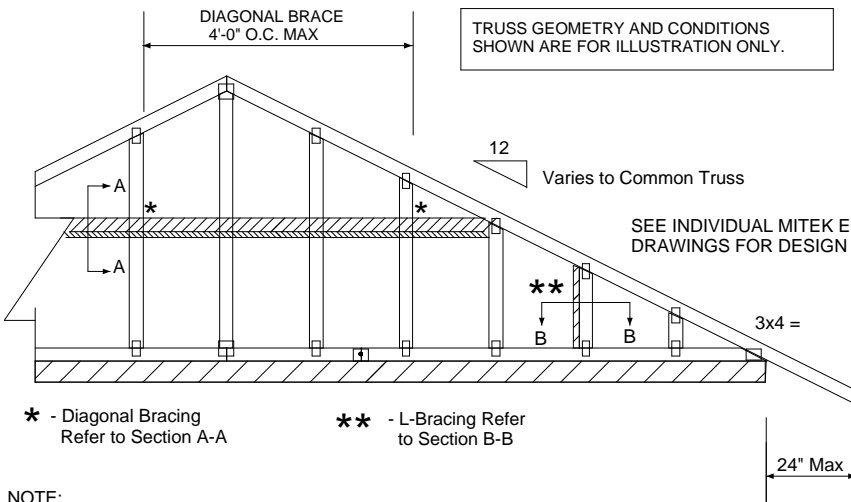
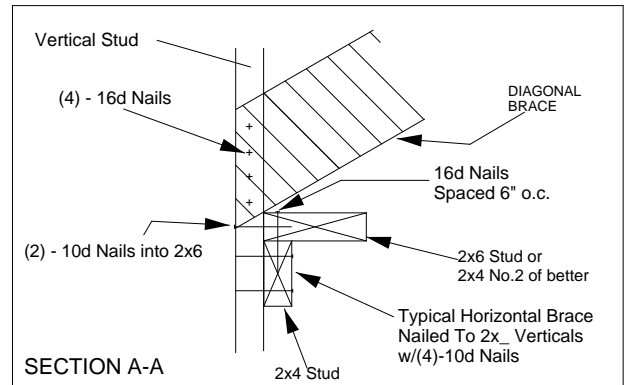
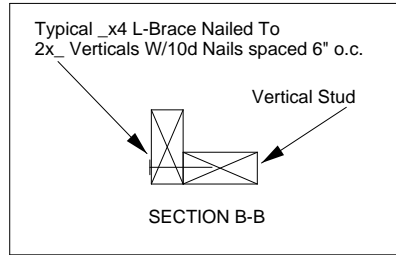
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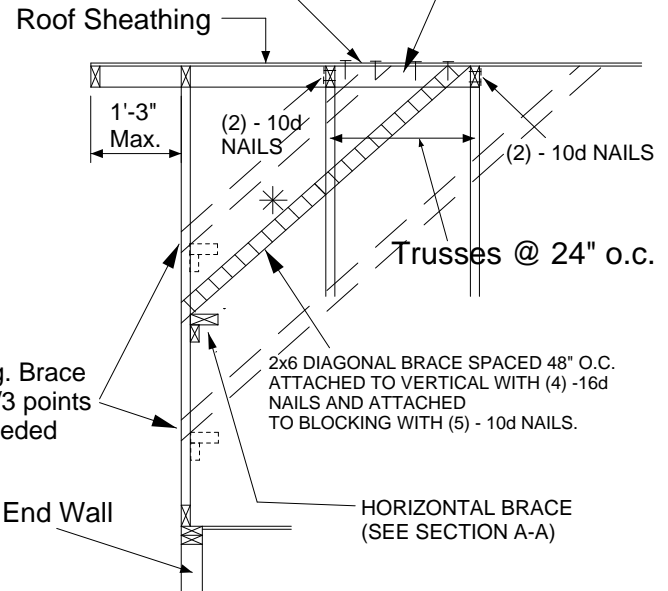


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PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

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



- 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.
  9. 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")

\* - Diagonal Bracing Refer to Section A-A

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

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length				
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.

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

April 2, 2021

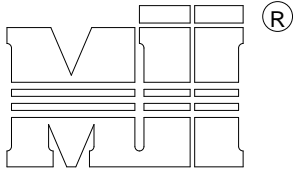
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-98, ASCE 7-02, ASCE 7-05, 130 MPH  
ASCE 7-10, ASCE 7-16, 160 MPH  
DURATION OF LOAD INCREASE = 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MVFRS. 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

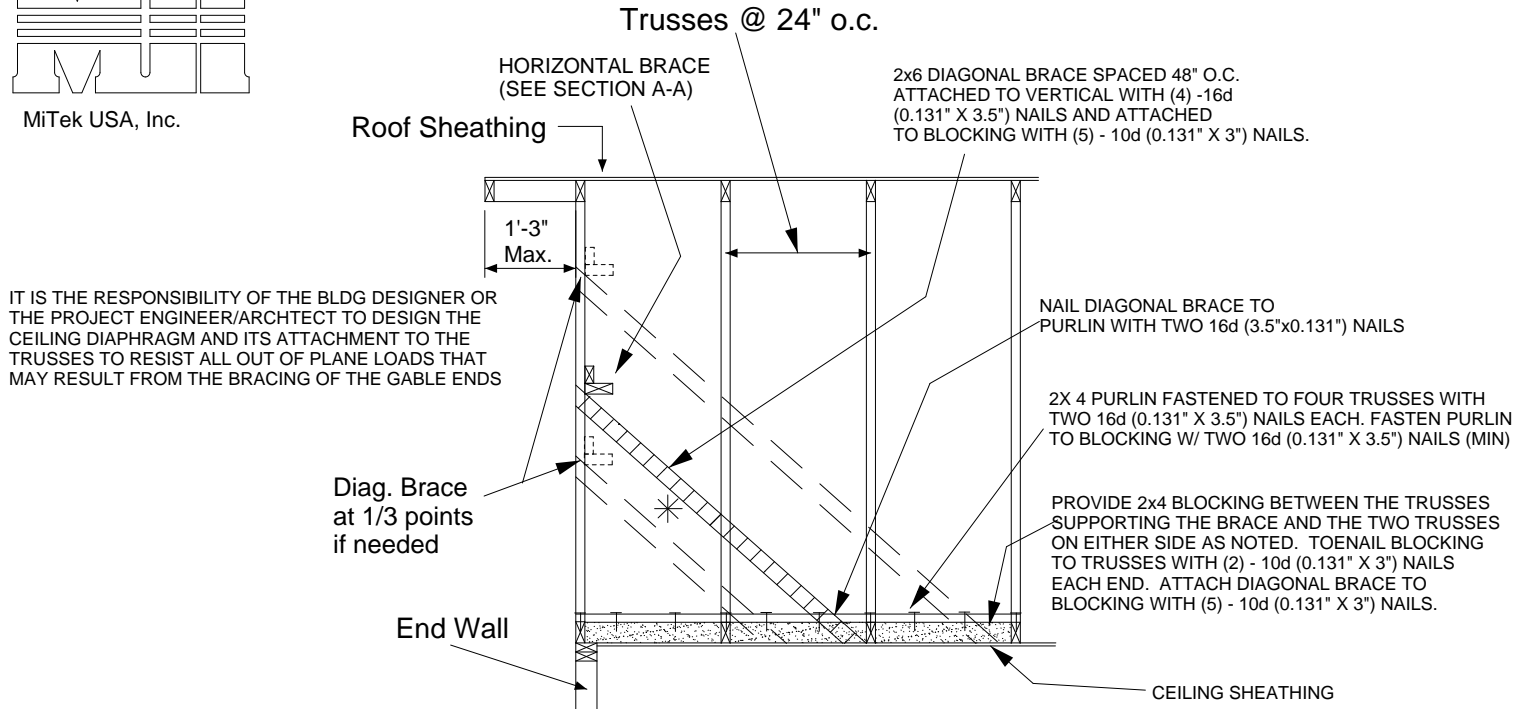


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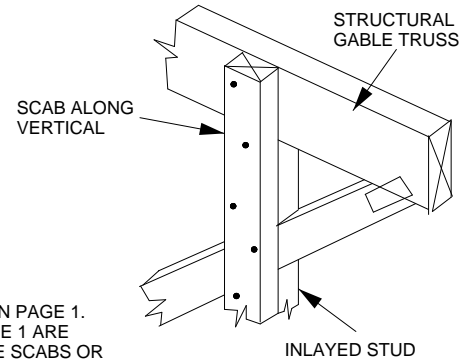
ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD



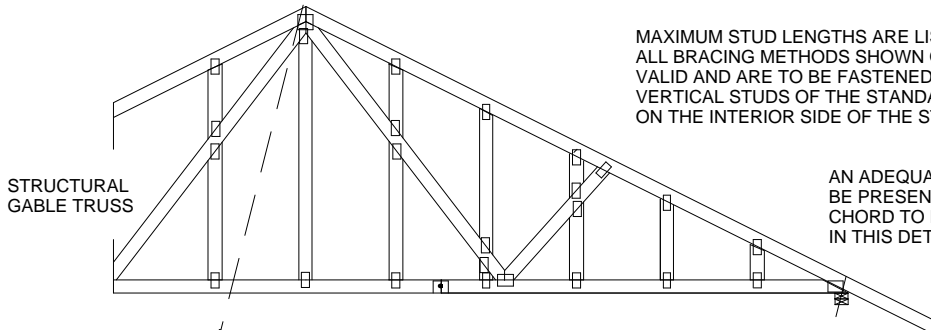
IT IS THE RESPONSIBILITY OF THE BLDG DESIGNER OR THE PROJECT ENGINEER/ARCHTECT TO DESIGN THE CEILING DIAPHRAGM AND ITS ATTACHMENT TO THE TRUSSES TO RESIST ALL OUT OF PLANE LOADS THAT MAY RESULT FROM THE BRACING OF THE GABLE ENDS

BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

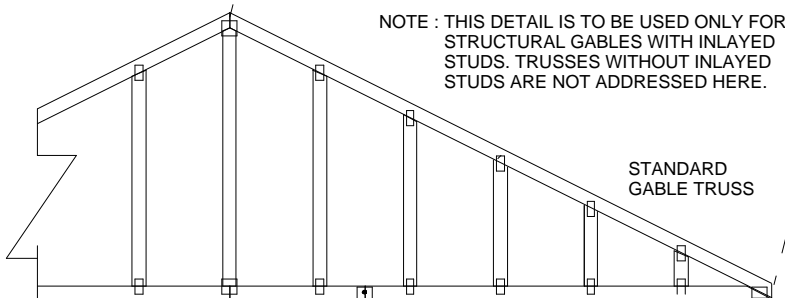
- STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:
- METHOD 1 : ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE FOLLOWING NAILING SCHEDULE.
  - METHOD 2 : ATTACH 2X 4 SCABS TO THE FACE OF EACH VERTICAL MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE AND SPECIES AS THE TRUSS VERTICALS
- NAILING SCHEDULE:
- 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.
  - FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL 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 INLAIYED STUDS. TRUSSES WITHOUT INLAIYED STUDS ARE NOT ADDRESSED HERE.

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Philip J. O'Regan PE No.58126  
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6904 Parke East Blvd. Tampa FL 33610  
Date:

April 2,2021

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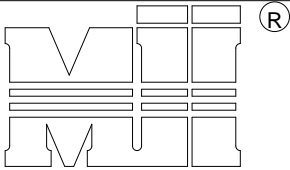
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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

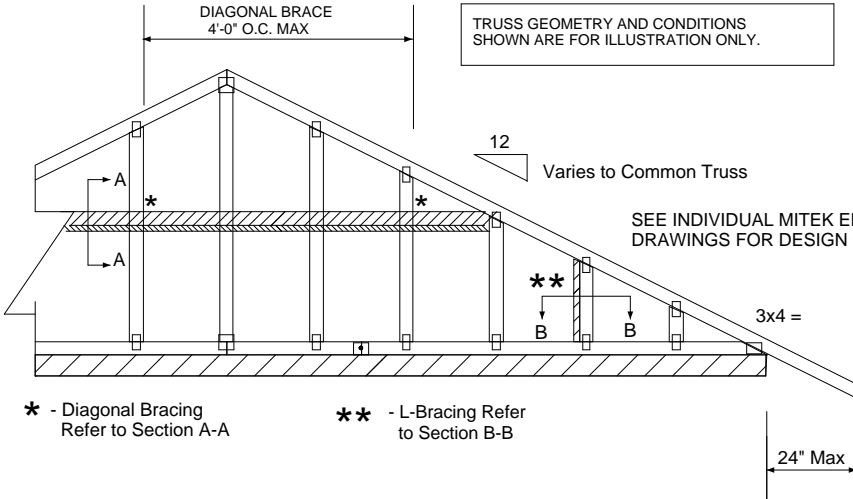
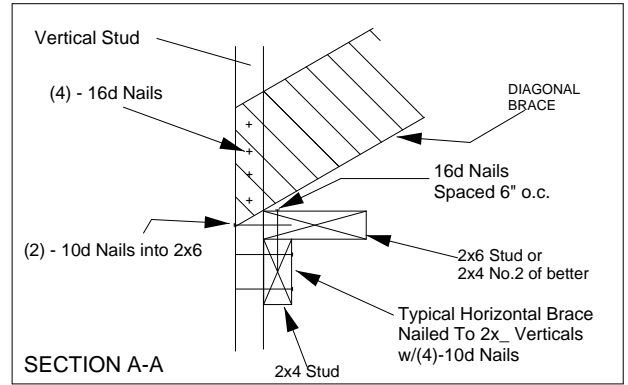
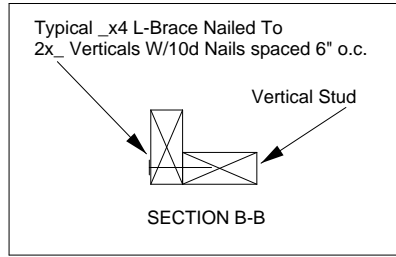
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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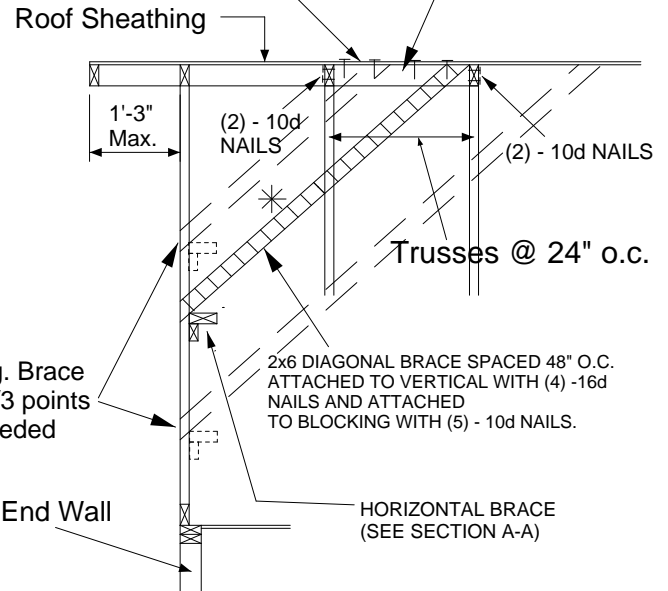


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PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

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



- 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.
  9. 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 and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		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.

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MiTek USA, Inc. FL Cert 6634  
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Date:

April 2, 2021

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

ASCE 7-98, ASCE 7-02, ASCE 7-05  
DURATION OF LOAD INCREASE = 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.

CONNECTION OF BRACINGS IS BASED ON MWPRS 173 rev. 5/19/2020 BEFORE USE.

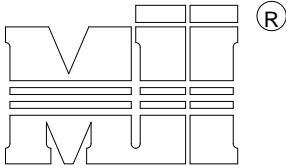
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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

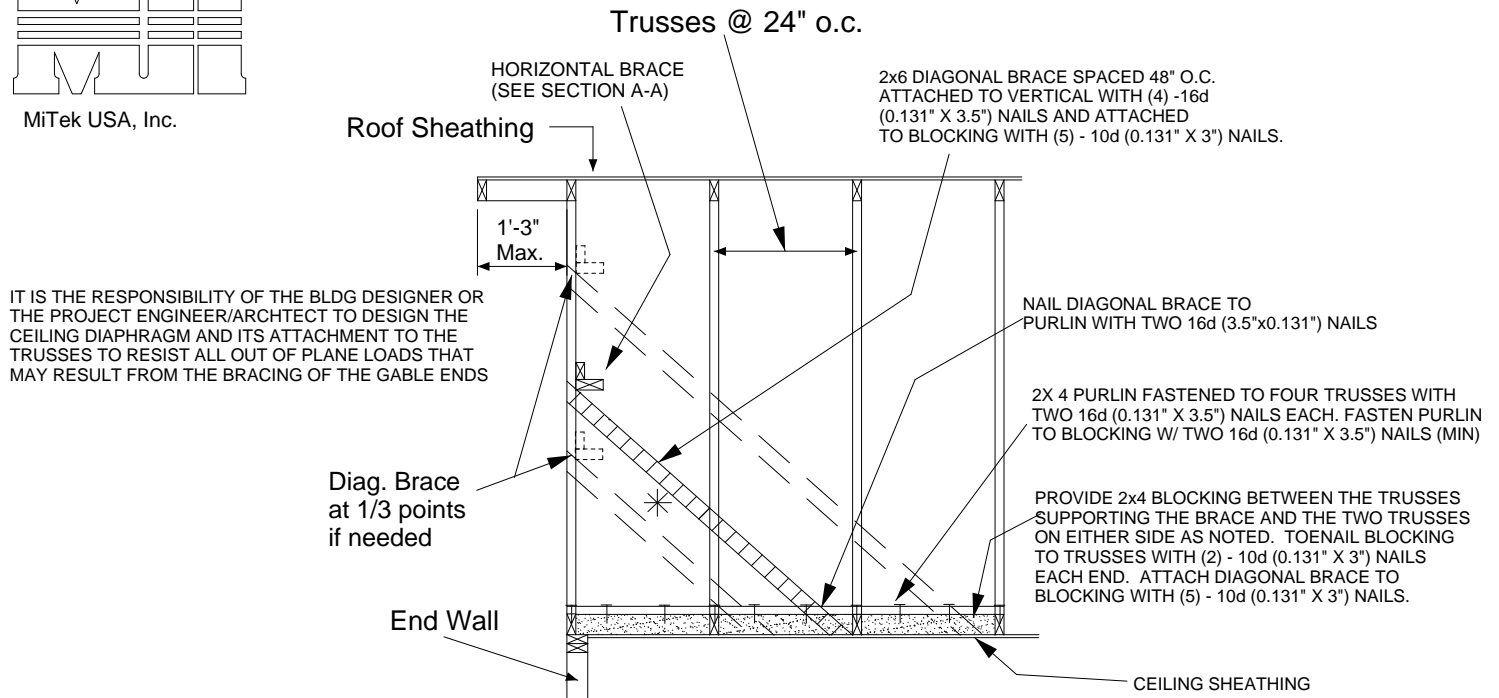


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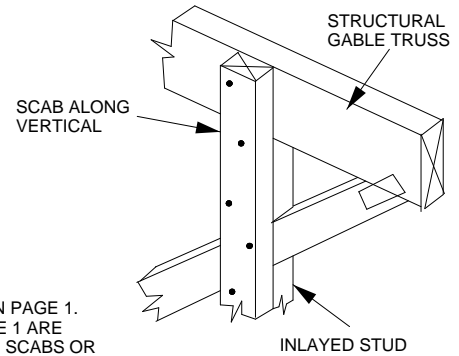
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ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD

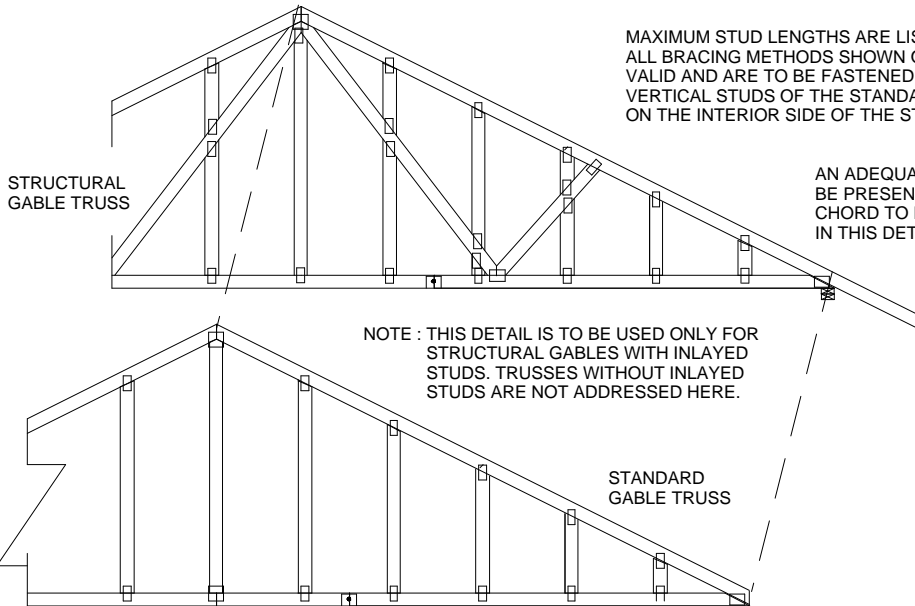


BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

- STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:
- METHOD 1 : ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE 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
- NAILING SCHEDULE:
- 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.
  - FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL 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.



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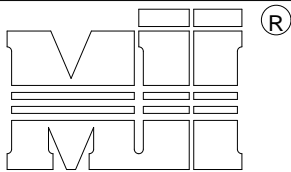
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

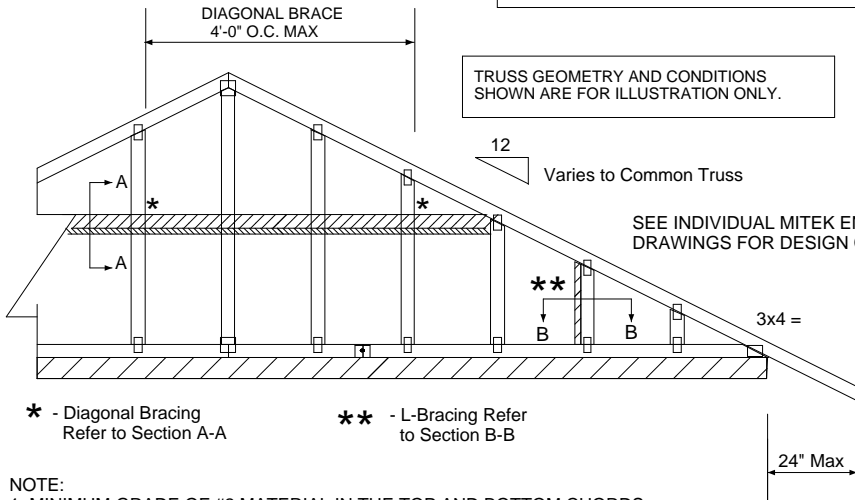
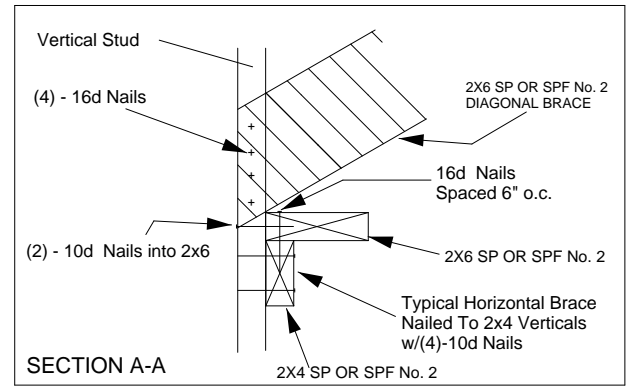
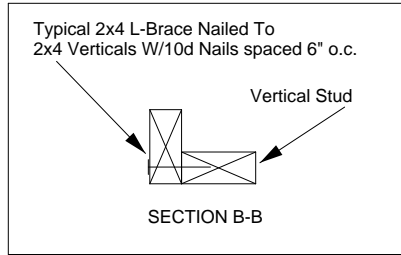
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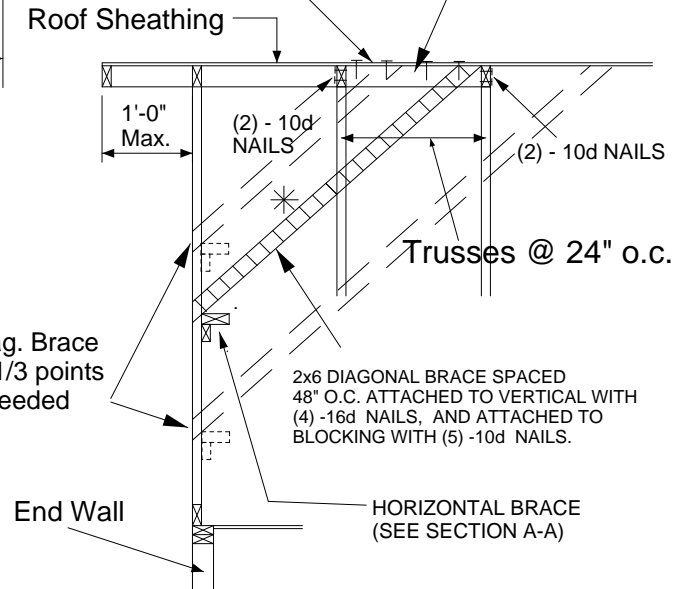


NOTE:

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, 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.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. 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")

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



Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
					Maximum 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 l 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 l braces must be 2x4 SPF No. 2 or SP No. 2.

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6904 Parke East Blvd. Tampa FL 33610  
Date:

April 2, 2021

MAX MEAN ROOF HEIGHT = 30 FEET  
EXPOSURE D

ASCE 7-10, ASCE 7-16 170 MPH

DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.

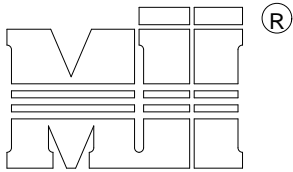
CONNECTION OF BRACING IS BASED ON MWFRS.

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

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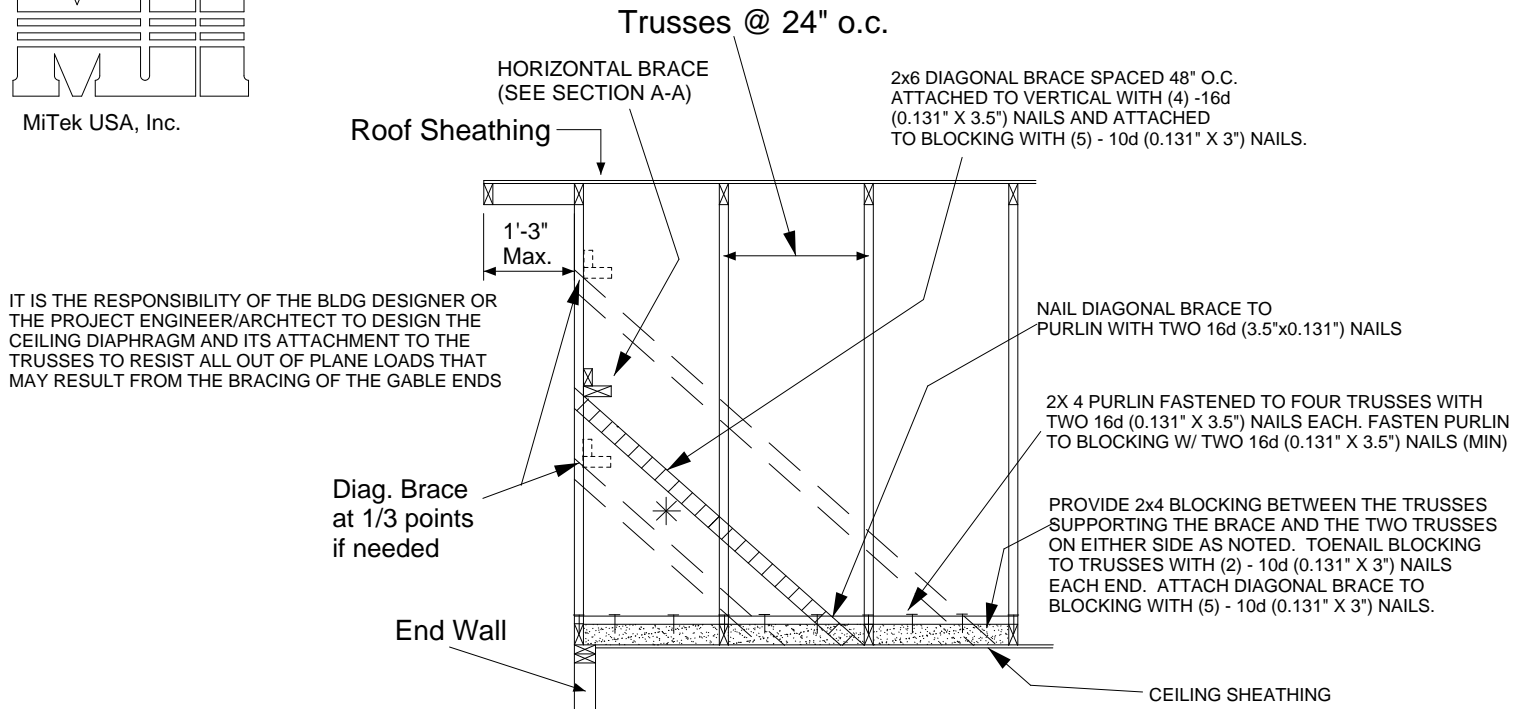


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ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD



BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

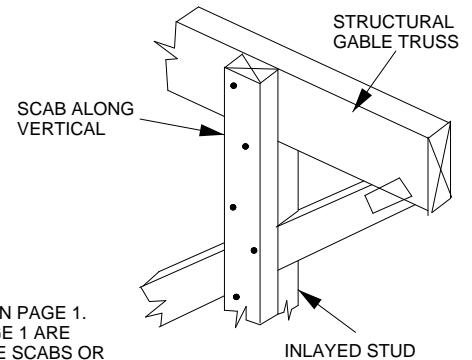
STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:

METHOD 1 : ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE FOLLOWING NAILING SCHEDULE.

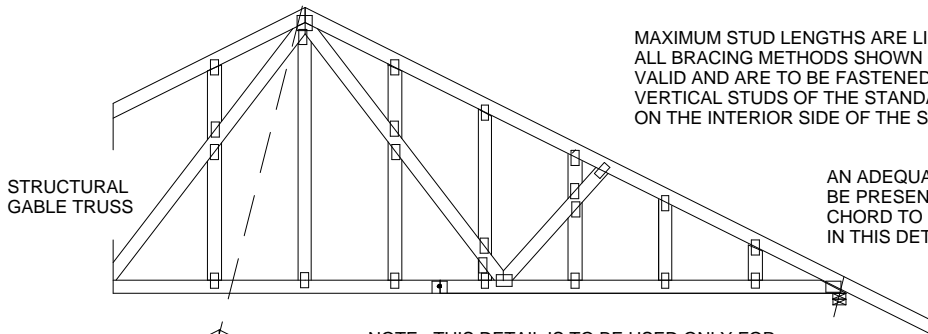
METHOD 2 : ATTACH 2X SCABS TO THE FACE OF EACH VERTICAL MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE AND SPECIES AS THE TRUSS VERTICALS

NAILING SCHEDULE:

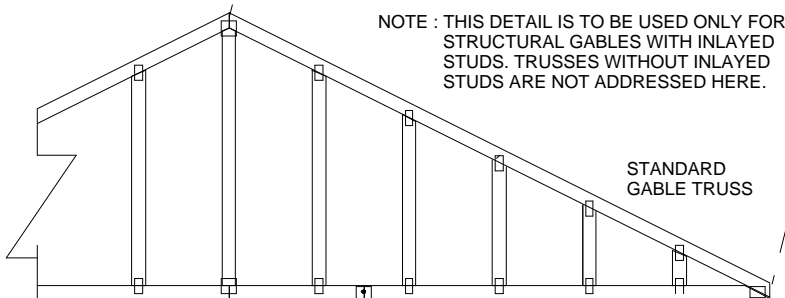
- FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10, 16) OR LESS, NAIL ALL MEMBERS WITH ONE ROW OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
- FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL MEMBERS WITH TWO ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C. (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 INLAVED STUDS. TRUSSES WITHOUT INLAVED STUDS ARE NOT ADDRESSED HERE.

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

April 2,2021

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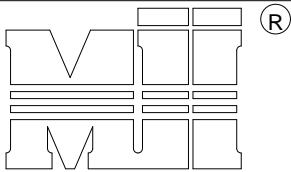
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

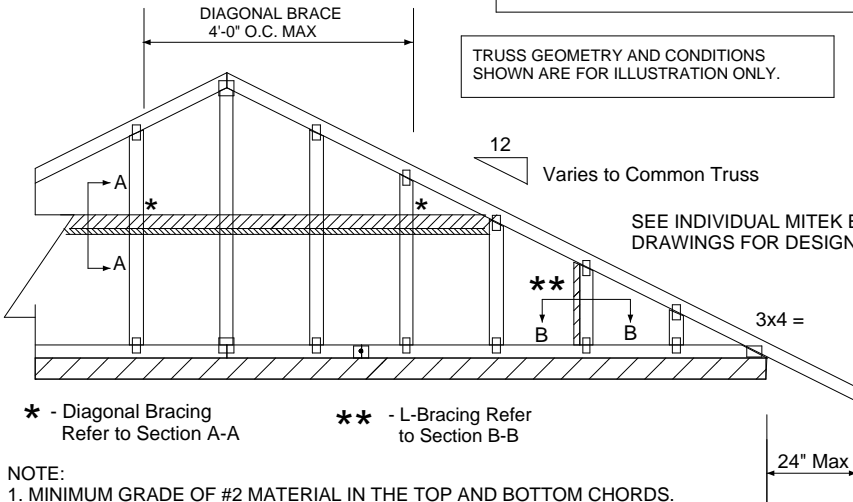
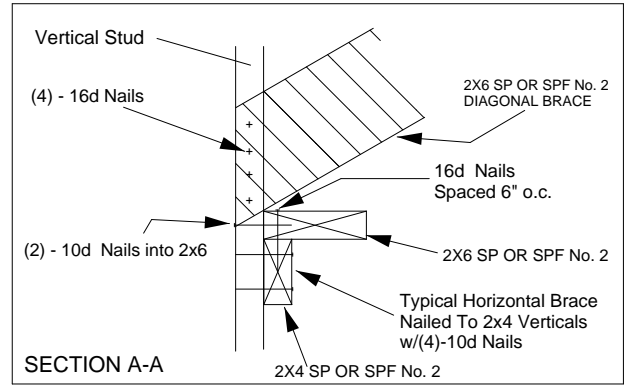
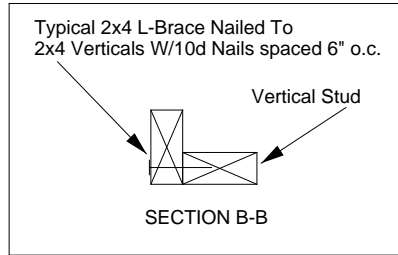
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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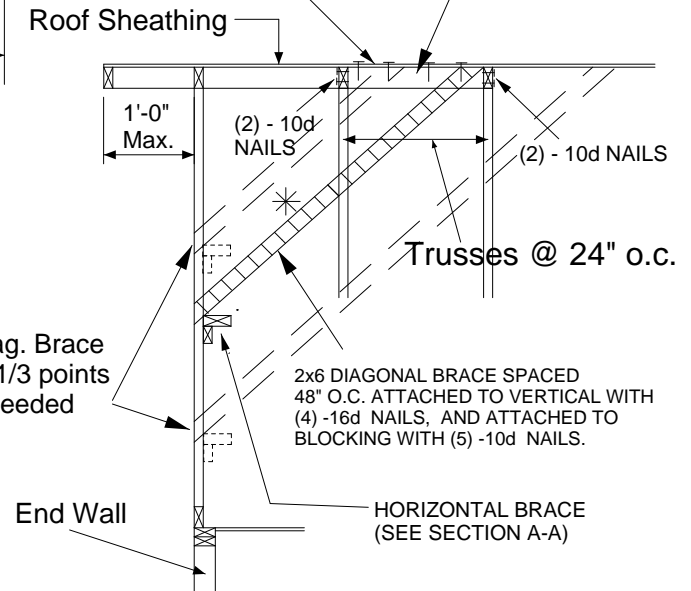
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- NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
  2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
  3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
  4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH, 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.
  8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
  9. 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")

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



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

\* 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.

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MAX MEAN ROOF HEIGHT = 30 FEET  
EXPOSURE D

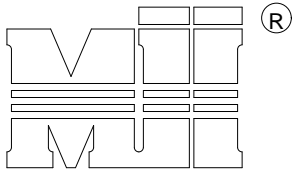
ASCE 7-10, ASCE 7-16 180 MPH  
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS

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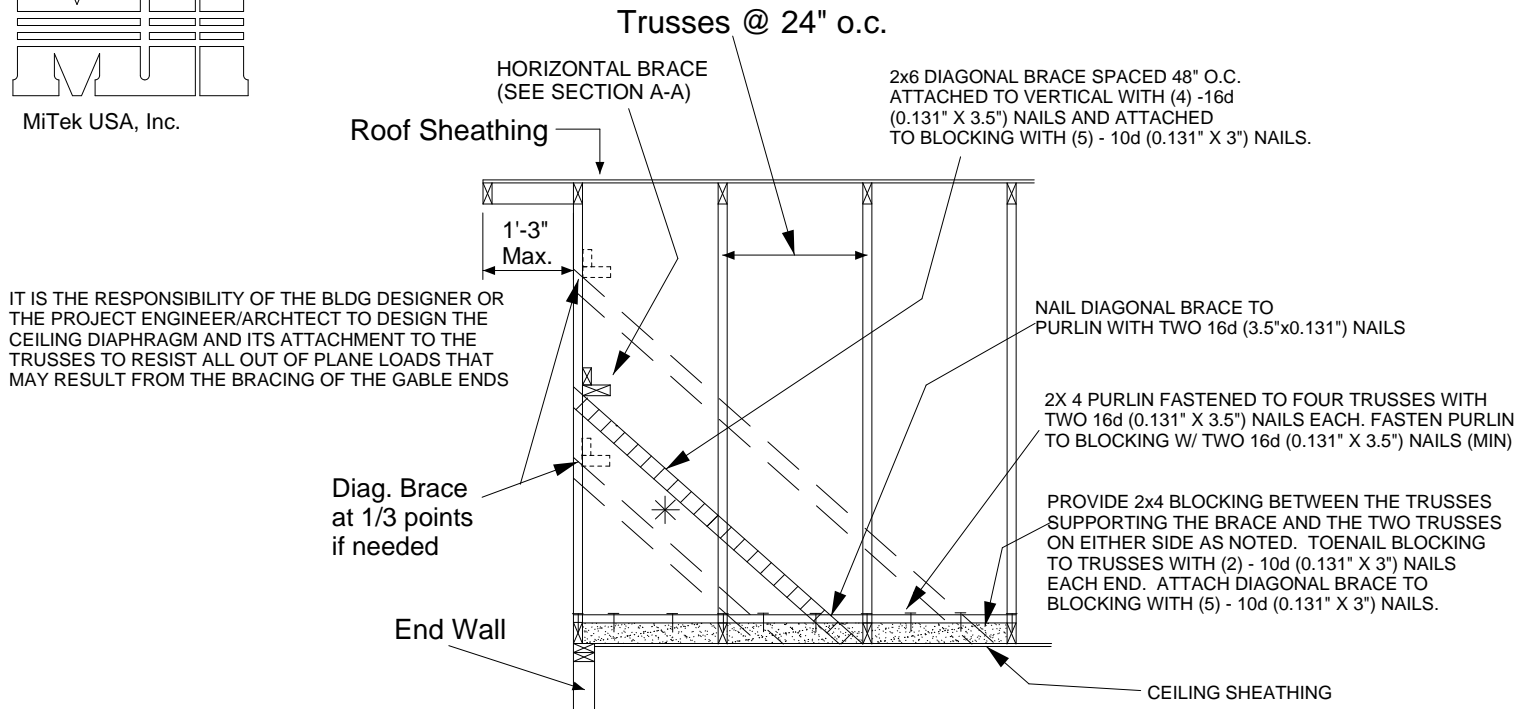


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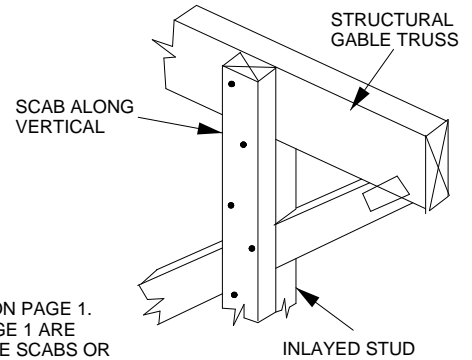
ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD



BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:  
 METHOD 1 : ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE 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

NAILING SCHEDULE:  
 - 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.  
 - FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL MEMBERS WITH TWO ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C. (2X 4 STUDS MINIMUM)



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STRUCTURAL 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.

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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

April 2,2021

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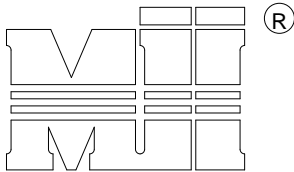
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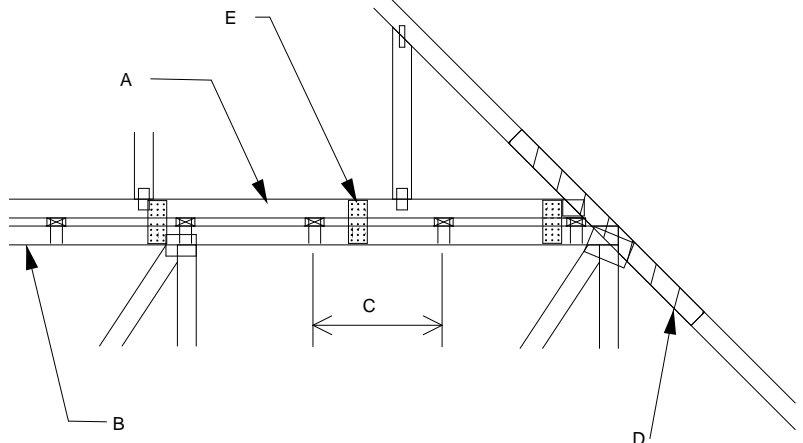


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MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E  
 MAX MEAN ROOF HEIGHT = 30 FEET  
 MAX TRUSS SPACING = 24" O.C.  
 CATEGORY II BUILDING  
 EXPOSURE B or C  
 ENCLOSED BUILDING  
 LOADING = 5 PSF TCDL  
 ASCE 7-10, ASCE 7-16  
 DURATION OF LOAD INCREASE : 1.60

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

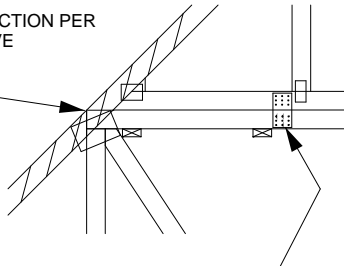
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING.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



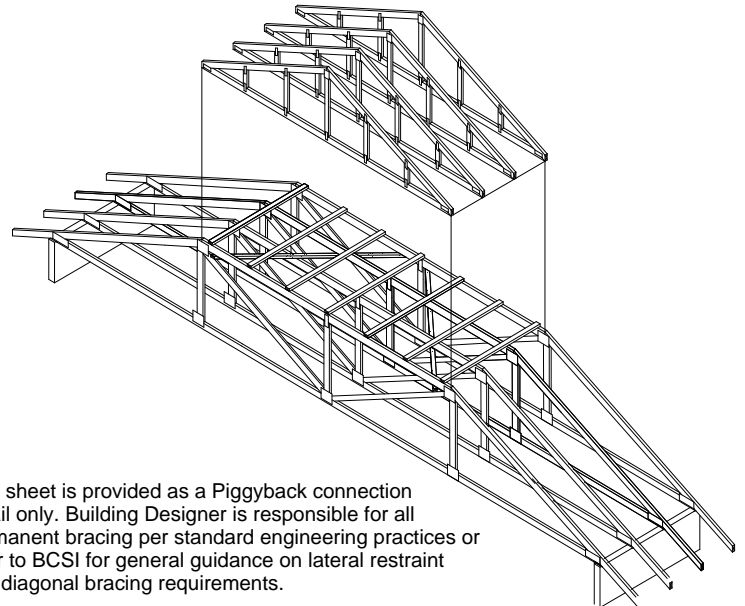
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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.

SCAB CONNECTION PER NOTE D ABOVE

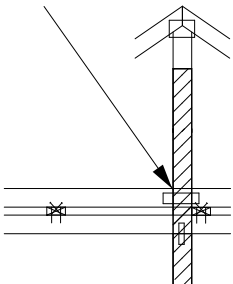


FOR ALL WIND SPEEDS, ATTACH MITEK NP37 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" NAIL EDGE DISTANCE.



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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.
- 2) 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 VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
- 3) 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 THE PIGGYBACK AND THE BASE TRUSS DESIGN.

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 Date:

April 2, 2021

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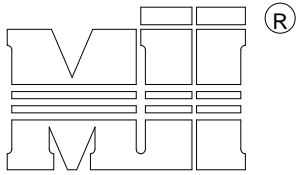
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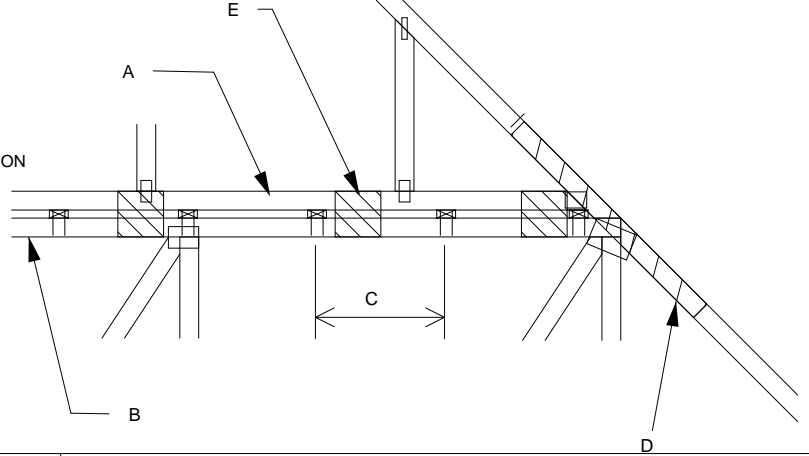


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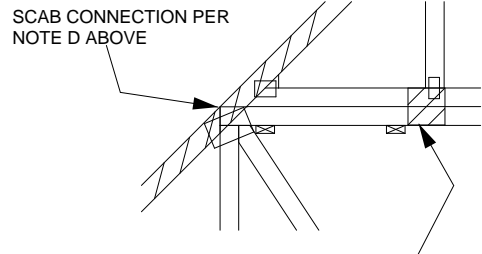
MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E  
 MAX MEAN ROOF HEIGHT = 30 FEET  
 MAX TRUSS SPACING = 24" O.C.  
 CATEGORY II BUILDING  
 EXPOSURE B or C  
 ENCLOSED BUILDING  
 LOADING = 5 PSF TC DL MINIMUM  
 ASCE 7-10, ASCE 7-16  
 DURATION OF LOAD INCREASE : 1.60

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

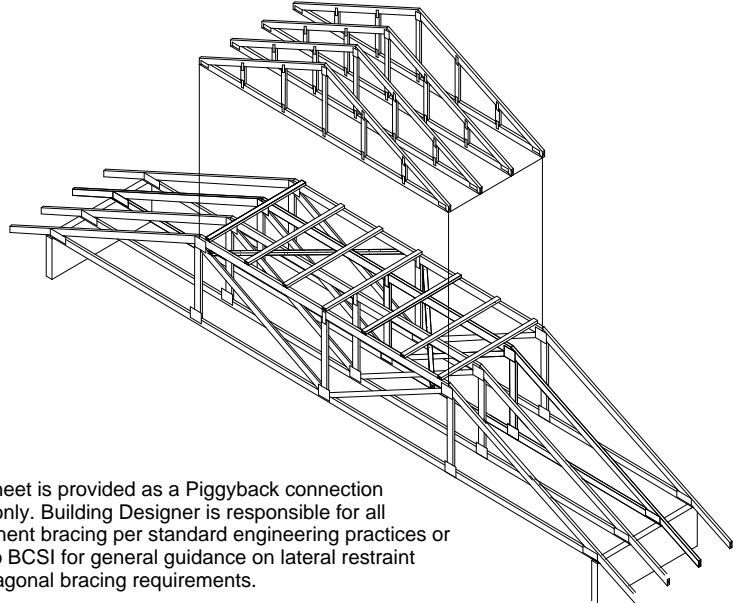
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING.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



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.

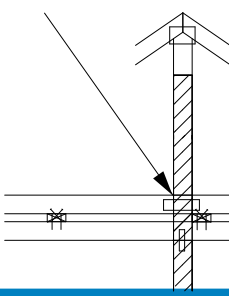


7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



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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.
- 2) 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 VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
- 3) 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.
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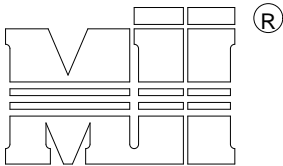
April 2,2021

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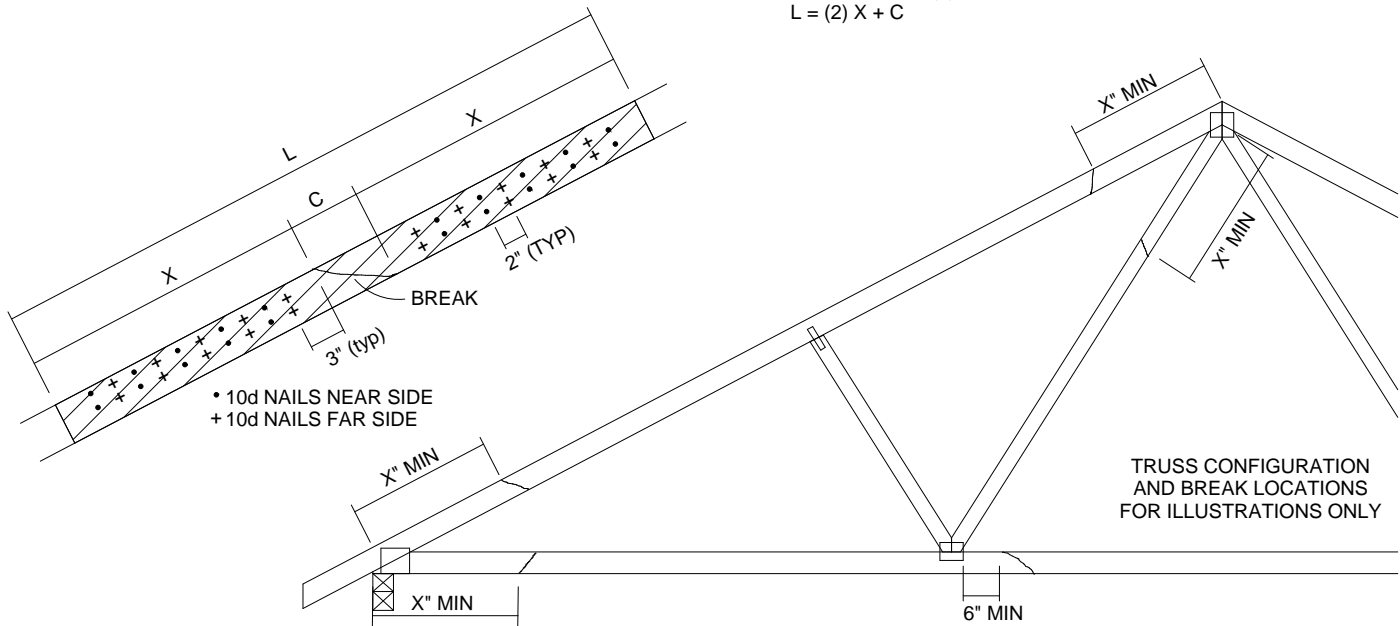
MiTek USA, Inc.

TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			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

\* 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:  
 $L = (2) X + C$



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:

1. 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 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 UNUSUAL SPLITTING OF THE WOOD.
4. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.
5. 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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MiTek USA, Inc. FL Cert 6634  
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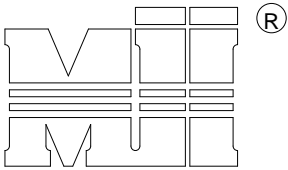
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6904 Parke East Blvd.  
Tampa, FL 36610



MiTek USA, Inc.

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

VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY

TOE-NAIL SINGLE SHEAR VALUES PER NDS 2018 (lb/nail)

	DIAM.	SP	DF	HF	SPF	SPF-S
3.5" LONG	.131	88.0	80.6	69.9	68.4	59.7
	.135	93.5	85.6	74.2	72.6	63.4
	.162	108.8	99.6	86.4	84.5	73.8
3.25" LONG	.128	74.2	67.9	58.9	57.6	50.3
	.131	75.9	69.5	60.3	59.0	51.1
	.148	81.4	74.5	64.6	63.2	52.5

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

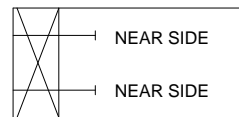
EXAMPLE:

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

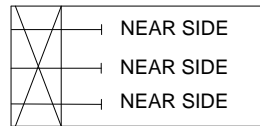
For load duration increase of 1.15:

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

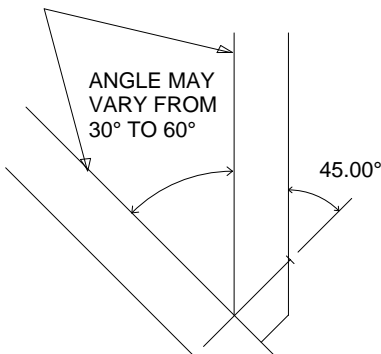
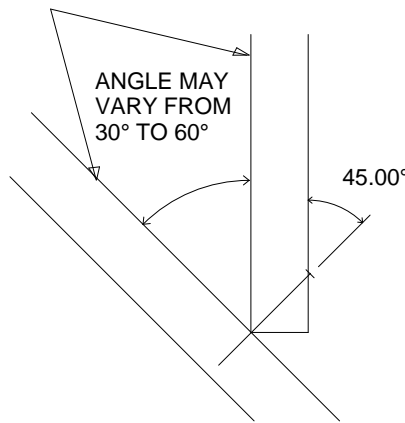
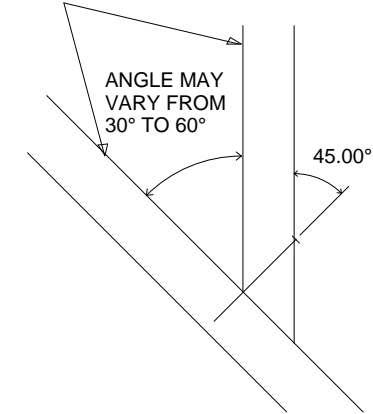
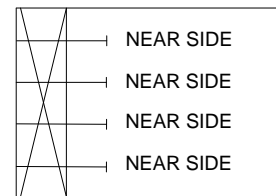
SIDE VIEW  
(2x3)  
2 NAILS



SIDE VIEW  
(2x4)  
3 NAILS



SIDE VIEW  
(2x6)  
4 NAILS



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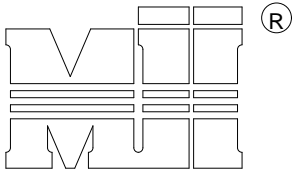
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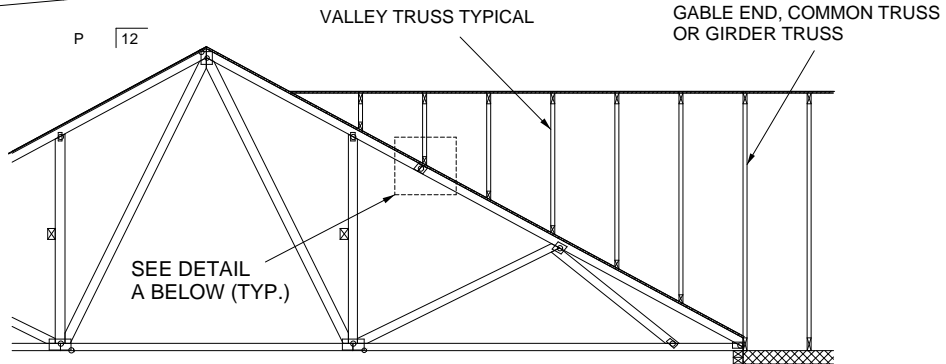
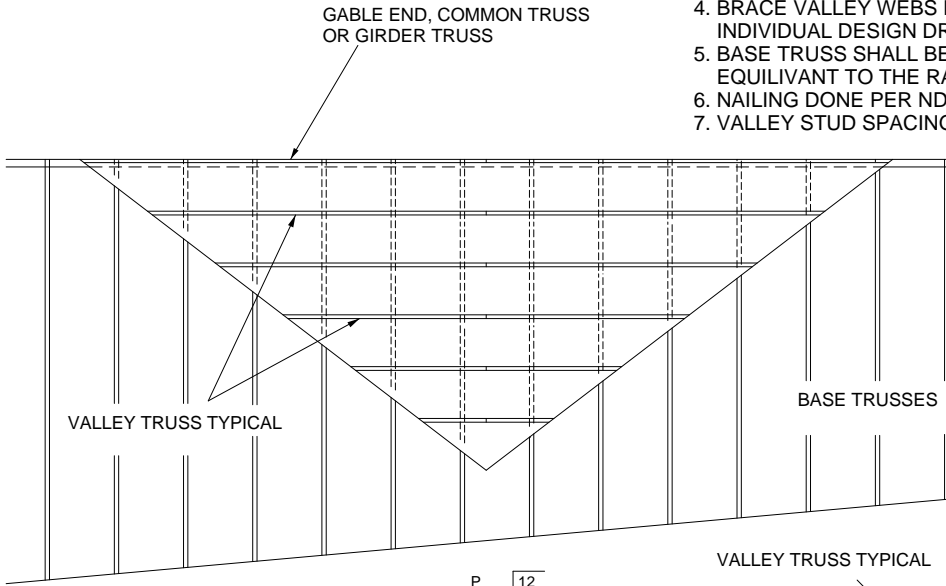
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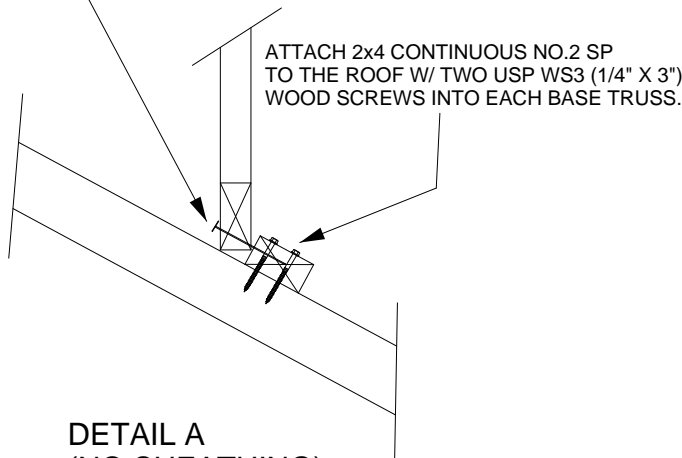
MiTek USA, Inc.

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 EQUIVANT 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.



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



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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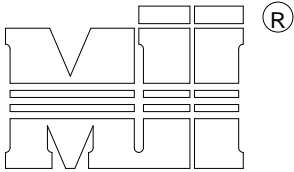
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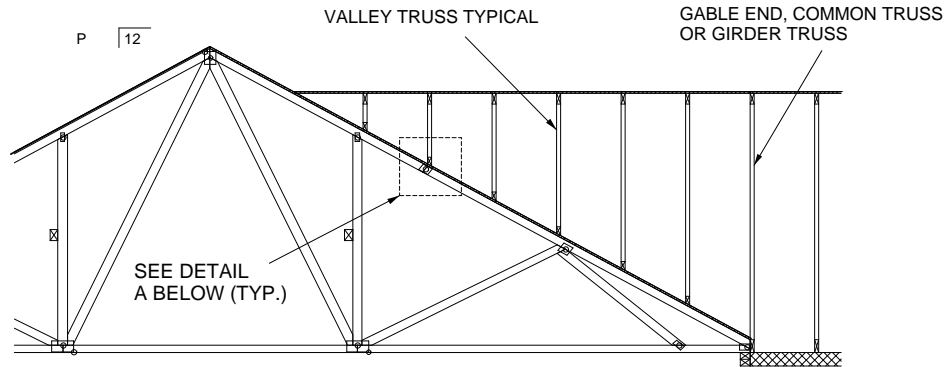
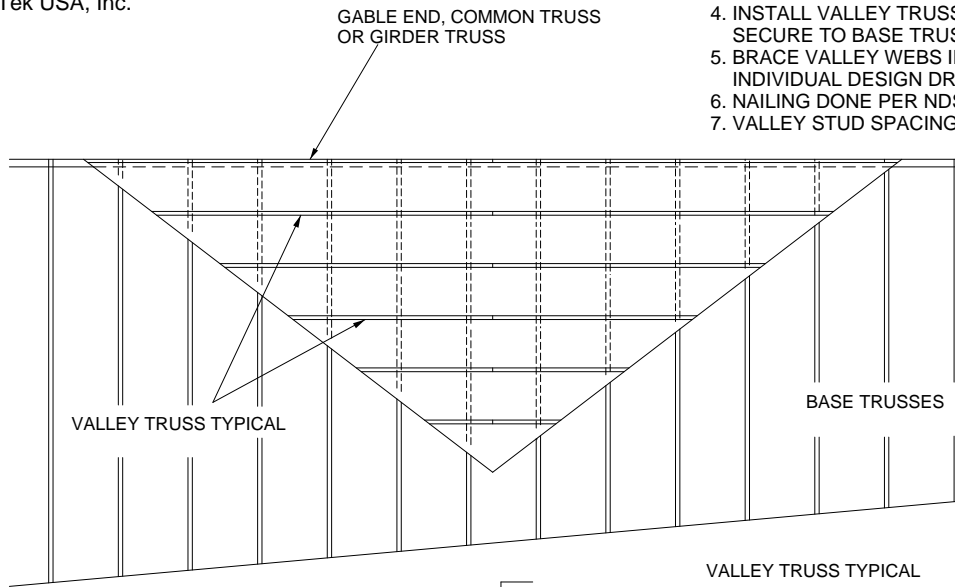
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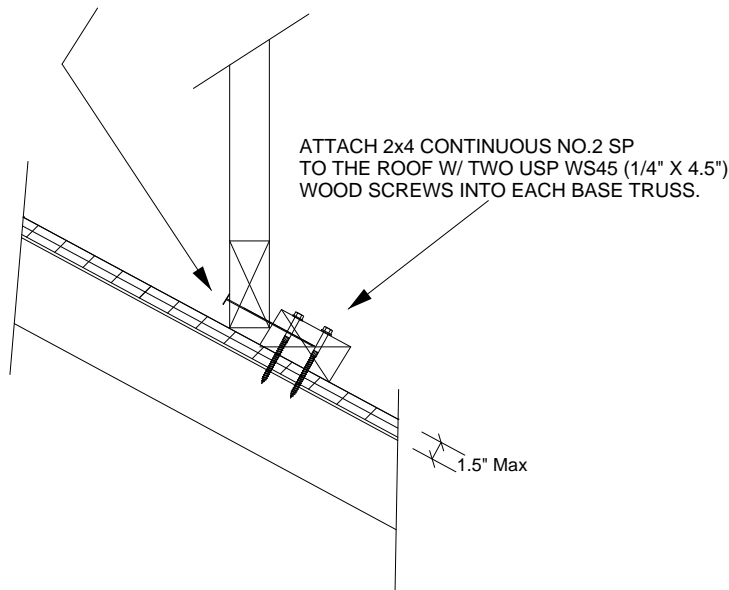
MiTek USA, Inc.

GENERAL SPECIFICATIONS

1. NAIL SIZE 10d (0.131" X 3")
2. WOOD SCREW = 4.5" WS45 USP OR EQUIVANT
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.



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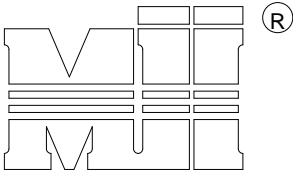
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



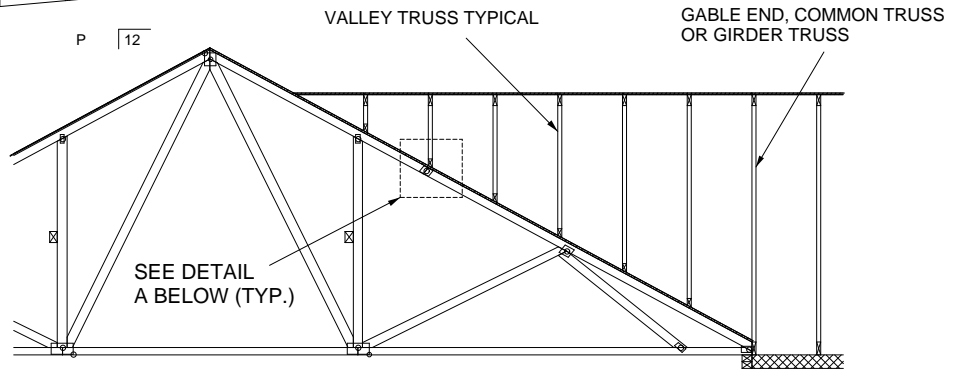
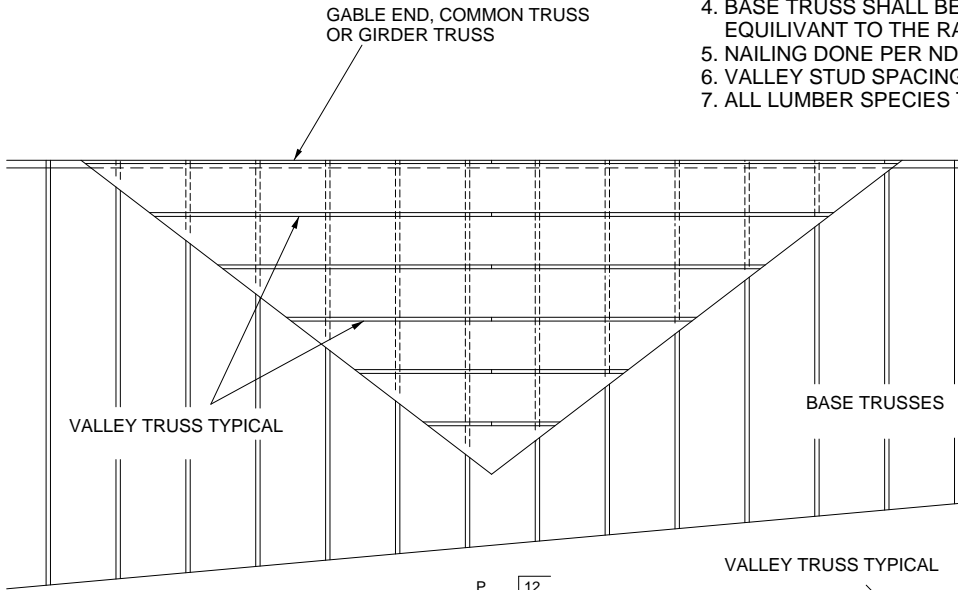
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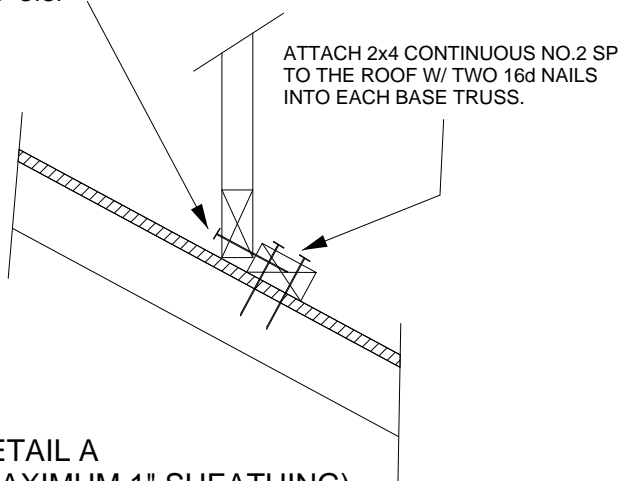
MiTek USA, Inc.

GENERAL SPECIFICATIONS

1. NAIL SIZE 16d (0.131" X 3.5")
2. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUIVARIANT 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.



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.

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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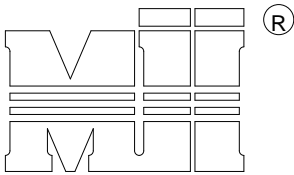
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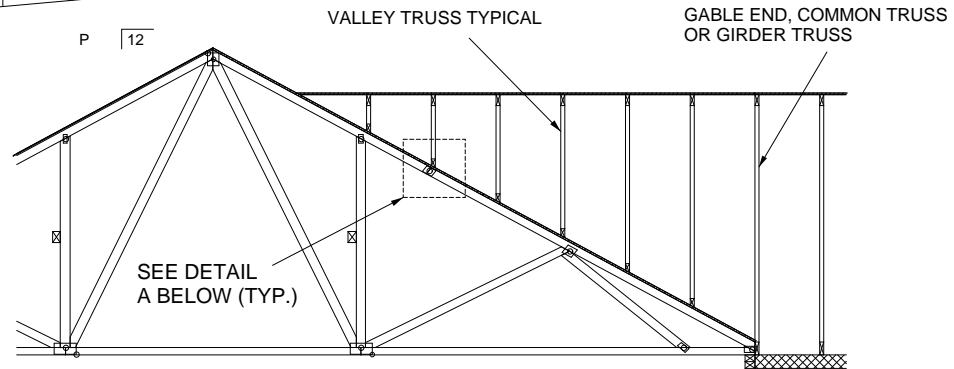
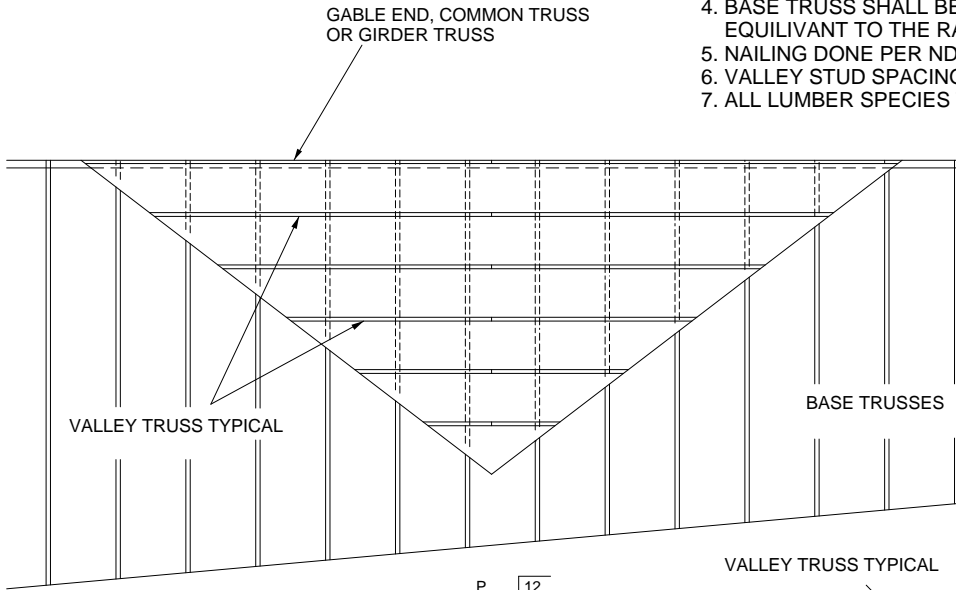
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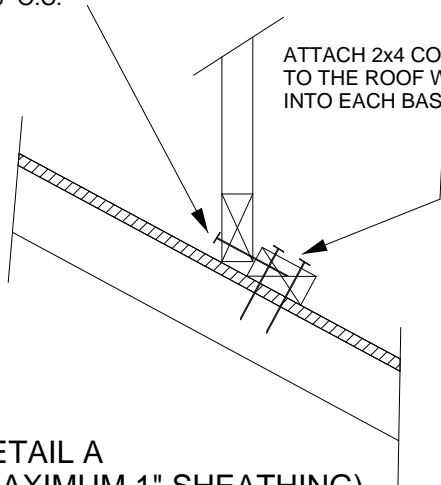
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4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUIVARIANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
5. NAILING DONE PER NDS - 01
6. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.
7. ALL LUMBER SPECIES TO BE SP.



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.



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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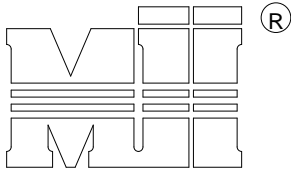
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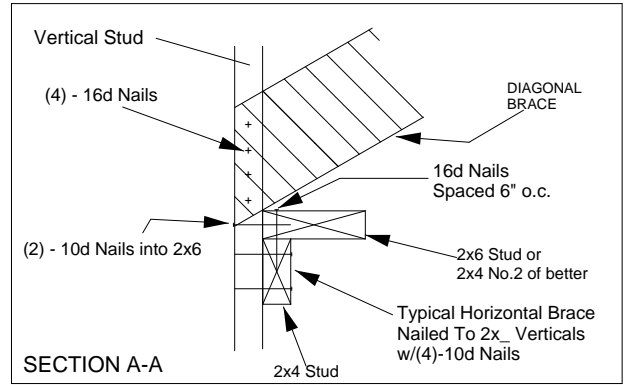
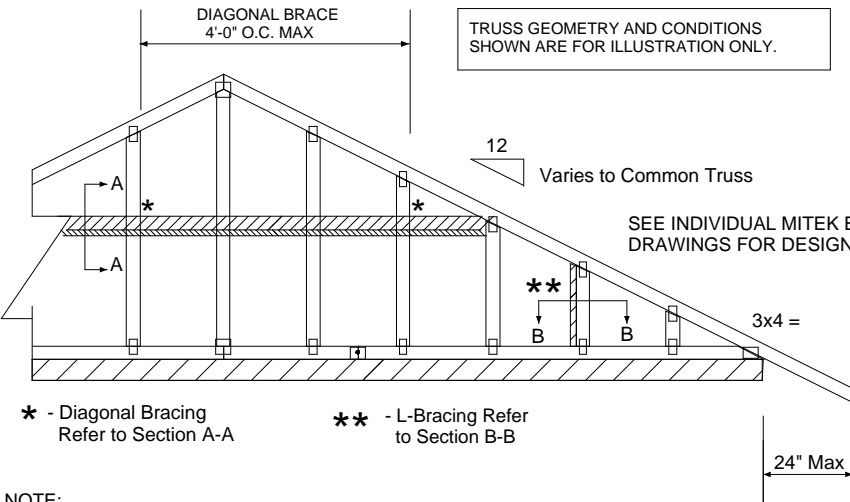
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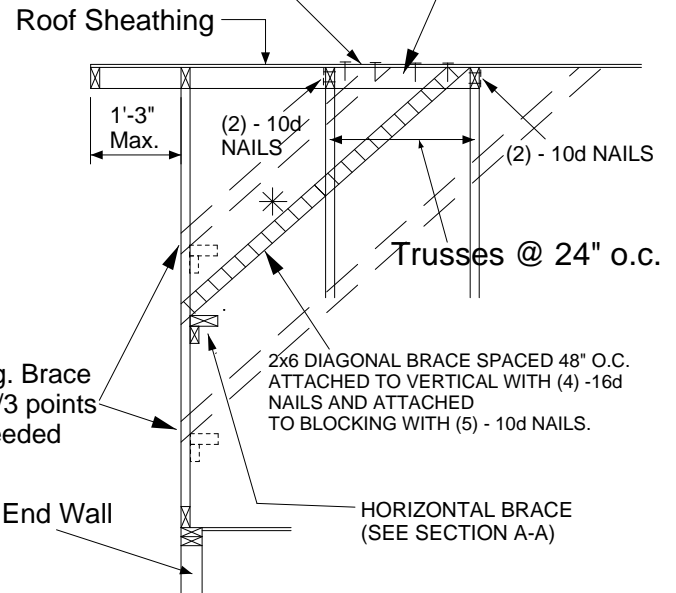


MiTek USA, Inc.



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



- 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.
  8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
  9. 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 and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		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.

This item has been electronically signed and sealed by O'Regan, 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  
Date:

April 2, 2021

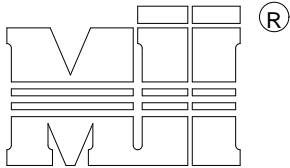
MAXIMUM WIND SPEED = 146 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C

ASCE 7-98, ASCE 7-02, ASCE 7-05  
DURATION OF LOAD INCREASE = 1.60 READ CONNECTION OF BRACINGS IS BASED ON MWFRS 173 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 ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

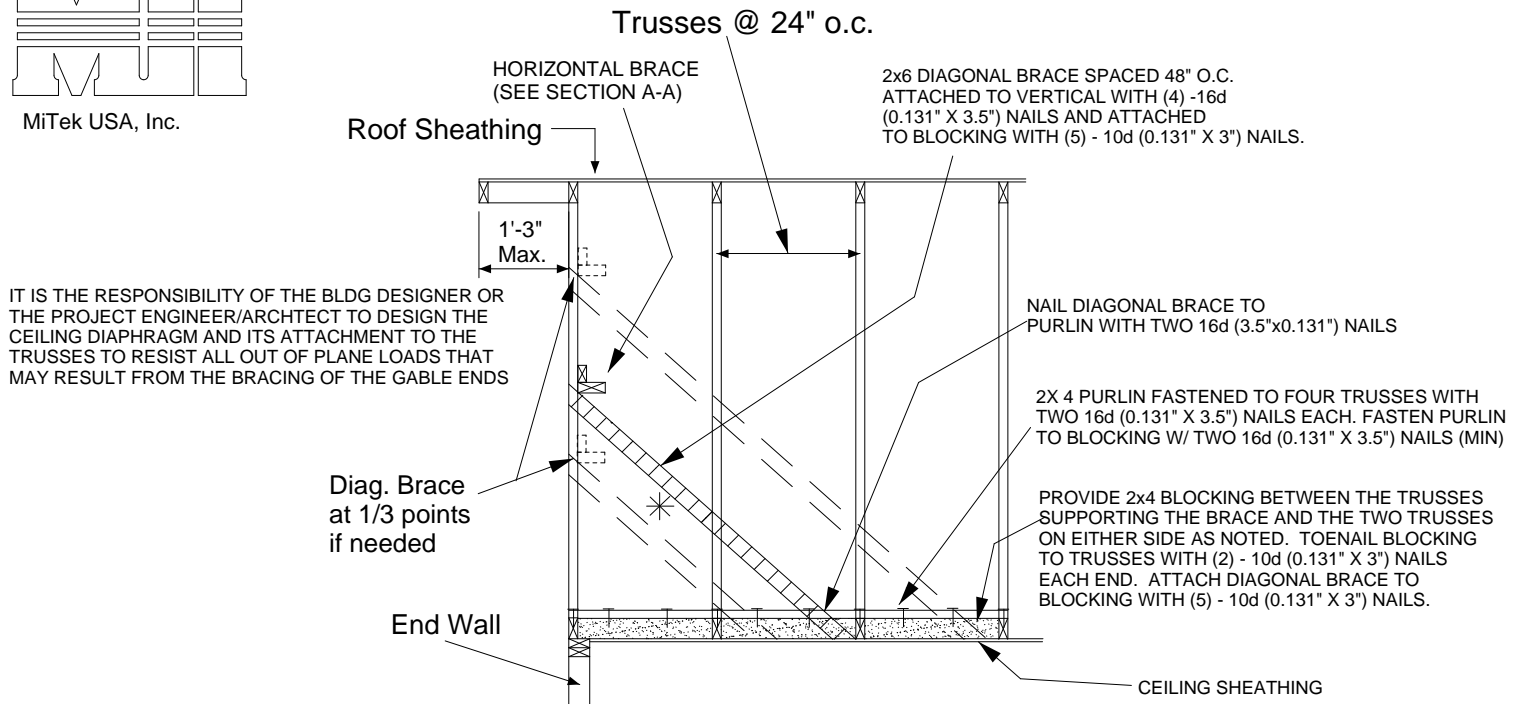


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Tampa, FL 36610



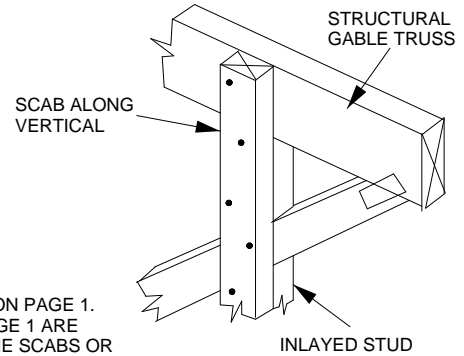
MiTek USA, Inc.

ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD

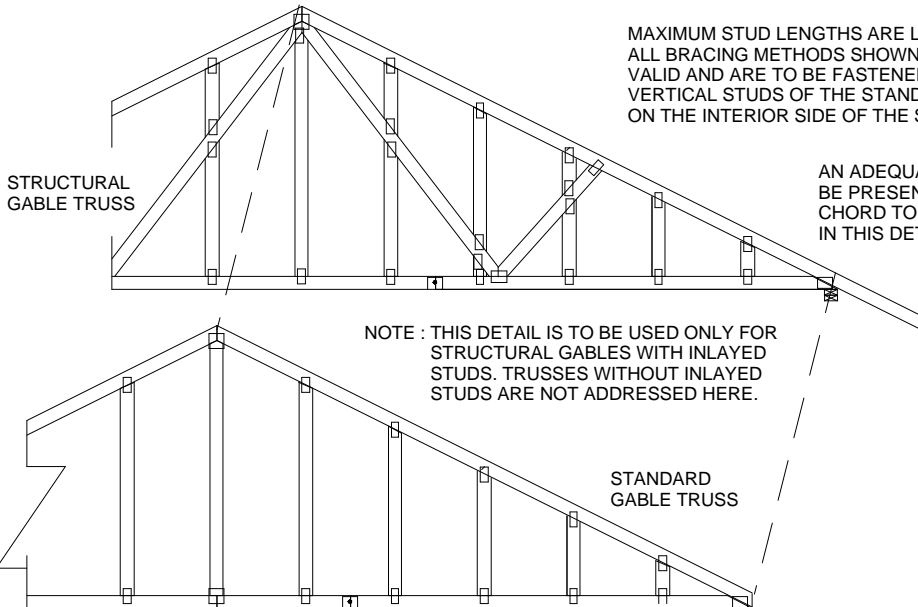


BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

- STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:
- METHOD 1 : ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE 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
- NAILING SCHEDULE:
- 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.
  - FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL 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.

This item has been electronically signed and sealed by O'Regan, 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  
Date:

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.**

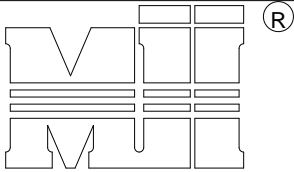
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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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Tampa, FL 36610



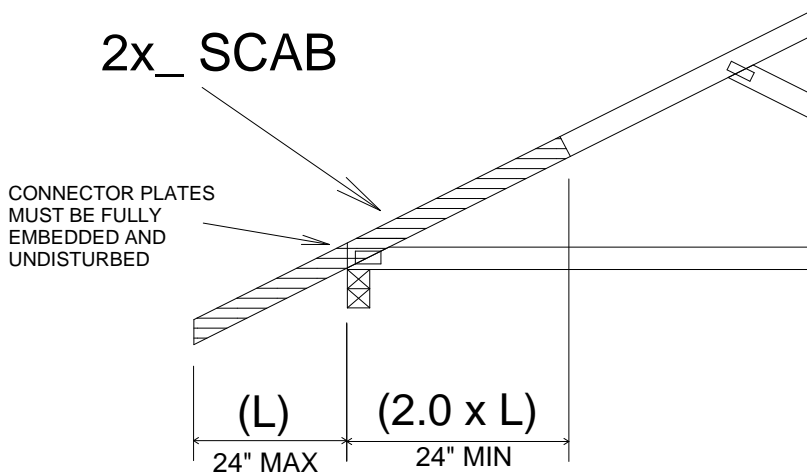
MiTek USA, Inc.

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.

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

April 2,2021

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

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

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



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

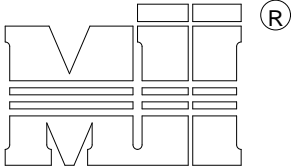
April 2,2021

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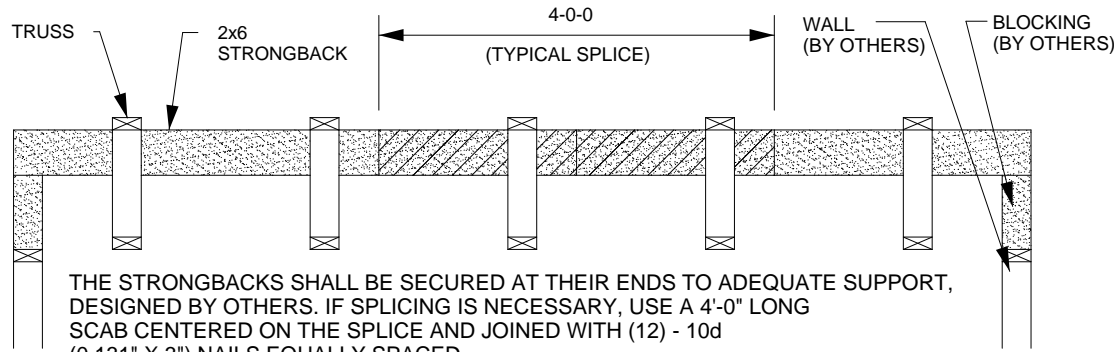
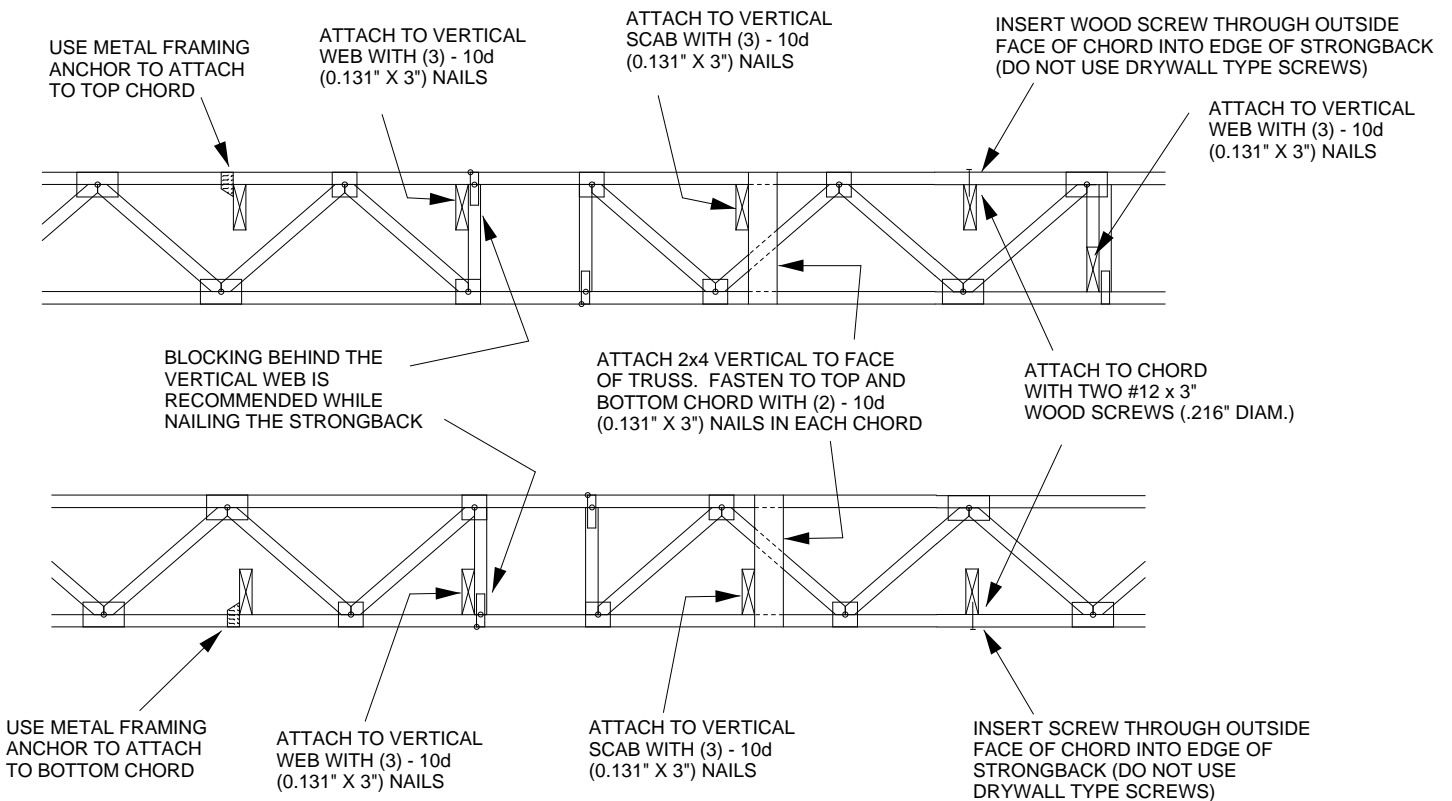


MiTek USA, Inc.

**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.



THE STRONGBACKS SHALL BE SECURED AT THEIR ENDS TO ADEQUATE SUPPORT, DESIGNED BY OTHERS. IF SPLICING IS NECESSARY, USE A 4'-0" LONG SCAB CENTERED ON THE SPLICE AND JOINED WITH (12) - 10d (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)

This item has been electronically signed and sealed by O'Regan, 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  
Date:

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**

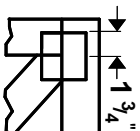
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



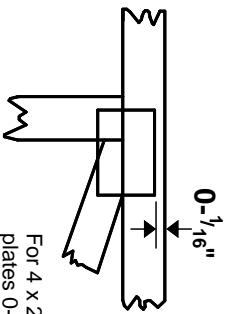
6904 Parke East Blvd.  
Tampa, FL 36610

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

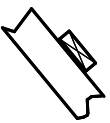
\* Plate location details available in **MITek 20/20 software** or upon request.

## PLATE SIZE

4 X 4

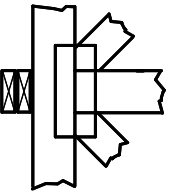
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



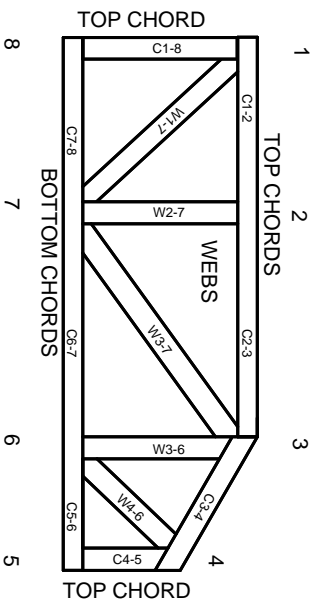
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

# Numbering System

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



**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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# General Safety Notes

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

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



MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020



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

RE: 3323964 - AMIRA BLDRS - VARNER RES.

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

**Site Information:**

Customer Info: AMIRA BLDRS. Project Name: Varner Res.. Model: Custom  
Lot/Block: N/A Subdivision: N/A  
Address: 114 SW Heron Drive, N/A  
City: Columbia Cty State: FL

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

Name: License #:  
Address:  
City: State:

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

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

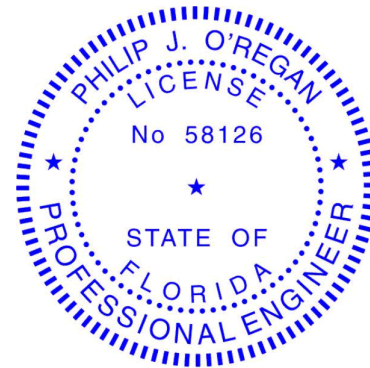
This package includes 49 individual, Truss Design Drawings and 0 Additional Drawings.  
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T29755909	CJ01	2/7/23	15	T29755923	EJ01	2/7/23
2	T29755910	CJ02	2/7/23	16	T29755924	EJ01G	2/7/23
3	T29755911	CJ02A	2/7/23	17	T29755925	EJ02	2/7/23
4	T29755912	CJ03	2/7/23	18	T29755926	EJ03	2/7/23
5	T29755913	CJ03A	2/7/23	19	T29755927	EJ04	2/7/23
6	T29755914	CJ04	2/7/23	20	T29755928	EJ05	2/7/23
7	T29755915	CJ04A	2/7/23	21	T29755929	EJ06	2/7/23
8	T29755916	CJ05	2/7/23	22	T29755930	HJ08	2/7/23
9	T29755917	CJ05A	2/7/23	23	T29755931	HJ10	2/7/23
10	T29755918	CJ06A	2/7/23	24	T29755932	HJ10A	2/7/23
11	T29755919	CJ07	2/7/23	25	T29755933	HJ10B	2/7/23
12	T29755920	CJ09	2/7/23	26	T29755934	HJ11	2/7/23
13	T29755921	CJ11	2/7/23	27	T29755935	PB01	2/7/23
14	T29755922	CJ13	2/7/23	28	T29755936	PB02	2/7/23

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

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, 2025.



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

**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.

February 7, 2023



RE: 3323964 - AMIRA BLDRS - VARNER RES.

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

**Site Information:**

Customer Info: AMIRA BLDRS. Project Name: Varner Res.. Model: Custom  
Lot/Block: N/A Subdivision: N/A  
Address: 114 SW Heron Drive, N/A  
City: Columbia Cty State: FL

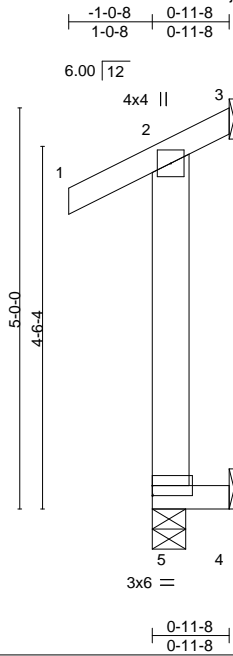
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31	T29755939	T01	2/7/23
32	T29755940	T02	2/7/23
33	T29755941	T03	2/7/23
34	T29755942	T04	2/7/23
35	T29755943	T05	2/7/23
36	T29755944	T06	2/7/23
37	T29755945	T07	2/7/23
38	T29755946	T08	2/7/23
39	T29755947	T09	2/7/23
40	T29755948	T10	2/7/23
41	T29755949	T11	2/7/23
42	T29755950	T12	2/7/23
43	T29755951	T13	2/7/23
44	T29755952	T13G	2/7/23
45	T29755953	T14	2/7/23
46	T29755954	T14G	2/7/23
47	T29755955	T15	2/7/23
48	T29755956	T16	2/7/23
49	T29755957	T17	2/7/23

Job 3323964	Truss CJ01	Truss Type Jack-Open	Qty 6	Ply 1	AMIRA BLDRS - VARNER RES. T29755909 Job Reference (optional)
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:16 2023 Page 1

ID:QT9?RVjmsS35aOAudzFTTjyMd2g-bEjuJOBx2A2WMJvcS?fJb6\_71ryGR\_3mTM\_1sOznwXD



Scale = 1:28.7

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.27	Vert(LL)	-0.00 5	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.46	Vert(CT)	-0.00 5	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.08 3	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MR					Weight: 15 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 0-11-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-5-0, 3=Mechanical, 4=Mechanical  
Max Horz 5=-100(LC 10)  
Max Uplift 5=-260(LC 10), 3=-134(LC 9), 4=-201(LC 9)  
Max Grav 5=321(LC 9), 3=103(LC 10), 4=192(LC 10)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; 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 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 connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=260, 3=134, 4=201.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

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

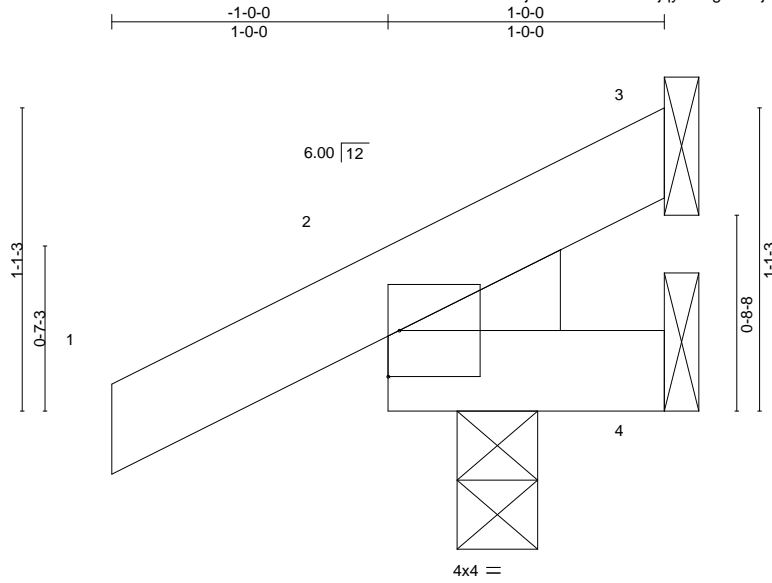
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss CJ02	Truss Type Jack-Open	Qty 12	Ply 1	AMIRA BLDRS - VARNER RES. T29755910
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:18 2023 Page 1  
 ID:QT9?RVjmS35aOAudzfTjgyMd2g-Xcrej4DBanIDbd3\_ZQhngX3Xnfl8vuZ3xfT7xHznwXB



Scale = 1:8.3

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.06	Vert(LL)	-0.00	5	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.01	Vert(CT)	-0.00	5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a		
BCDL 10.0	Code	FBC2020/TP12014	Matrix-MP					Weight: 6 lb	FT = 20%

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

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

**REACTIONS.** (size) 3=Mechanical, 4=Mechanical, 2=0-3-8  
 Max Horz 2=32(LC 12)  
 Max Uplift 3=8(LC 12), 4=1(LC 12), 2=32(LC 12)  
 Max Grav 3=8(LC 1), 4=12(LC 3), 2=118(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 2.

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:

February 7, 2023

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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

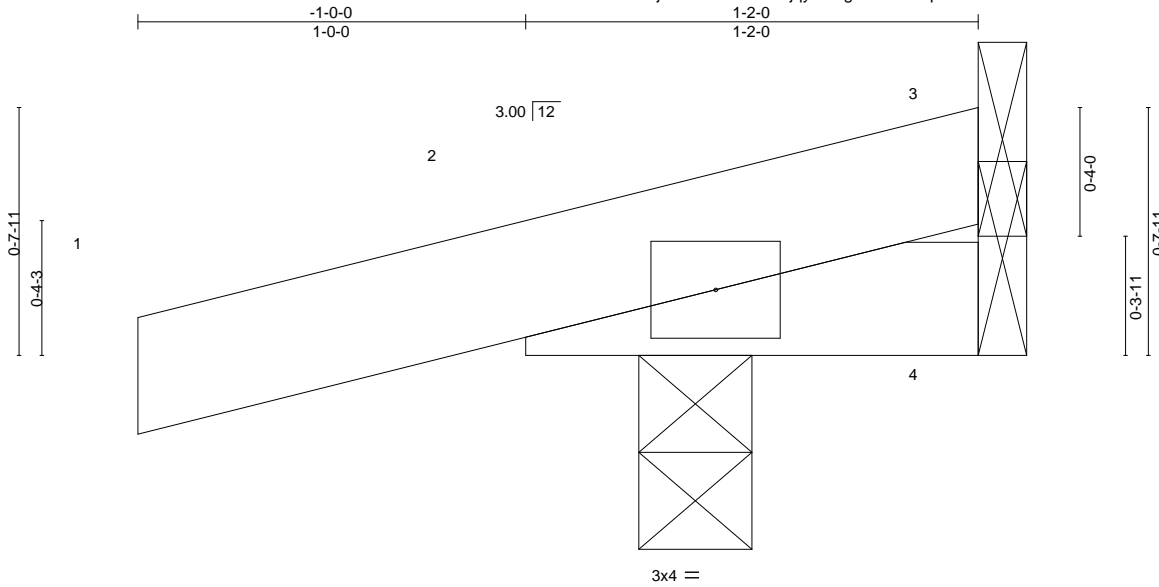


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 3323964	Truss CJ02A	Truss Type Jack-Open	Qty 4	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755911
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:19 2023 Page 1  
ID:QT9?RVjmS35aOAudzFTTjyMd2g-?oP1xQEpk5Q4DndB77C0Dkcha35NeLpC9JChTjznwXA



Scale = 1:5.9

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 0.05	Vert(LL)	-0.00	5	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.01	Vert(CT)	-0.00	5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a		
BCDL 10.0	Code	FBC2020/TP12014	Matrix-MP					Weight: 5 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 1-2-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 4=Mechanical, 2=0-3-8  
Max Horz 2=21(LC 8)  
Max Uplift 3=-3(LC 12), 4=-1(LC 12), 2=-64(LC 8)  
Max Grav 3=14(LC 3), 4=11(LC 3), 2=120(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left exposed ; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 2.

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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:

February 7, 2023

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**ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component**

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



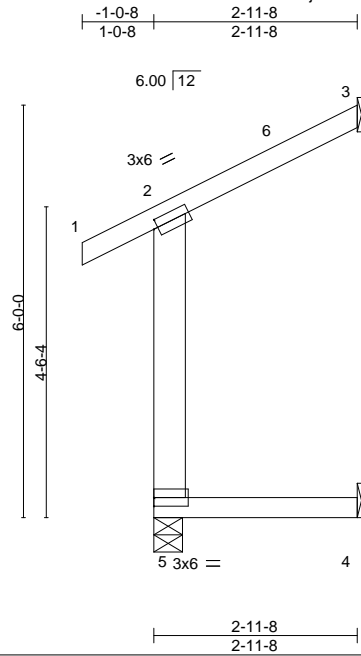
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss CJ03	Truss Type Jack-Open	Qty 4	Ply 1	AMIRA BLDRS - VARNER RES. T29755912 Job Reference (optional)
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:20 2023 Page 1

ID:QT9?RVjmS35aOAudzFTTjyMd2g-T?yP8mFS5OYxqwCNhrkFly8ldSFInN2MOzyE?9znwX9



Scale = 1:33.5

Plate Offsets (X,Y)--	[2:0-0-12,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.48	Vert(LL) 0.03 4-5 >962 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.80	Vert(CT) 0.03 4-5 >983 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.33 3 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MR		Weight: 21 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-7-2 oc bracing.
WEBS 2x6 SP No.2	

**REACTIONS.** (size) 5=0-5-0, 3=Mechanical, 4=Mechanical  
 Max Horz 5=117(LC 9)  
 Max Uplift 5=-20(LC 10), 3=-76(LC 9), 4=-63(LC 9)  
 Max Grav 5=184(LC 1), 3=72(LC 19), 4=71(LC 10)


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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-8 to 1-11-8, Interior(1) 1-11-8 to 2-10-12 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 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) 5, 3, 4.

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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:

February 7, 2023

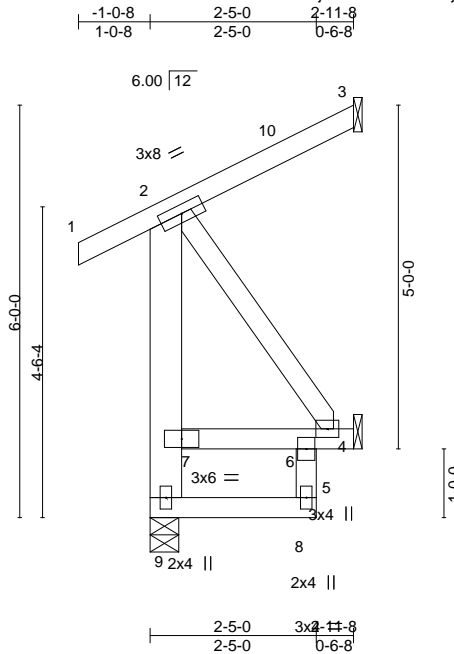
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd        Chesterfield, MO 63017</p>
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Job 3323964	Truss CJ03A	Truss Type Jack-Open	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. T29755913 Job Reference (optional)
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:22 2023 Page 1

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Scale = 1:33.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.10	Vert(LL)	-0.00	8	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.22	Vert(CT)	-0.00	8	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	-0.01	3	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 31 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 6-8: 2x4 SP No.3  
 WEBS 2x6 SP No.2 \*Except\*  
 2-5: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 9=0-5-0, 3=Mechanical, 4=Mechanical  
 Max Horz 9=117(LC 9)  
 Max Uplift 9=-20(LC 10), 3=-37(LC 12), 4=-121(LC 9)  
 Max Grav 9=184(LC 1), 3=55(LC 1), 4=108(LC 10)

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

WEBS 2-5=-193/333

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-8 to 1-11-8, Interior(1) 1-11-8 to 2-10-12 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 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) 9, 3 except (jt=lb) 4=121.

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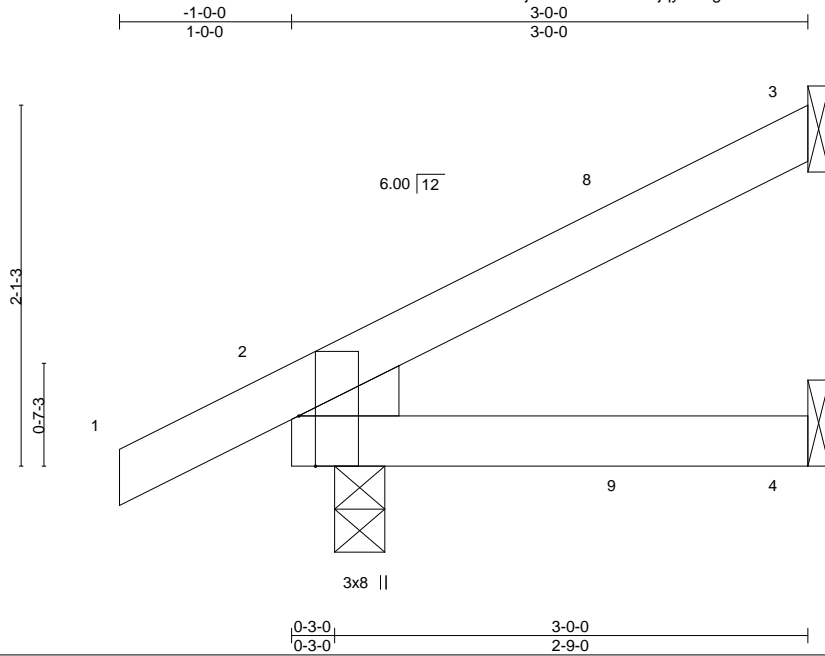


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 3323964	Truss CJ04	Truss Type Jack-Open	Qty 12	Ply 1	AMIRA BLDRS - VARNER RES. T29755914
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:23 2023 Page 1

ID:QT9?RVjmS35aOAudzFTTjyMd2g-uaeXnnHKOJxWhOxyMzHyNamMegRTa8oo4xAucUznwX6



Scale = 1:13.4

Plate Offsets (X,Y)--	[2:0-3-8,Edge]							
<b>LOADING</b> (psf)	<b>SPACING</b>	2-0-0	<b>CSI</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>
TCLL 20.0	Plate Grip DOL 1.25		TC 0.11	Vert(LL) 0.01	4-7	>999	240	MT20
TCDL 7.0	Lumber DOL 1.25		BC 0.13	Vert(CT) -0.01	4-7	>999	180	GRIP
BCLL 0.0 *	Rep Stress Incr YES		WB 0.00	Horz(CT) -0.00	3	n/a	n/a	244/190
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MP					Weight: 12 lb
								FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (size) 3=Mechanical, 4=Mechanical, 2=0-3-8  
 Max Horz 2=65(LC 12)  
 Max Uplift 3=-39(LC 12), 4=-19(LC 9), 2=-36(LC 12)  
 Max Grav 3=64(LC 1), 4=51(LC 3), 2=172(LC 1)


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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 2-11-4 zone; cantilever left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 2.

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February 7, 2023

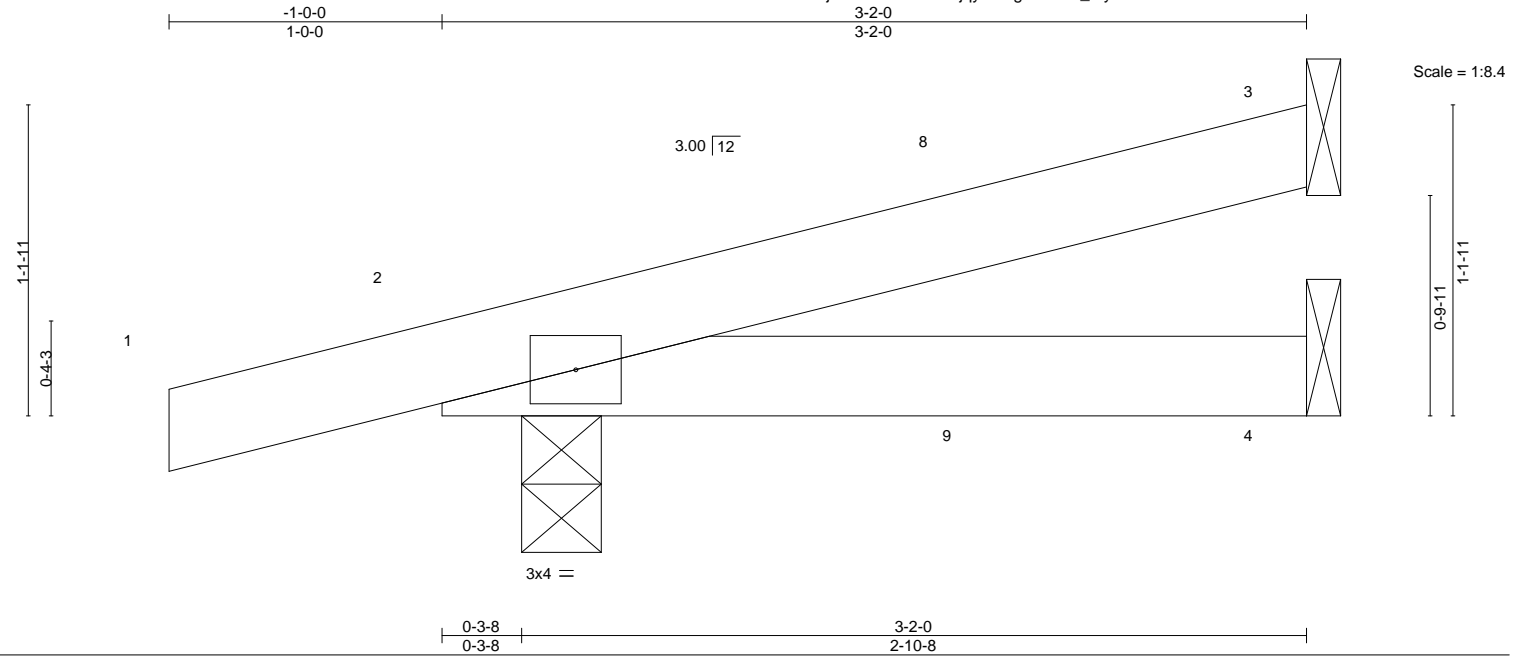
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd          Chesterfield, MO 63017</p>
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Job 3323964	Truss CJ04A	Truss Type Jack-Open	Qty 4	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755915
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:24 2023 Page 1

ID:QT9?RVjms35aOAudzFTTjyMd2g-MmCw\_7ly9d3NJYW8whoBwoJXD4mZJb2xJbwS8xznwX5



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.13	Vert(LL)	0.01 4-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.13	Vert(CT)	-0.01 4-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00 2	n/a	n/a		
BCDL 10.0	Code FBC2020/TP12014		Matrix-MP					Weight: 11 lb	FT = 20%

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

**REACTIONS.** (size) 3=Mechanical, 4=Mechanical, 2=0-3-8  
 Max Horz 2=38(LC 8)  
 Max Uplift 3=-34(LC 8), 4=-20(LC 8), 2=-96(LC 8)  
 Max Grav 3=67(LC 1), 4=52(LC 3), 2=178(LC 1)


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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-1-4 zone; cantilever left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 2.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

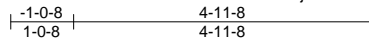
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd        Chesterfield, MO 63017</p>
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Job 3323964	Truss CJ05	Truss Type Jack-Open	Qty 4	Ply 1	AMIRA BLDRS - VARNER RES. T29755916 Job Reference (optional)
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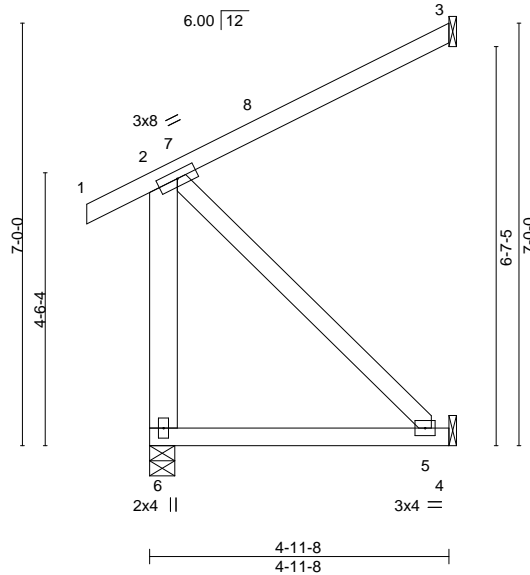
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:26 2023 Page 1

ID:QT9?RVjmS35aOAudzTTjgyMd2g-I9KgPpJChEJ5YrgX15qf?DOpetQ\_nTKEmvPYDpznwX3



Scale = 1:38.2



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 0.32	Vert(LL)	-0.03 5-6	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.27	Vert(CT)	-0.06 5-6	>984	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.01 3	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MP					Weight: 36 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x6 SP No.2 \*Except\*  
2-5: 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=0-5-0, 3=Mechanical, 4=Mechanical  
Max Horz 6=138(LC 9)  
Max Uplift 3=-76(LC 12), 4=-78(LC 9)  
Max Grav 6=251(LC 1), 3=117(LC 1), 4=93(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-5=-194/331

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-8 to 1-11-8, Interior(1) 1-11-8 to 4-10-12 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 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) 3, 4.

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:

February 7, 2023

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

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

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



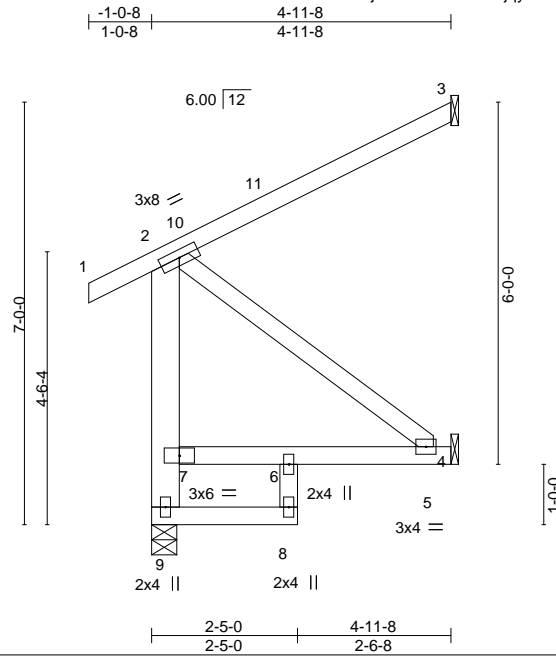
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss CJ05A	Truss Type Jack-Open	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. T29755917 Job Reference (optional)
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:27 2023 Page 1

ID:QT9?RVjmS35aOAudzFTTjgyMd2g-mLt2c9KrSYRyA?FjbpMuYQx0fHnMWwXO?Z86IGznwX2



Scale = 1:38.2

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 0.24	Vert(LL)	-0.02 5-6	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.19	Vert(CT)	-0.03 5-6	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	-0.02 3	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 39 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* 6-8: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 8-9.
WEBS 2x6 SP No.2 *Except* 2-5: 2x4 SP No.3	

**REACTIONS.** (size) 9=0-5-0, 3=Mechanical, 4=Mechanical  
 Max Horz 9=138(LC 9)  
 Max Uplift 3=64(LC 12), 4=85(LC 9)  
 Max Grav 9=251(LC 1), 3=99(LC 1), 4=98(LC 3)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 BOT CHORD 5-6=-310/196  
 WEBS 2-5=-245/388

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-8 to 1-11-8, Interior(1) 1-11-8 to 4-10-12 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 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) 3, 4.

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:

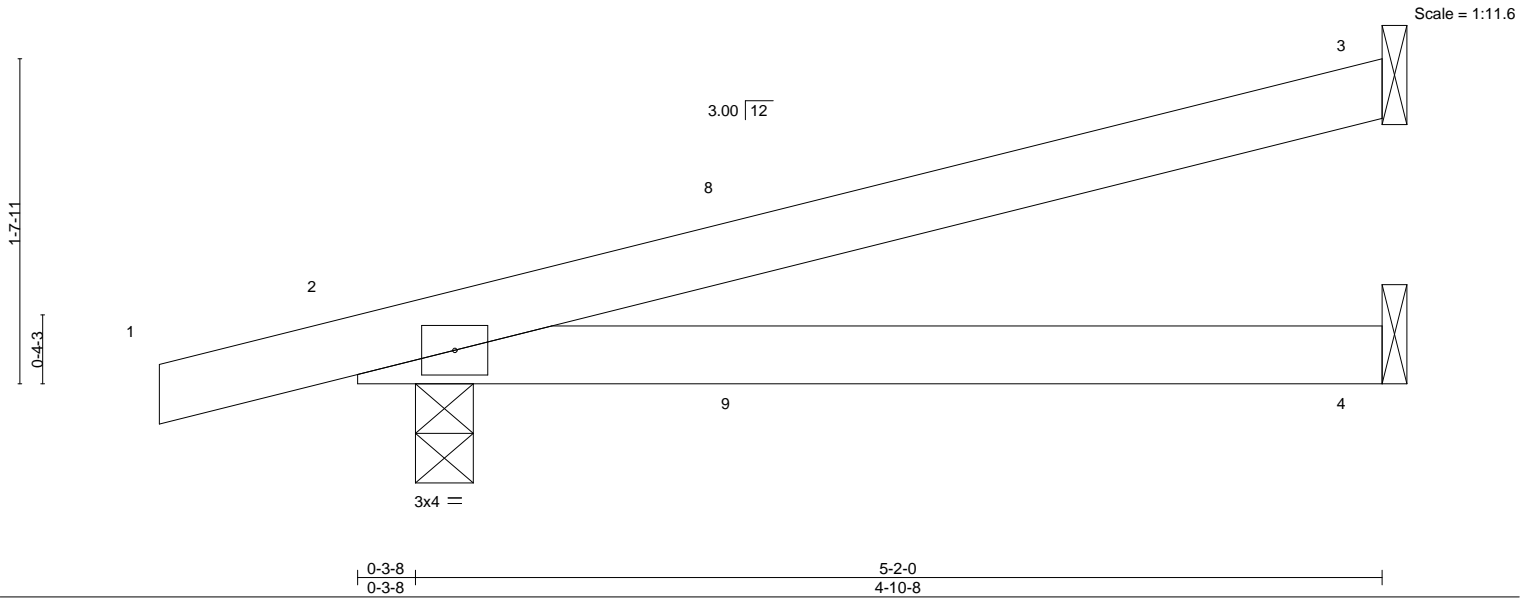
February 7, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd        Chesterfield, MO 63017</p>
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Job 3323964	Truss CJ06A	Truss Type Jack-Open	Qty 4	Ply 1	AMIRA BLDRS - VARNER RES. T29755918
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:29 2023 Page 1  
ID:QT9?RVjmS35aOAudzFTTjyMd2g-ik?p1rL5\_9hgPJO6jEOMdr0Jn5PE\_sHgTtdDq8znwX0



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.39	Vert(LL)	0.10 4-7	>590	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.42	Vert(CT)	0.09 4-7	>677	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00 2	n/a	n/a		
BCDL 10.0	Code FBC2020/TP12014		Matrix-MP					Weight: 17 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-2-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 4=Mechanical, 2=0-3-8  
 Max Horz 2=55(LC 8)  
 Max Uplift 3=61(LC 8), 4=34(LC 8), 2=-128(LC 8)  
 Max Grav 3=118(LC 1), 4=89(LC 3), 2=248(LC 1)


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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 5-1-4 zone; cantilever left exposed ; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=128.

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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:

February 7, 2023

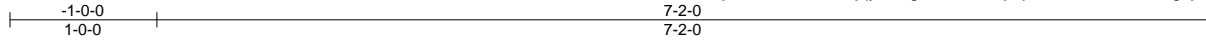
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Job 3323964	Truss CJ07	Truss Type Jack-Partial	Qty 4	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755919
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8,530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:30 2023 Page 1

ID:QT9?RVjmS35aOAudzFTTjyMd2g-AwZBFAMjITpX1TzIGxvb93ZQiUgFjJXqhXNmMaznWX?



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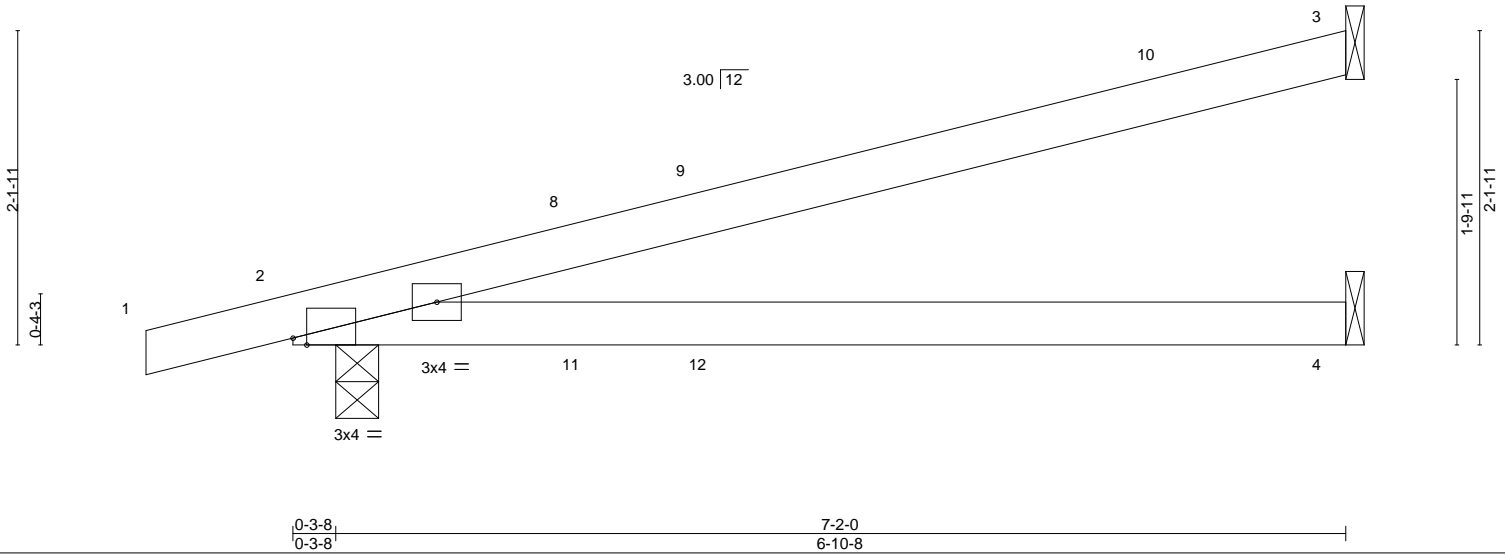


Plate Offsets (X,Y)--	[2:0-1-2,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/def	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.70	Vert(LL)	0.34 4-7	>248	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.76	Vert(CT)	0.29 4-7	>292	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01 3	n/a	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS					Weight: 23 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-10-2 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 4=Mechanical, 2=0-3-8  
Max Horz 2=73(LC 8)  
Max Uplift 3=88(LC 8), 4=47(LC 8), 2=161(LC 8)  
Max Grav 3=168(LC 1), 4=126(LC 3), 2=321(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 7-1-4 zone; cantilever left exposed ; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=161.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

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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

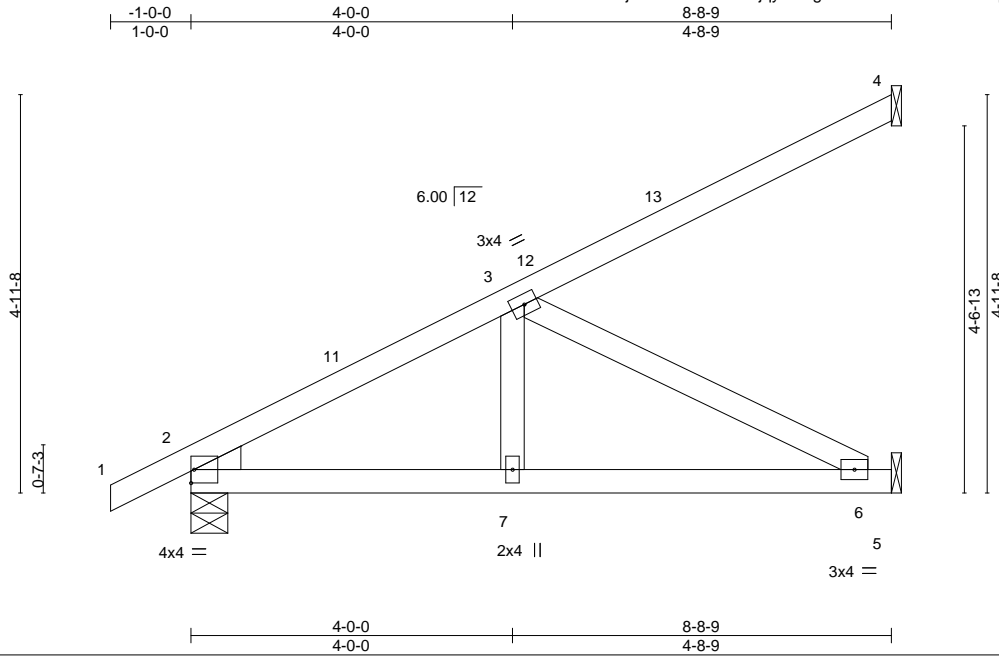


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss CJ09	Truss Type Jack-Open	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. T29755920
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:31 2023 Page 1  
ID:QT9?RVjmS35aOAudzFTTjgyMd2g-f67ZSWNLWnxNfdYUqfQqjG5ifu71SjezwB6Ju1znwX\_



Scale = 1:28.7

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.24	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.27	Vert(LL) -0.02 6-7 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.20	Vert(CT) -0.05 6-7 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.00 5 n/a n/a		
	Code FBC2020/TPI2014			Weight: 40 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 4=Mechanical, 2=0-5-8, 5=Mechanical  
Max Horz 2=150(LC 12)  
Max Uplift 4=-42(LC 12), 2=-69(LC 12), 5=-55(LC 12)  
Max Grav 4=104(LC 1), 2=377(LC 1), 5=213(LC 1)

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

TOP CHORD 2-3=-429/67  
BOT CHORD 2-7=-214/355, 6-7=-214/355  
WEBS 3-6=-400/241

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 8-7-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.

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:

February 7, 2023

**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  
Chesterfield, MO 63017

Job 3323964	Truss CJ11	Truss Type Jack-Open	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. T29755921
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:33 2023 Page 1

ID:QT9?RVjmS35aOAudzfTTjyMd2g-bVFJtCPb1OB5uwity4ShhB0ripywbyGNVbQyvzrwWY

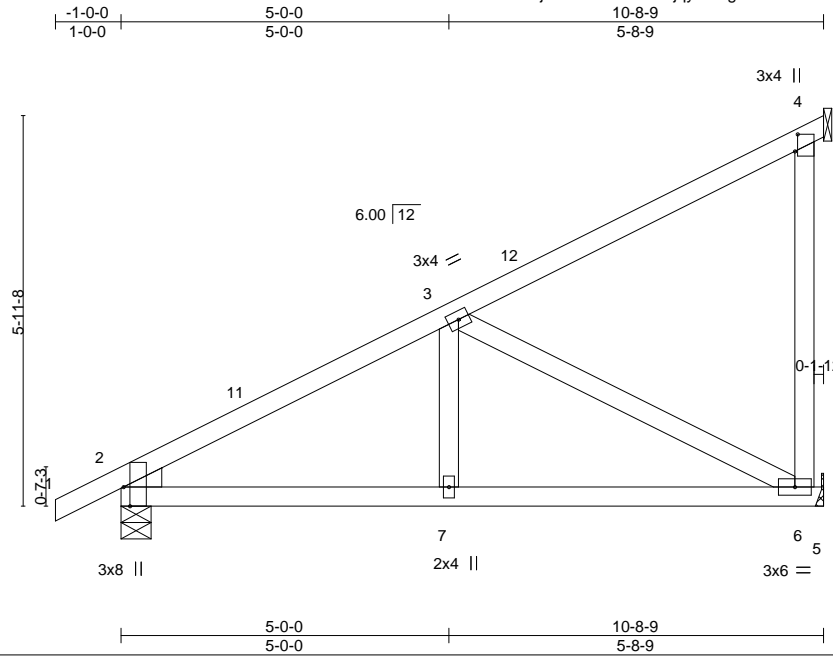


Plate Offsets (X,Y)--	[2:0-3-8,Edge], [4:0-3-2,0-0-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	Vert(LL)	-0.03	6-7	>999	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.31	Vert(CT)	-0.06	6-7	>999		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.34	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS						
	Code FBC2020/TPI2014						Weight: 57 lb	FT = 20%

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

**REACTIONS.** (size) 2=0-5-8, 6=Mechanical, 4=Mechanical  
 Max Horz 2=172(LC 12)  
 Max Uplift 2=-77(LC 12), 6=-62(LC 12), 4=-46(LC 14)  
 Max Grav 2=442(LC 1), 6=271(LC 1), 4=118(LC 1)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-519/57  
 BOT CHORD 2-7=-213/427, 6-7=-213/427  
 WEBS 3-6=-480/240

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 10-5-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 4.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

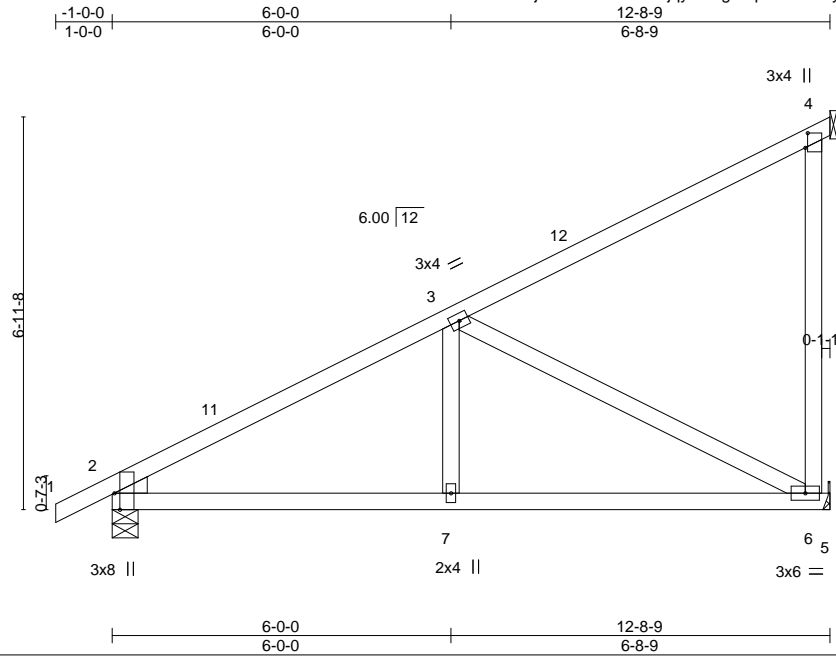
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd        Chesterfield, MO 63017</p>
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Job 3323964	Truss CJ13	Truss Type Jack-Open	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. T29755922
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:34 2023 Page 1

ID:QT9?RVjmS35aOAudzfTjyMd2g-3hpi4YPEoiJyW4H3Vn\_XKvj9J66Ef\_UPc9LzUMznmWx



Scale = 1:40.8

Plate Offsets (X,Y)--	[2:0-3-8,Edge], [4:0-3-2,0-0-8]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.47	Vert(LL)	-0.06	6-7	>999	240	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.43	Vert(CT)	-0.11	6-7	>999	180	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.01	6	n/a	n/a	
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS						
								Weight: 67 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (size) 2=0-5-8, 4=Mechanical, 6=Mechanical  
 Max Horz 2=195(LC 12)  
 Max Uplift 2=-84(LC 12), 4=-55(LC 14), 6=-66(LC 12)  
 Max Grav 2=516(LC 1), 4=139(LC 1), 6=324(LC 1)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-634/55  
 BOT CHORD 2-7=-220/521, 6-7=-220/521  
 WEBS 3-7=0/285, 3-6=-585/247

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 12-5-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd        Chesterfield, MO 63017</p>
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Job 3323964	Truss EJ01	Truss Type Jack-Partial	Qty 17	Ply 1	AMIRA BLDRS - VARNER RES. T29755923
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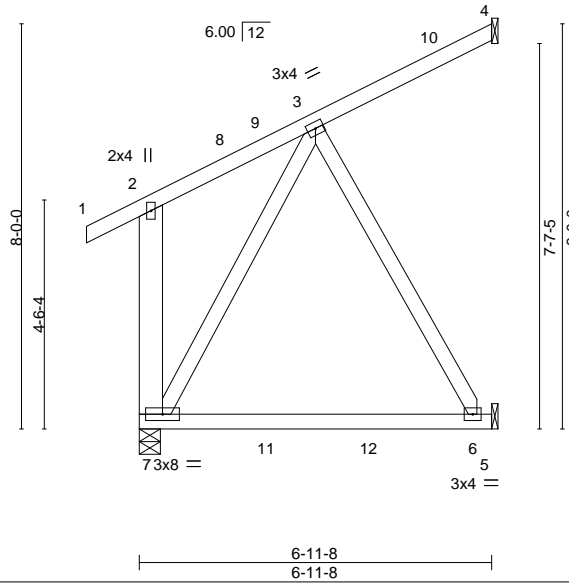
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:36 2023 Page 1

ID:QT9?RVjmS35aOAudzTTjyMd2g-74wSVERUKJZglORSdC0?PKpZmVlR7\_wi4Tq4ZEznwWv



Scale = 1:45.5



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.15	Vert(LL)	-0.13 6-7	>638	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.58	Vert(CT)	-0.21 6-7	>375	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.20	Horz(CT)	0.02 4	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 53 lb	FT = 20%

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

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

**REACTIONS.** (size) 4=Mechanical, 5=Mechanical, 7=0-5-0  
 Max Horz 7=159(LC 9)  
 Max Uplift 4=-37(LC 12), 5=-111(LC 12), 7=-3(LC 12)  
 Max Grav 4=76(LC 1), 5=231(LC 19), 7=340(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-6=-213/322

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-8 to 1-11-8, Interior(1) 1-11-8 to 6-10-12 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 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, with BCDL = 10.0psf.
  - 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, 7 except (jt=lb) 5=111.

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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:

February 7, 2023

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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

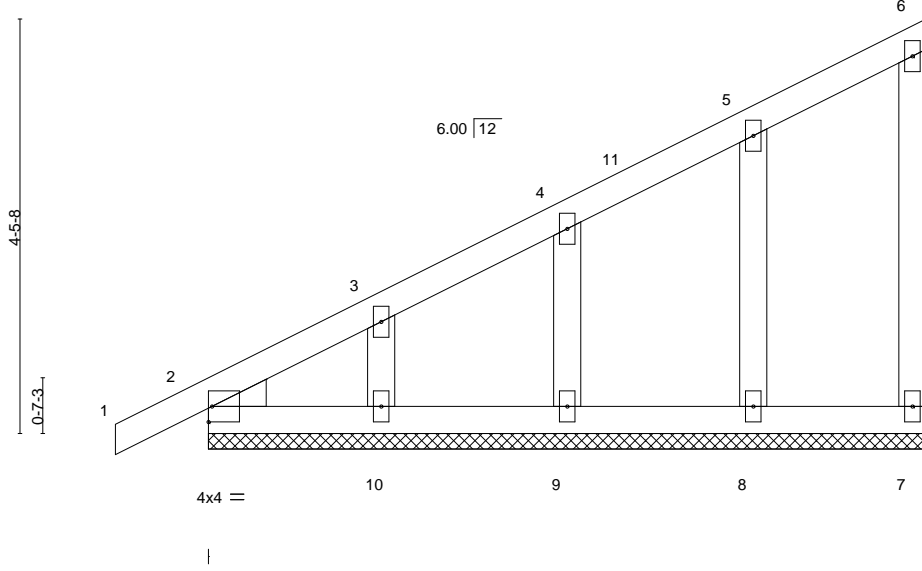


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 3323964	Truss EJ01G	Truss Type Jack-Partial Supported Gable	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. T29755924
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,					8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:38 2023 Page 1
Job Reference (optional)					ID:QT9?RVjms35aOAudzFTjgyMd2g-xS2CwwSksqwQ_haqkd2TUluxgjaVbxh?XnJBd7znnWt



Scale = 1:24.8



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.06	Vert(LL)	0.00	1	n/r	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	7	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-S						
								Weight: 42 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** All bearings 7-8-9.  
 (lb) - Max Horz 2=146(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 7, 9, 10, 8  
 Max Grav All reactions 250 lb or less at joint(s) 7, 2, 9, 10, 8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-283/97


**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 1-10-5, Exterior(2N) 1-10-5 to 7-6-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 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) 7, 9, 10, 8.

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  
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 16023 Swingley Ridge Rd. Chesterfield, MO 63017  
 Date:

February 7, 2023

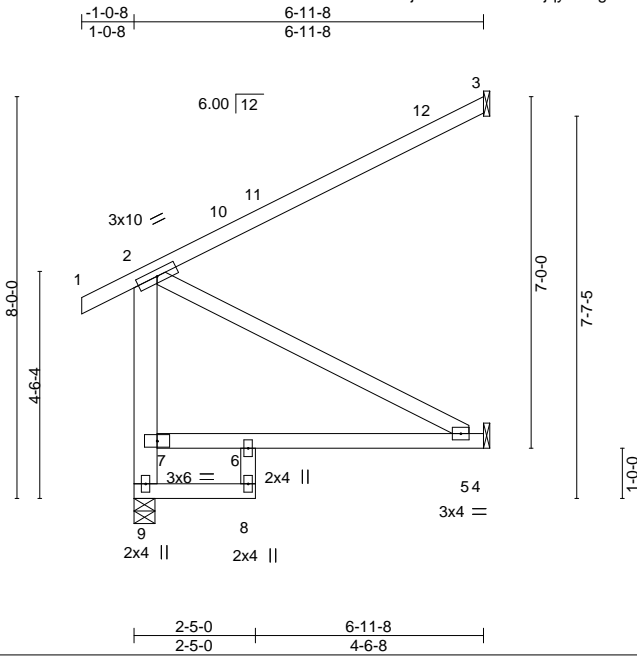
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd        Chesterfield, MO 63017</p>
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Job 3323964	Truss EJ02	Truss Type Jack-Partial	Qty 5	Ply 1	AMIRA BLDRS - VARNER RES. T29755925 Job Reference (optional)
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:39 2023 Page 1

ID:QT9?RVjmS35aOAudzFTTjyMd2g-Qfcb8FTMdEyFcr91IKZi1yR\_A7sHKJr9mR2k9ZznwWs



Scale = 1:45.9

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.53	Vert(LL)	-0.05 5-6	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.31	Vert(CT)	-0.10 5-6	>767	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.32	Horz(CT)	0.03 3	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 48 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* 6-8: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x6 SP No.2 *Except* 2-5: 2x4 SP No.3	

**REACTIONS.** (size) 9=0-5-0, 3=Mechanical, 4=Mechanical  
 Max Horz 9=159(LC 9)  
 Max Uplift 9=-3(LC 12), 3=-80(LC 12), 4=-70(LC 9)  
 Max Grav 9=322(LC 1), 3=141(LC 1), 4=143(LC 3)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 7-9=-273/80  
 BOT CHORD 6-7=-320/296, 5-6=-385/278  
 WEBS 2-5=-313/434

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-8 to 1-11-8, Interior(1) 1-11-8 to 6-10-12 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 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) 9, 3, 4.

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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:

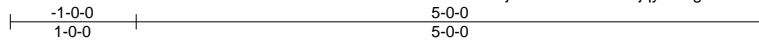
February 7, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd        Chesterfield, MO 63017</p>
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Job 3323964	Truss EJ03	Truss Type Jack-Partial	Qty 4	Ply 1	AMIRA BLDRS - VARNER RES. T29755926
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:40 2023 Page 1

ID:QT9?RVjmS35aOAudzFTjgyMd2g-urAzLbU\_OY46E?kDs24xZAzCFW9E3q?l\_5oli?znnwWR



Scale = 1:18.3

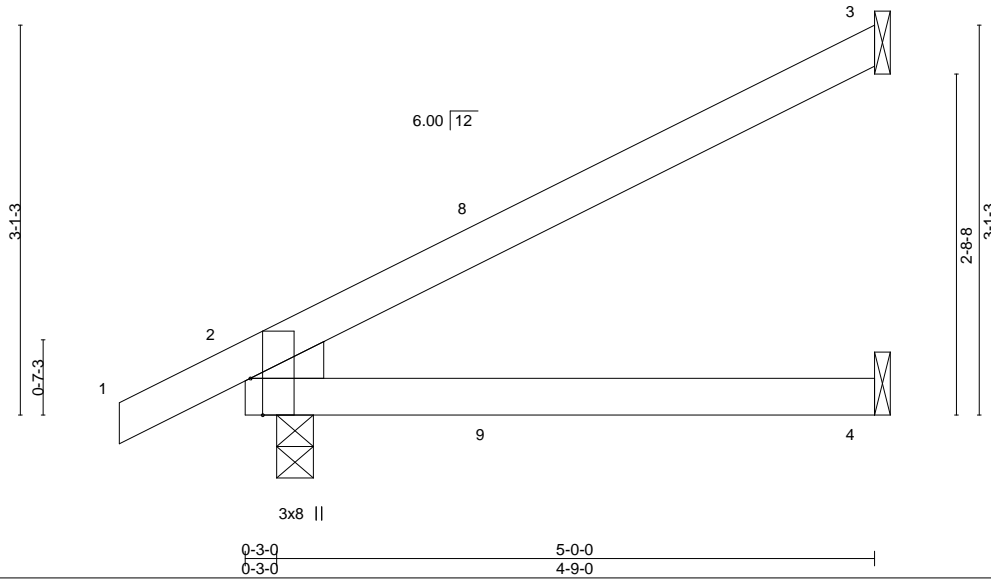


Plate Offsets (X,Y)-- [2:0-3-8,Edge]		CSI.		DEFL.		PLATES	GRIP
LOADING (psf)	SPACING- 2-0-0	TC	0.38	in (loc)	l/defl	L/d	
TCLL 20.0	Plate Grip DOL 1.25	BC	0.40	Vert(LL) 0.09 4-7	>631	240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	WB	0.00	Vert(CT) 0.08 4-7	>724	180	
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MP		Horz(CT) -0.02 3	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014						Weight: 18 lb FT = 20%

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

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

**REACTIONS.** (size) 3=Mechanical, 4=Mechanical, 2=0-3-8  
Max Horz 2=100(LC 12)  
Max Uplift 3=-69(LC 12), 4=-31(LC 9), 2=-49(LC 9)  
Max Grav 3=115(LC 1), 4=89(LC 3), 2=242(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 4-11-4 zone; cantilever left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 2.

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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:

February 7, 2023

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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



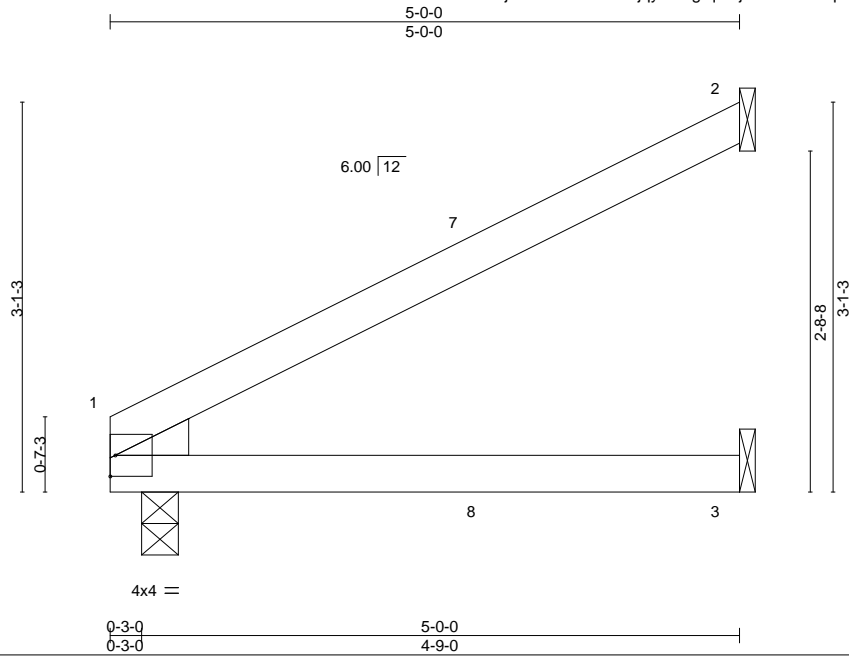
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss EJ04	Truss Type Jack-Partial	Qty 4	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755927
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:42 2023 Page 1

ID:QT9?RVjmS35aOAudzFTTjyMd2g-qEHjmHWFw9KqTJucS7Peb3YeKrbXkvbSOHPmuznwWp



Scale = 1:18.3

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.38	Vert(LL)	0.10 3-6	>616	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.40	Vert(CT)	0.08 3-6	>711	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02 2	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MP					Weight: 17 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
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.
WEDGE	
Left: 2x4 SP No.3	

**REACTIONS.** (size) 2=Mechanical, 3=Mechanical, 1=0-3-8  
 Max Horz 1=85(LC 12)  
 Max Uplift 2=-70(LC 12), 3=-31(LC 9), 1=-41(LC 9)  
 Max Grav 2=118(LC 1), 3=89(LC 3), 1=183(LC 1)

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


**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 4-11-4 zone; cantilever left exposed ; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3, 1.

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

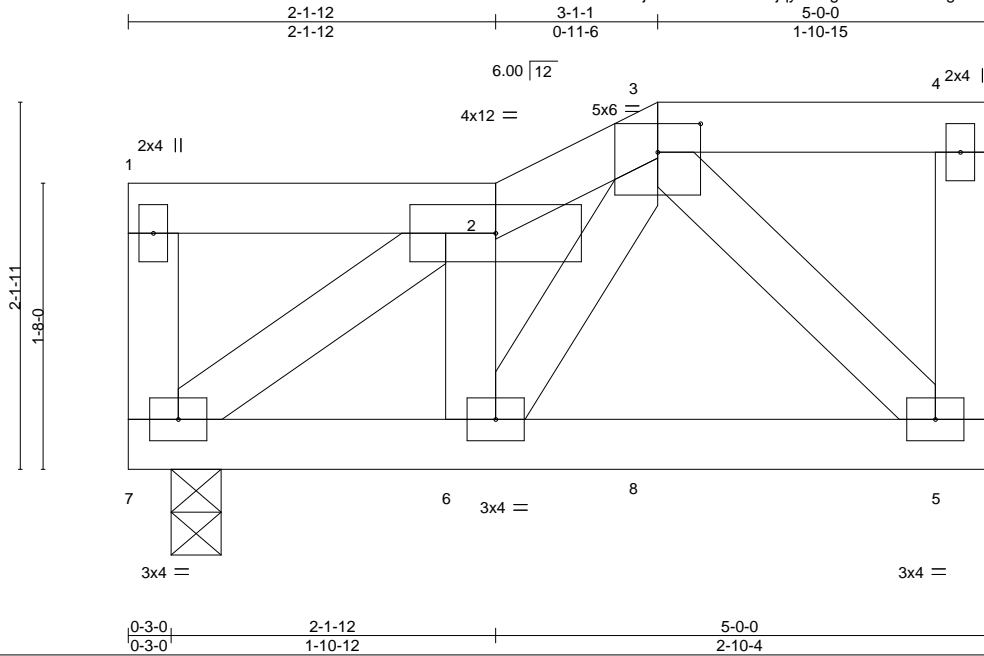
February 7, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd          Chesterfield, MO 63017</p>
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Job 3323964	Truss EJ05	Truss Type Roof Special	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755928
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:43 2023 Page 1

ID:QT9?RVjmS35aOAudzfTTjgyMd2g-lQr5zdWthTSg5TToXAeeBoboQkGIGAOkh20yIKzrwWo



Scale = 1:13.4

Plate Offsets (X,Y)--	[3:0-3-0,0-2-0]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.06	Vert(LL)	0.01 5-6	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.09	Vert(CT)	-0.01 5-6	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	-0.00 5	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MP					Weight: 30 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (size) 7=0-3-8, 5=Mechanical  
 Max Horz 7=16(LC 12)  
 Max Uplift 7=-73(LC 8), 5=-76(LC 9)  
 Max Grav 7=174(LC 1), 5=174(LC 1)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-189/296  
 BOT CHORD 6-7=-277/155  
 WEBS 2-7=-188/295, 3-6=-251/131

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 2-1-12, Interior(1) 2-1-12 to 3-1-1, Exterior(2E) 3-1-1 to 4-10-4 zone; cantilever left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.

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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:

February 7, 2023

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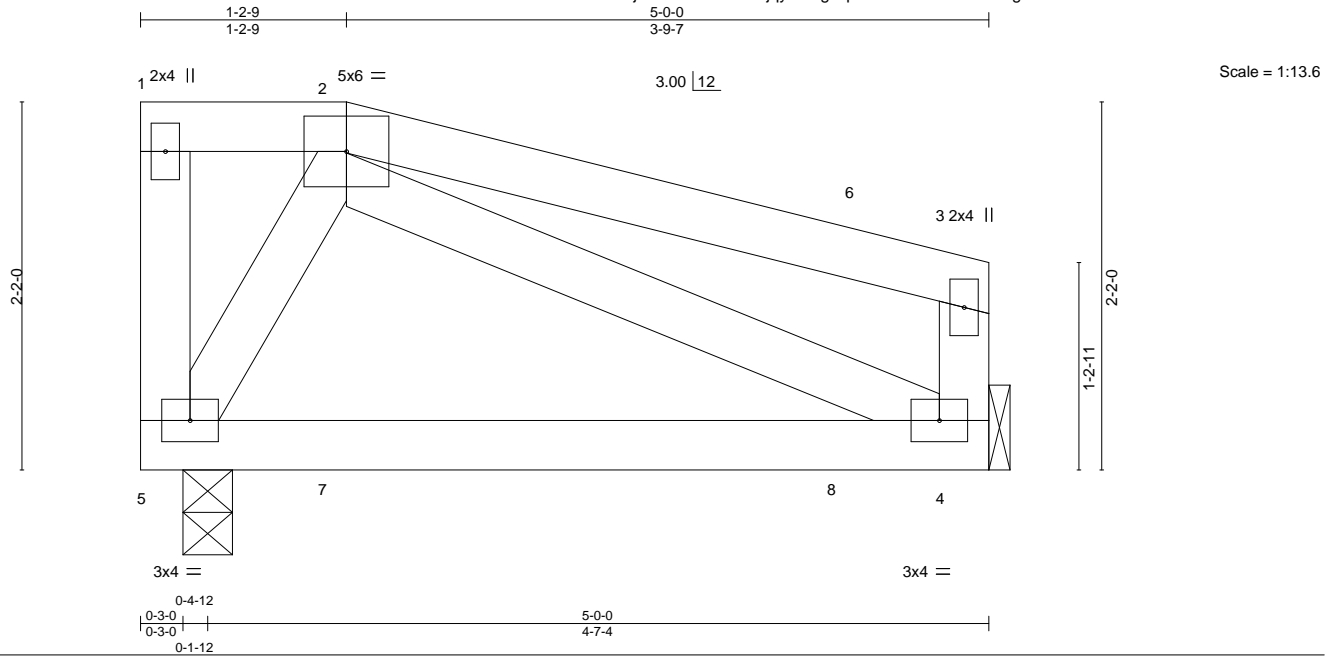
Job 3323964	Truss EJ06	Truss Type Roof Special	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755929
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Builders FirstSource (Lake City,FL),

Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:45 2023 Page 1

ID:QT9?RVjmS35aOAudzFTTjyMd2g-EpzsOJY7D4iOKmdBfbg6GDh5zXsMk5R18MV3NDznwWm



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.25	Vert(LL)	0.09 4-5	>596	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.46	Vert(CT)	0.09 4-5	>657	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00 4	n/a	n/a		
BCDL 10.0	Code FBC2020/TPJ2014		Matrix-MP					Weight: 27 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (size) 5=0-3-8, 4=Mechanical  
 Max Horz 5=-31(LC 9)  
 Max Uplift 5=-95(LC 9), 4=-76(LC 9)  
 Max Grav 5=174(LC 1), 4=174(LC 1)


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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 1-2-9, Exterior(2R) 1-2-9 to 4-2-9, Interior(1) 4-2-9 to 4-10-4 zone; cantilever left exposed; 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) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.

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Philip J. O'Regan PE No.58126  
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 16023 Swingley Ridge Rd. Chesterfield, MO 63017  
 Date:

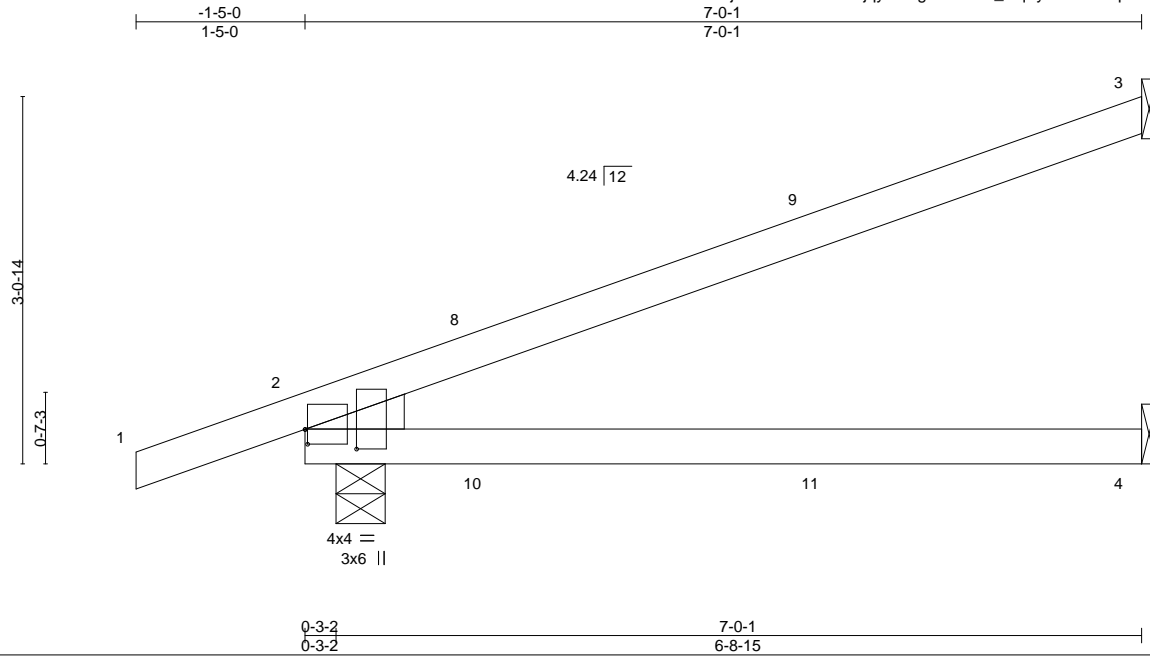
February 7, 2023

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Job 3323964	Truss HJ08	Truss Type Diagonal Hip Girder	Qty 6	Ply 1	AMIRA BLDRS - VARNER RES. T29755930
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:46 2023 Page 1  
ID:QT9?RVjmS35aOAudzFTTjyMd2g-i?XEcZL\_OqFywCNCIBLpRD8NxB3TYUAN0FcvfzwnWI



Scale = 1:19.3

Plate Offsets (X, Y)--	[2:0-0,4-0,1-8], [2:0-2,0,0-5-3]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.72	Vert(LL) 0.18 4-7 >457 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.56	Vert(CT) -0.23 4-7 >362 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.03 2 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 25 lb	FT = 20%

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

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

**REACTIONS.** (size) 3=Mechanical, 4=Mechanical, 2=0-4-15  
Max Horz 2=107(LC 4)  
Max Uplift 3=95(LC 4), 4=52(LC 4), 2=173(LC 4)  
Max Grav 3=165(LC 1), 4=126(LC 3), 2=343(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; cantilever left exposed ; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) 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) 3, 4 except (jt=lb) 2=173.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 53 lb down and 9 lb up at 1-5-15, 53 lb down and 9 lb up at 1-6-1, and 23 lb down and 43 lb up at 4-3-14, and 23 lb down and 43 lb up at 4-4-0 on top chord, and 29 lb down and 3 lb up at 1-5-15, 29 lb down and 3 lb up at 1-6-1, and 21 lb down and 28 lb up at 4-3-14, and 21 lb down and 28 lb up at 4-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-54, 4-5=-20  
Concentrated Loads (lb)  
Vert: 9=-2(F=-1, B=-1) 10=6(F=3, B=3) 11=-17(F=-8, B=-8)

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

February 7, 2023

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

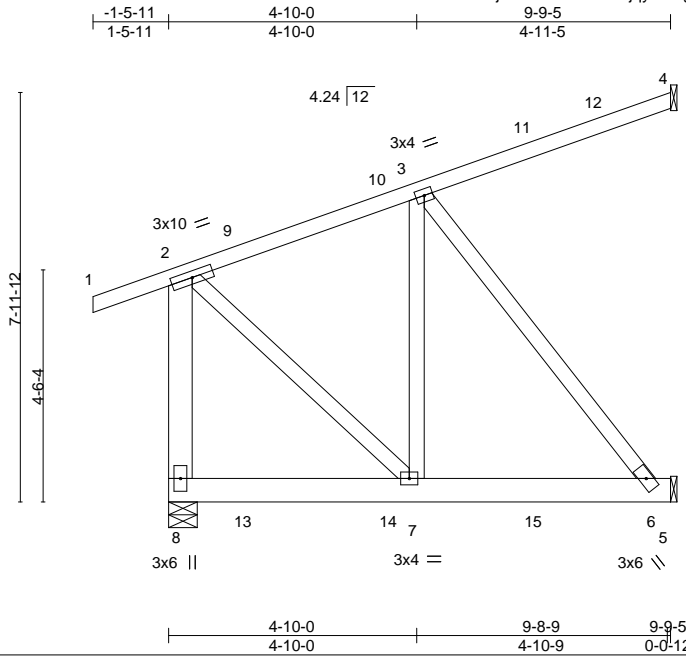
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss HJ10	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755931
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:48 2023 Page 1  
 ID:QT9?RVjms35aOAudzFTTjyMd2g-fOf\_0Ka0V?4zBELIKjEpusJYglxbxMDTqKkj\_YznwWj



Scale = 1:44.9

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.48	Vert(LL)	0.02 7-8	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.24	Vert(CT)	-0.03 7-8	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.43	Horz(CT)	-0.00 4	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 77 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 2-8: 2x6 SP No.2	

**REACTIONS.** (size) 8=0-6-11, 4=Mechanical, 5=Mechanical  
 Max Horz 8=165(LC 5)  
 Max Uplift 8=-813(LC 4), 4=-67(LC 4), 5=-436(LC 5)  
 Max Grav 8=799(LC 25), 4=136(LC 1), 5=377(LC 35)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-8=-504/531, 2-3=-382/368  
 BOT CHORD 6-7=-341/264  
 WEBS 2-7=-261/373, 3-6=-424/549

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) 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) 4 except (jt=lb) 8=813, 5=436.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 144 lb down and 173 lb up at 1-5-5, 144 lb down and 173 lb up at 1-5-5, 86 lb down and 78 lb up at 4-3-4, 86 lb down and 78 lb up at 4-3-4, and 40 lb down and 87 lb up at 7-1-3, and 40 lb down and 87 lb up at 7-1-3 on top chord, and 188 lb down and 202 lb up at 1-5-5, 188 lb down and 202 lb up at 1-5-5, 63 lb down and 70 lb up at 4-3-4, 63 lb down and 70 lb up at 4-3-4, and 82 lb down and 92 lb up at 7-1-3, and 82 lb down and 92 lb up at 7-1-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).


**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-2=-54, 2-4=-54, 5-8=-20  
 Concentrated Loads (lb)  
 Vert: 9=54(F=27, B=27) 11=-81(F=-40, B=-40) 14=-1(F=0, B=0) 15=-37(F=-18, B=-18)

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

**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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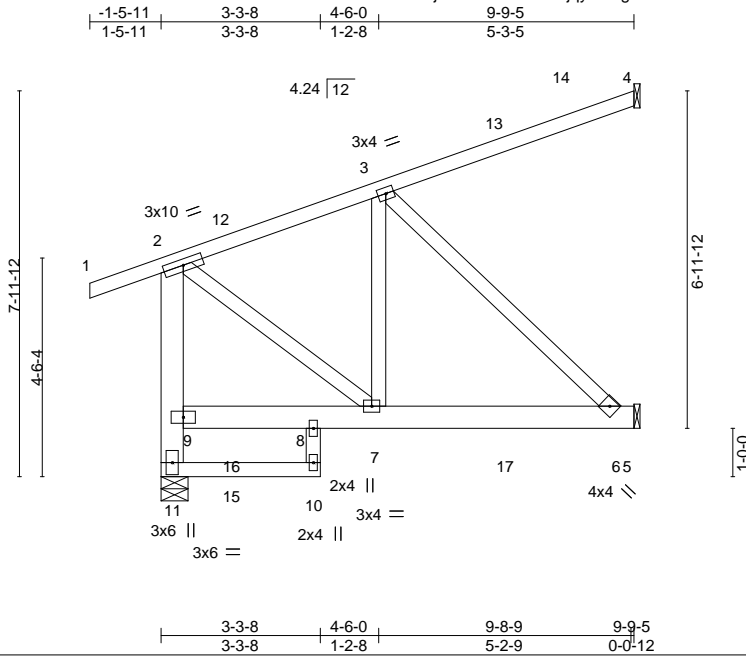


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 3323964	Truss HJ10A	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755932
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:50 2023 Page 1

ID:QT9?RVjms35aQAudzFTTjyMd2g-bmmIR0cG1cKhRXV8R8GHZHOuQYaRPHfmlE dq2QznwWh



Scale: 1/4"=1'

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.46	Vert(LL)	0.04 6-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.40	Vert(CT)	-0.03 6-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.37	Horz(CT)	-0.01 5	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 79 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2 *Except* 10-11: 2x4 SP No.2, 8-10: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 7-8.
WEBS 2x4 SP No.3 *Except* 2-11: 2x6 SP No.2	

**REACTIONS.** (size) 11=0-6-11, 4=Mechanical, 5=Mechanical  
 Max Horz 11=167(LC 5)  
 Max Uplift 11=830(LC 4), 4=-69(LC 4), 5=-453(LC 5)  
 Max Grav 11=787(LC 31), 4=133(LC 1), 5=377(LC 35)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 9-11=-529/596, 2-9=-515/587, 2-3=-394/463  
 BOT CHORD 6-7=-443/317  
 WEBS 2-7=-348/418, 3-7=-336/320, 3-6=-437/610

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) 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) 4 except (jt=lb) 11=830, 5=453.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 144 lb down and 173 lb up at 1-5-5, 144 lb down and 173 lb up at 1-5-5, 16 lb down and 38 lb up at 4-3-4, 16 lb down and 38 lb up at 4-3-4, and 32 lb down and 72 lb up at 7-1-3, and 32 lb down and 72 lb up at 7-1-3 on top chord, and 188 lb down and 202 lb up at 1-5-5, 188 lb down and 202 lb up at 1-5-5, 100 lb down and 129 lb up at 4-3-4, 100 lb down and 129 lb up at 4-3-4, and 89 lb down and 102 lb up at 7-1-3, and 89 lb down and 102 lb up at 7-1-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-2=-54, 2-4=-54, 10-11=-20, 5-8=-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:

February 7, 2023

Continued on page 2

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 3323964	Truss HJ10A	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	AMIRA BLDRS - VARNER RES.  Job Reference (optional)	T29755932
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:50 2023 Page 2  
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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 7=-2(F=-1, B=-1) 12=54(F=27, B=27) 13=-45(F=-23, B=-23) 17=-72(F=-36, B=-36)

**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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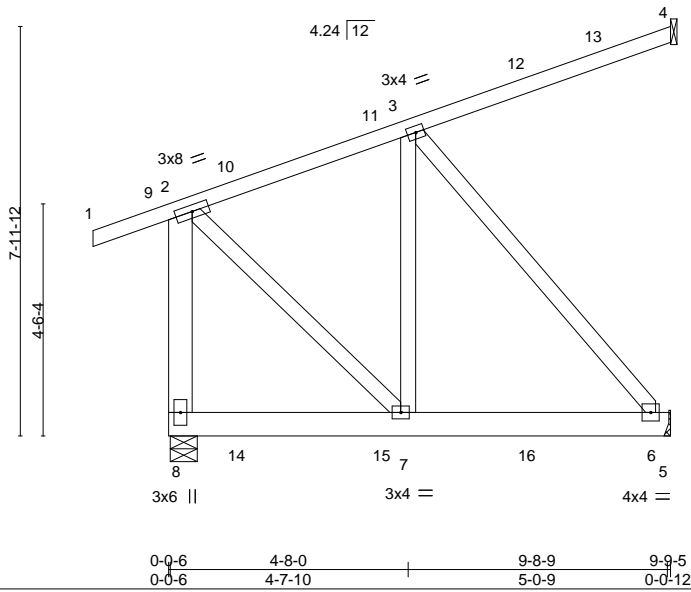
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss HJ10B	Truss Type Diagonal Hip Girder	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755933
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:51 2023 Page 1



Scale = 1:44.9



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.55	Vert(LL)	0.03 6-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.47	Vert(CT)	-0.05 6-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.73	Horz(CT)	-0.00 4	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 77 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 2-8: 2x6 SP No.2	

**REACTIONS.** (size) 8=0-6-5, 4=Mechanical, 5=Mechanical  
 Max Horz 8=165(LC 5)  
 Max Uplift 8=596(LC 4), 4=66(LC 4), 5=361(LC 5)  
 Max Grav 8=909(LC 1), 4=145(LC 1), 5=634(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-8=-753/413, 2-3=-492/286  
 BOT CHORD 6-7=-290/434  
 WEBS 2-7=-229/593, 3-7=-186/406, 3-6=-678/453

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) 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) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 8=596, 5=361.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 19 lb down and 19 lb up at -0-1-2, 33 lb down and 51 lb up at 1-3-13, 144 lb down and 173 lb up at 1-5-5, 42 lb down and 57 lb up at 4-1-12, 86 lb down and 78 lb up at 4-3-4, and 62 lb down and 67 lb up at 6-11-11, and 40 lb down and 87 lb up at 7-1-3 on top chord, and 188 lb down and 80 lb up at 1-3-13, 188 lb down and 202 lb up at 1-5-5, 242 lb down and 90 lb up at 4-1-12, 63 lb down and 70 lb up at 4-3-4, and 296 lb down and 94 lb up at 6-11-11, and 82 lb down and 92 lb up at 7-1-3 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).

**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, 5-8=-20

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

Continued on page 2

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 3323964	Truss HJ10B	Truss Type Diagonal Hip Girder	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES.  Job Reference (optional)	T29755933
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:52 2023 Page 2  
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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 9=-4 10=-1(F=27, B=-28) 11=-42(B) 12=-103(F=-40, B=-62) 14=-188(B) 15=-243(F=-0, B=-242) 16=-315(F=-18, B=-296)

**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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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss HJ11	Truss Type Roof Special Girder	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755934
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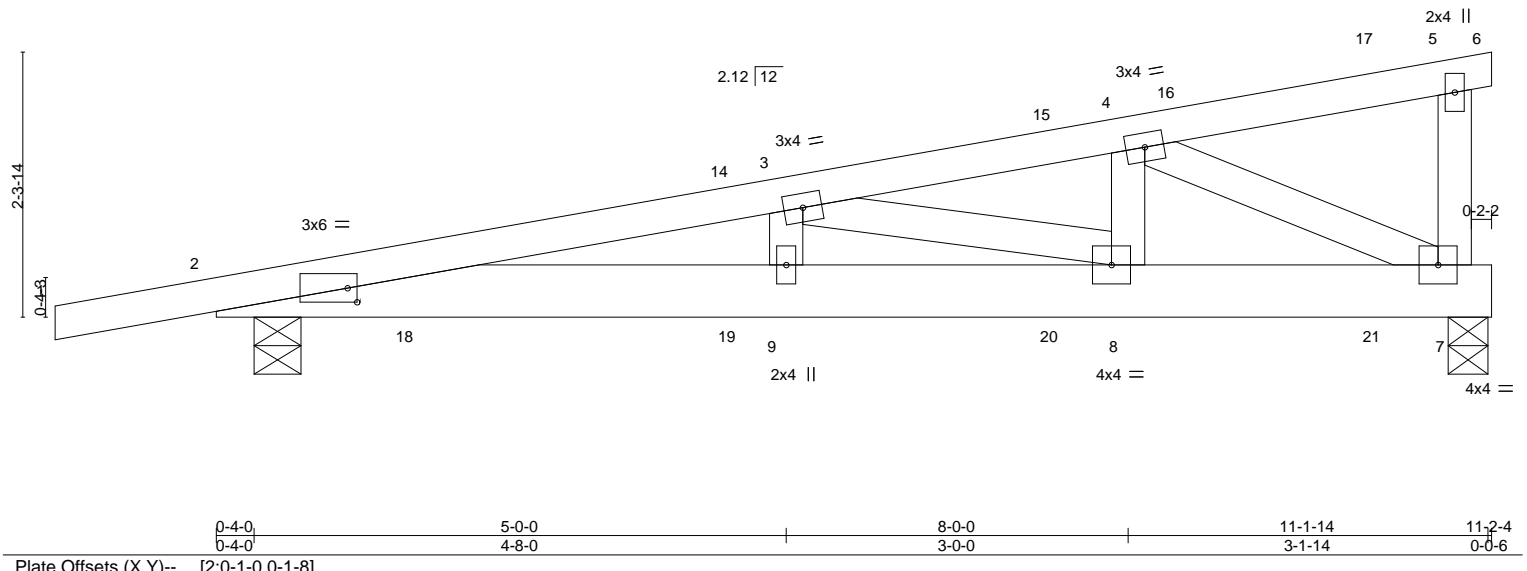
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:53 2023 Page 1

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Scale = 1:20.2



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 0.24	Vert(LL)	0.05	9	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.38	Vert(CT)	-0.07	9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.25	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS					Weight: 58 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-9-5 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-7-7 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (size) 7=0-4-3, 2=0-4-15  
 Max Horz 2=75(LC 4)  
 Max Uplift 7=-436(LC 4), 2=-312(LC 4)  
 Max Grav 7=828(LC 1), 2=610(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1466/703, 3-4=-986/485  
 BOT CHORD 2-9=-723/1434, 8-9=-723/1434, 7-8=-497/961  
 WEBS 3-8=-492/236, 4-8=-153/341, 4-7=-1012/522

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; cantilever left exposed ; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=436, 2=312.
  - 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 24 lb down and 39 lb up at 4-6-13, 24 lb down and 39 lb up at 4-6-13, 44 lb down and 74 lb up at 7-4-12, 44 lb down and 74 lb up at 7-4-12, and 104 lb down and 98 lb up at 10-2-11, and 104 lb down and 98 lb up at 10-2-11 on top chord, and 5 lb down and 6 lb up at 1-8-14, 5 lb down and 6 lb up at 1-8-14, 21 lb down and 29 lb up at 4-6-13, 21 lb down and 29 lb up at 4-6-13, 42 lb down and 50 lb up at 7-4-12, 42 lb down and 50 lb up at 7-4-12, and 82 lb down and 70 lb up at 10-2-11, and 82 lb down and 70 lb up at 10-2-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).


**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-5=-54, 5-6=-54, 2-7=-20

This item has been electronically signed and sealed by O'Regan, 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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 16023 Swingley Ridge Rd. Chesterfield, MO 63017  
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February 7, 2023

Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd        Chesterfield, MO 63017</p>
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Job 3323964	Truss HJ11	Truss Type Roof Special Girder	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES.  Job Reference (optional)	T29755934
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:53 2023 Page 2  
ID:QT9?RVjmsS35aOAudzFTjyMd2g-?LSt42e8KXjGI?Ej7Gp\_bv0S7mcZcgOC\_cRUffznrWw

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 14=-6(F=-3, B=-3) 15=-83(F=-42, B=-42) 17=-208(F=-104, B=-104) 18=-11(F=-5, B=-5) 19=-23(F=-12, B=-12) 20=-75(F=-37, B=-37) 21=-134(F=-67, B=-67)

**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



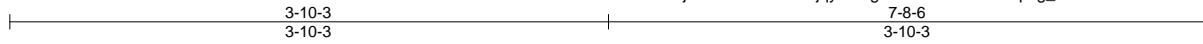
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss PB01	Truss Type Piggyback	Qty 9	Ply 1	AMIRA BLDRS - VARNER RES. T29755935
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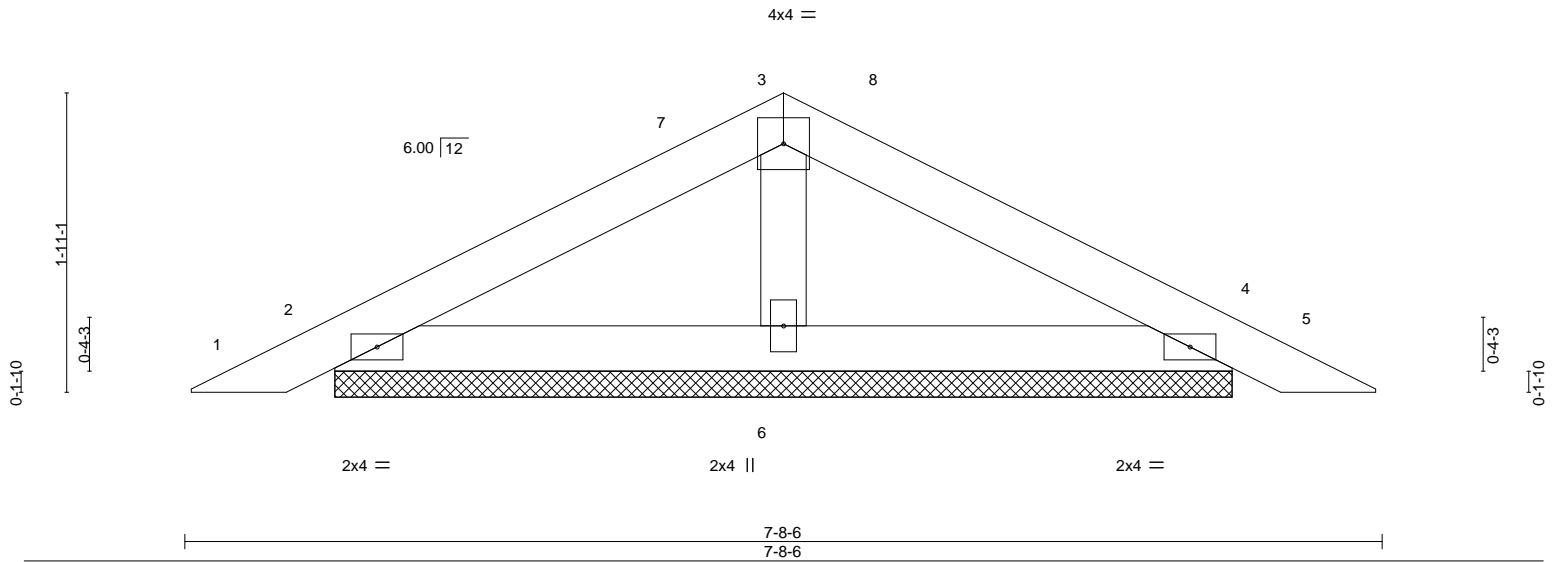
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:54 2023 Page 1

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Scale = 1:14.8



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 0.15	Vert(LL)	0.00	5	n/r	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.08	Vert(CT)	0.01	5	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code FBC2020/TP12014		Matrix-P					Weight: 23 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.
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=5-9-4, 4=5-9-4, 6=5-9-4  
 Max Horz 2=-26(LC 17)  
 Max Uplift 2=-48(LC 12), 4=-53(LC 13), 6=-19(LC 12)  
 Max Grav 2=144(LC 1), 4=144(LC 1), 6=206(LC 1)

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


**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-3 to 3-4-3, Interior(1) 3-4-3 to 3-10-3, Exterior(2R) 3-10-3 to 6-8-13, Interior(1) 6-8-13 to 7-4-3 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) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) 2, 4, 6.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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:

February 7, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd          Chesterfield, MO 63017</p>
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Job 3323964	Truss PB02	Truss Type Piggyback	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755936
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:56 2023 Page 1  
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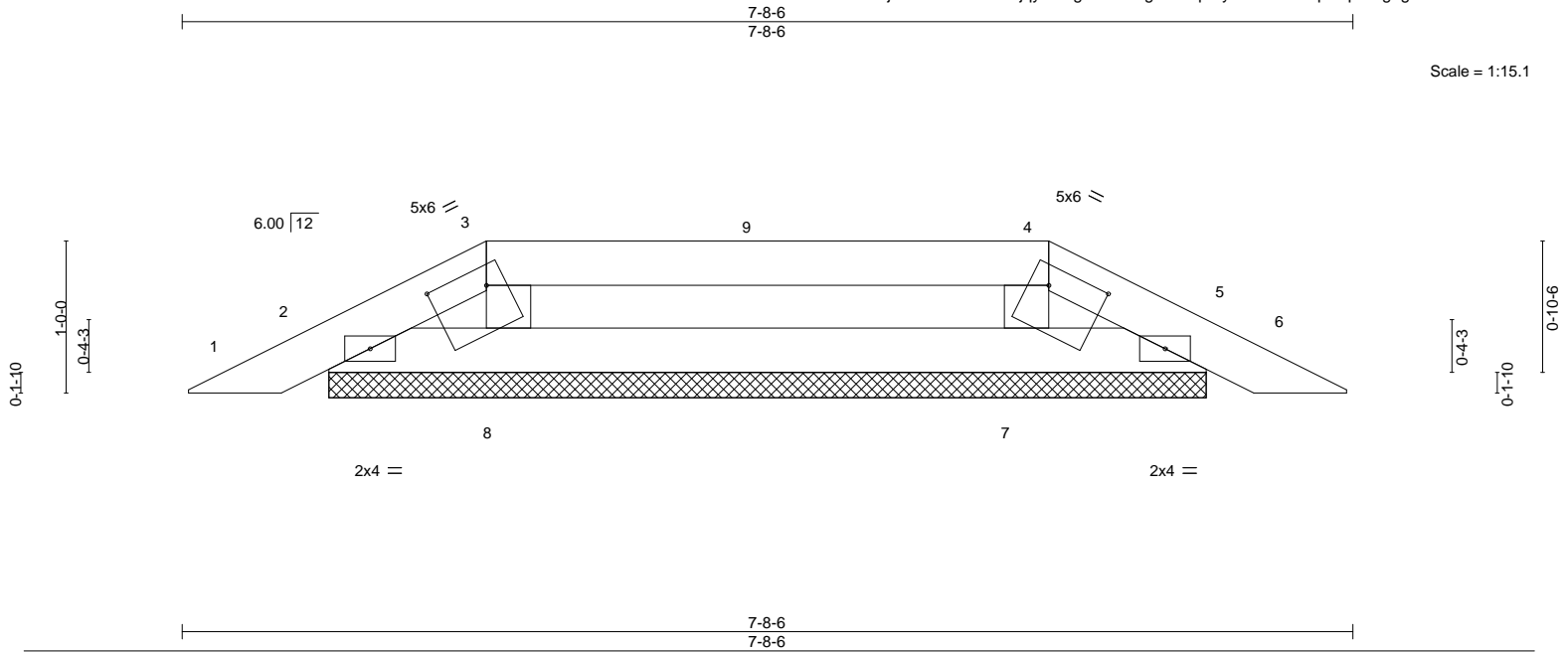


Plate Offsets (X,Y)--	[3:0-4-8,0-1-8], [4:0-4-8,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.21	Vert(LL) -0.00 5 n/r 120	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.07	Vert(CT) -0.00 5 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-P		Weight: 21 lb	FT = 20%

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

**REACTIONS.** All bearings 5-9-4.  
 (lb) - Max Horz 2=12(LC 17)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 8, 7  
 Max Grav All reactions 250 lb or less at joint(s) 2, 5, 8, 7


**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; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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) Gable requires continuous bottom chord bearing.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5, 8, 7.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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:

February 7, 2023

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Job 3323964	Truss PB03	Truss Type Piggyback	Qty 7	Ply 1	AMIRA BLDRS - VARNER RES. T29755937
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:58 2023 Page 1  
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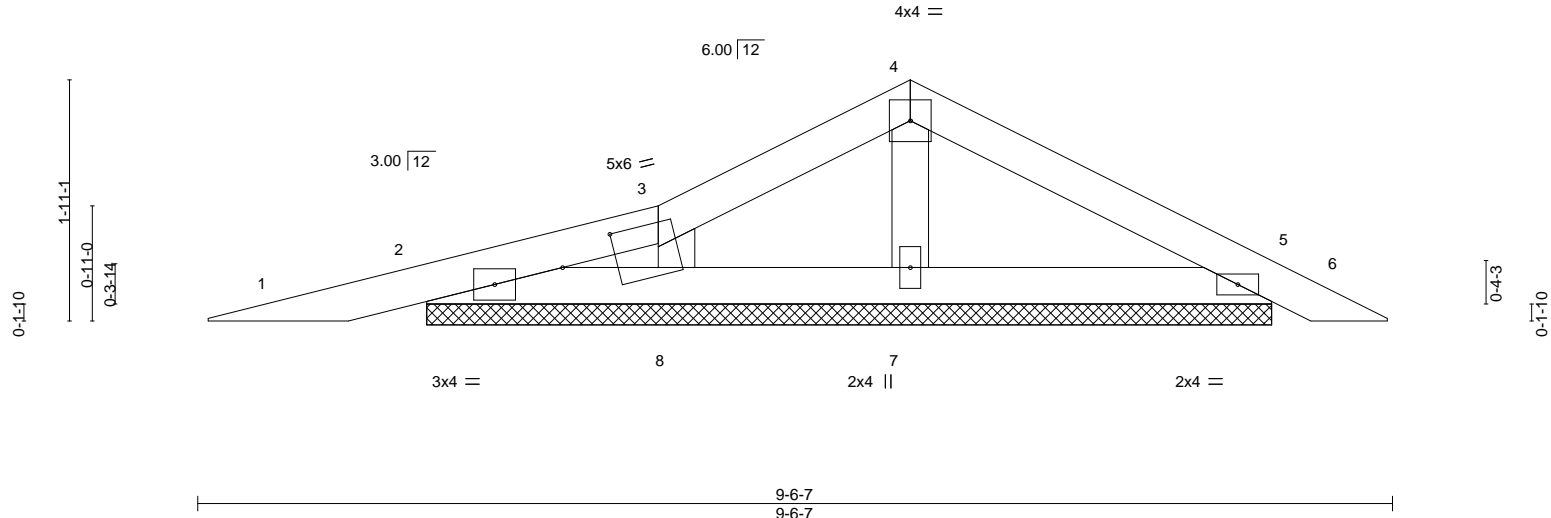


Plate Offsets (X,Y)--	[3:0-5-3,0-2-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.25	TC 0.16	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.06	Vert(CT)	0.01	6	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-P						Weight: 28 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 6-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 6-8-15.  
 (lb) - Max Horz 2--26(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 7, 8  
 Max Grav All reactions 250 lb or less at joint(s) 2, 5, 7, 8


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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-11 to 3-8-2, Interior(1) 3-8-2 to 5-8-4, Exterior(2R) 5-8-4 to 8-6-14, Interior(1) 8-6-14 to 9-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 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) 2, 5, 7, 8.
  - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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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:

February 7, 2023

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Job 3323964	Truss PB04	Truss Type Piggyback	Qty 2	Ply 2	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755938
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:44:59 2023 Page 1

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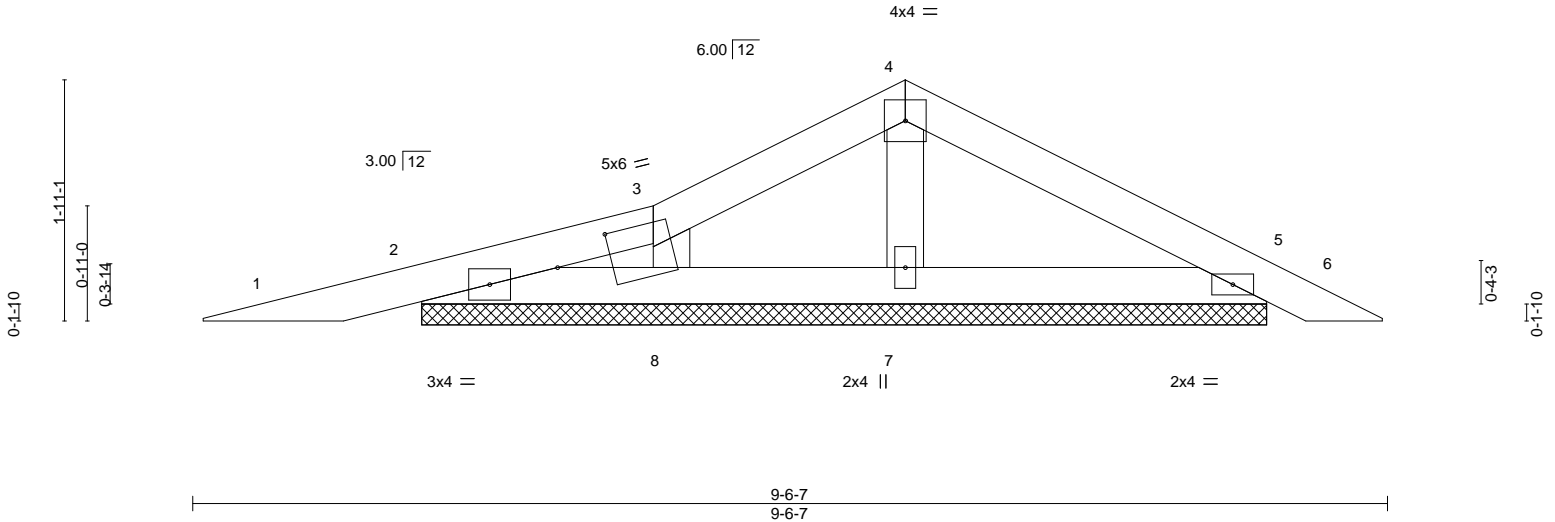


Plate Offsets (X,Y)--	[3:0-5-3,0-2-0]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.08	Vert(LL)	0.00	6	n/r	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	0.00	6	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-P					Weight: 55 lb	FT = 20%

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

**REACTIONS.** All bearings 6-8-15.  
 (lb) - Max Horz 2--26(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 7, 8  
 Max Grav All reactions 250 lb or less at joint(s) 2, 5, 7, 8


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

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-11 to 3-8-2, Interior(1) 3-8-2 to 5-8-4, Exterior(2R) 5-8-4 to 8-6-14, Interior(1) 8-6-14 to 9-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5, 7, 8.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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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:

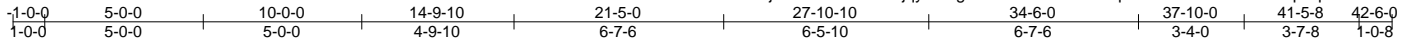
February 7, 2023

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Job 3323964	Truss T01	Truss Type Hip Girder	Qty 1	Ply 2	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755939
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:04 2023 Page 1

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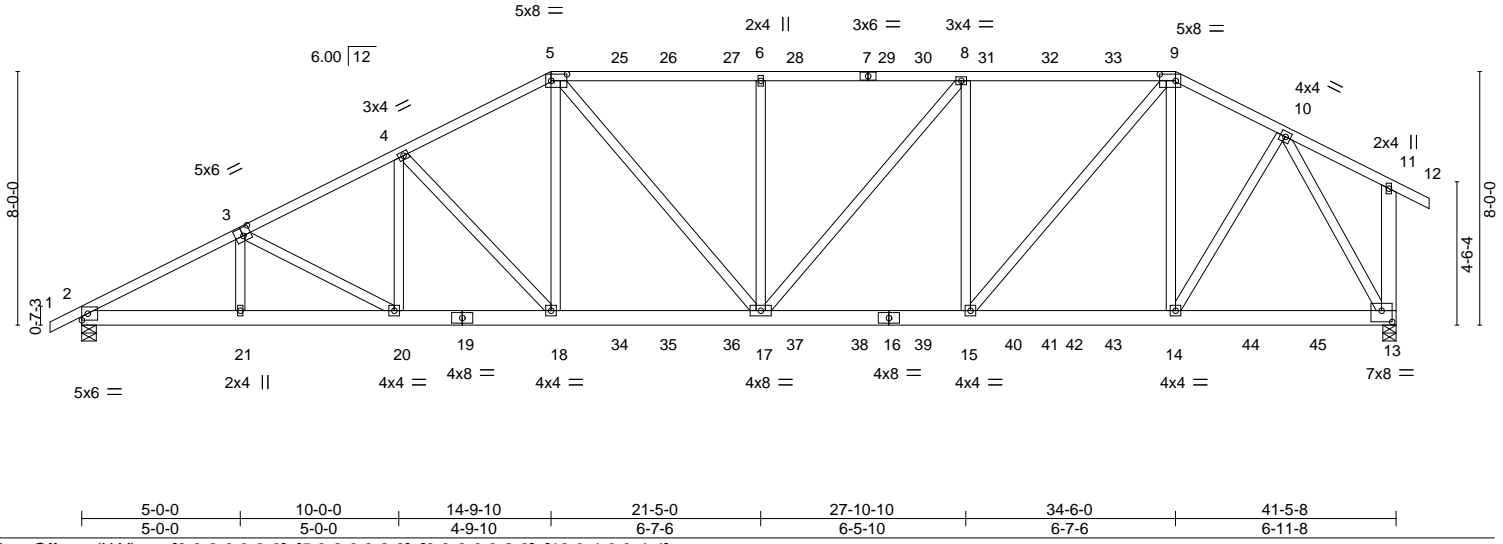


Plate Offsets (X,Y)--	[3:0-3-0,0-3-0], [5:0-6-0,0-2-8], [9:0-6-0,0-2-8], [13:0-4-0,0-4-4]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.52	Vert(LL) 0.21 17-18 >999 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.75	Vert(CT) -0.32 17-18 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.69	Horz(CT) 0.08 13 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS			
				Weight: 617 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
11-13: 2x6 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-1-3 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-5-8, 13=0-5-0  
Max Horz 2=195(LC 8)  
Max Uplift 2=-1274(LC 8), 13=-1704(LC 9)  
Max Grav 2=2946(LC 2), 13=3409(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-5519/2443, 3-4=-5433/2538, 4-5=-5121/2529, 5-6=-5008/2520, 6-8=-5008/2520, 8-9=-4415/2243, 9-10=-3136/1702  
BOT CHORD 2-21=-2303/4877, 20-21=-2304/4878, 18-20=-2316/4832, 17-18=-2229/4560, 15-17=-2167/4415, 14-15=-1427/2770, 13-14=-920/1794  
WEBS 3-20=-359/265, 4-20=-108/375, 4-18=-570/262, 5-18=-725/1486, 5-17=-462/785, 6-17=-453/218, 8-17=-429/934, 8-15=-1135/494, 9-15=-1130/2528, 9-14=-789/239, 10-14=-1033/1939, 10-13=-3586/1857

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 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.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1274, 13=1704.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss T01	Truss Type Hip Girder	Qty 1	Ply <b>2</b>	AMIRA BLDRS - VARNER RES. T29755939 Job Reference (optional)
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:04 2023 Page 2  
ID:QT9?RVjmS35aOAudzFTTjyMd2g-BTd1Non2kw5i6haqG4WZYezGOCHFhX6qWqcZYcznwWT

**NOTES-**

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 41 lb down and 39 lb up at 14-9-10, 26 lb down and 39 lb up at 16-10-6, 26 lb down and 39 lb up at 18-4-12, 26 lb down and 39 lb up at 20-4-12, 26 lb down and 39 lb up at 22-4-12, 26 lb down and 33 lb up at 24-5-4, 26 lb down and 39 lb up at 26-5-4, 26 lb down and 39 lb up at 28-5-4, 26 lb down and 39 lb up at 30-5-4, and 26 lb down and 39 lb up at 32-5-4, and 41 lb down and 39 lb up at 34-6-0 on top chord, and 749 lb down and 521 lb up at 14-9-10, 158 lb down and 131 lb up at 16-10-6, 168 lb down and 131 lb up at 18-4-12, 173 lb down and 131 lb up at 20-4-12, 173 lb down and 131 lb up at 22-4-12, 168 lb down and 131 lb up at 24-5-4, 158 lb down and 131 lb up at 26-5-4, 171 lb down and 131 lb up at 28-5-4, 172 lb down and 131 lb up at 30-5-4, and 158 lb down and 131 lb up at 32-5-4, and 493 lb down and 595 lb up at 34-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-5=-54, 5-9=-54, 9-11=-54, 11-12=-54, 13-22=-20

Concentrated Loads (lb)

Vert: 5=-22(B) 9=-22(B) 18=-749(B) 14=-401(B) 25=-22(B) 26=-22(B) 27=-22(B) 28=-22(B) 29=-22(B) 30=-22(B) 31=-22(B) 32=-22(B) 33=-22(B) 34=-144(B) 35=-144(B) 36=-144(B) 37=-144(B) 38=-144(B) 39=-144(B) 40=-144(B) 41=-144(B) 43=-144(B)

**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  
Chesterfield, MO 63017

Job 3323964	Truss T02	Truss Type Hip	Qty 1	Ply 1	AMIRA BLDRS - VARNER RES. T29755940
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:05 2023 Page 1

ID:QT9?RVjmS35aOAudzFTTjgyMd2g-ffAQb8ngVDDZkr81qo1o4RWOcbeYQ\_DzkTL643znwWS

-1-0-0	5-7-8	11-2-9	16-9-10	24-7-13	32-6-0	36-10-0	41-5-8	42-6-0
1-0-0	5-7-8	5-7-1	5-7-1	7-10-3	7-10-3	4-4-0	4-7-8	1-0-8

Scale = 1:72.7

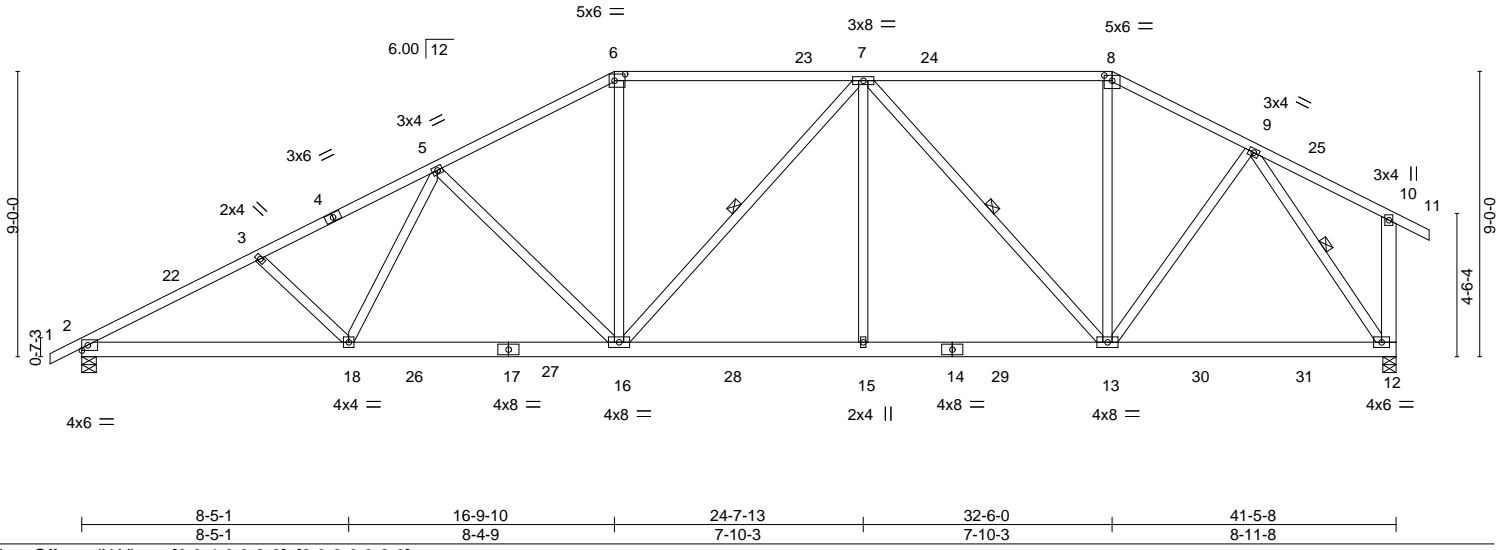


Plate Offsets (X,Y)--	[6:0-4-0,0-2-8], [8:0-3-0,0-2-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.72	Vert(LL) -0.20 16-18 >999 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.69	Vert(CT) -0.33 16-18 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.70	Horz(CT) 0.09 12 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 294 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 9-1-12 oc bracing.
WEBS 2x4 SP No.3 *Except* 10-12: 2x6 SP No.2	WEBS 1 Row at midpt 7-16, 7-13, 9-12

<b>REACTIONS.</b>	(size) 2=0-5-8, 12=0-5-0
	Max Horz 2=199(LC 11)
	Max Uplift 2=371(LC 12), 12=325(LC 13)
	Max Grav 2=1756(LC 2), 12=1815(LC 2)


<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3153/658, 3-5=-2992/627, 5-6=-2351/522, 6-7=-2061/504, 7-8=-1461/372, 8-9=-1667/385
BOT CHORD	2-18=-652/2767, 16-18=-504/2434, 15-16=-391/2087, 13-15=-391/2087, 12-13=-209/1034
WEBS	5-18=-66/465, 5-16=-560/238, 6-16=-88/767, 7-15=0/402, 7-13=-977/240, 8-13=-84/484, 9-13=-121/751, 9-12=-1771/322

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 3-1-12, Interior(1) 3-1-12 to 16-9-10, Exterior(2R) 16-9-10 to 22-8-0, Interior(1) 22-8-0 to 32-6-0, Exterior(2R) 32-6-0 to 38-4-6, Interior(1) 38-4-6 to 42-6-0 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=371, 12=325.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job 3323964	Truss T05	Truss Type Piggyback Base	Qty 6	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755943
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:11 2023 Page 1

ID:QT9?RVjmS35aOaudzfTTjyMd2g-UpYhrCsR53\_iSmcAA28CKilSH0ihqjqs7PoRliznwWM

-1-0-0	7-0-0	14-0-0	20-9-10	24-7-13	28-6-0	34-10-0	41-5-8	42-6-0
1-0-0	7-0-0	7-0-0	6-9-10	3-10-3	3-10-3	6-4-0	6-7-8	1-0-8

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

Scale = 1:78.1

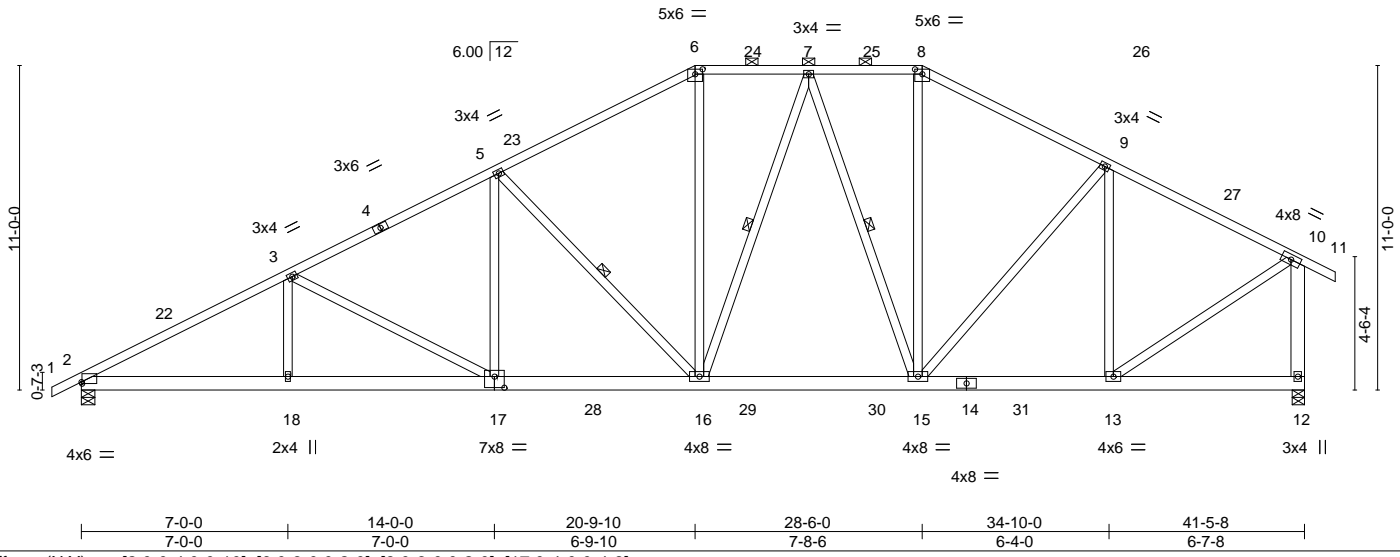


Plate Offsets (X, Y)--	[2:0-0-4,0-0-10], [6:0-3-0,0-2-0], [8:0-3-0,0-2-0], [17:0-4-0,0-4-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.51	Vert(LL)	-0.16 17-18	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.64	Vert(CT)	-0.28 17-18	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.63	Horz(CT)	0.08 12	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 316 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-11-11 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-7 max.): 6-8.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 9-3-9 oc bracing.
WEBS 2x4 SP No.3 *Except* 10-12: 2x6 SP No.2	WEBS 1 Row at midpt 5-16, 7-16, 7-15

REACTIONS.
(size) 2=0-5-8, 12=0-5-0
Max Horz 2=221(LC 11)
Max Uplift 2=364(LC 12), 12=318(LC 13)
Max Grav 2=1738(LC 2), 12=1780(LC 2)


FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3097/620, 3-5=-2593/542, 5-6=-1974/465, 6-7=-1705/447, 7-8=-1470/416, 8-9=-1707/424, 9-10=-1512/341, 10-12=-1675/390
BOT CHORD	2-18=-634/2708, 17-18=-634/2708, 16-17=-447/2261, 15-16=-277/1613, 13-15=-238/1298
WEBS	3-17=-513/211, 5-17=-58/535, 5-16=-816/298, 6-16=-96/627, 7-16=-117/335, 7-15=-516/179, 8-15=-107/531, 9-15=-71/326, 9-13=-604/177, 10-13=-237/1510

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 3-1-12, Interior(1) 3-1-12 to 20-9-10, Exterior(2R) 20-9-10 to 26-8-0, Interior(1) 26-8-0 to 28-6-0, Exterior(2R) 28-6-0 to 34-4-6, Interior(1) 34-4-6 to 42-6-0 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=364, 12=318.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job 3323964	Truss T06	Truss Type Hip Girder	Qty 1	Ply <b>2</b>	AMIRA BLDRS - VARNER RES. T29755944 Job Reference (optional)
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:16 2023 Page 2

ID:QT9?RVjmS35aOAudzfTTjyMd2g-qmLavvavcc?YXU8zbn1mTMq1NVVx0bGhWCzwnwWH

**NOTES-**

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 41 lb down and 39 lb up at 14-9-10, 26 lb down and 39 lb up at 16-10-6, 26 lb down and 39 lb up at 18-10-6, 26 lb down and 39 lb up at 20-10-6, 26 lb down and 39 lb up at 22-10-6, 26 lb down and 33 lb up at 24-5-4, 87 lb down and 85 lb up at 26-5-4, 87 lb down and 85 lb up at 28-5-4, 87 lb down and 85 lb up at 30-5-4, and 87 lb down and 85 lb up at 32-5-4, and 106 lb down and 85 lb up at 34-6-0 on top chord, and 749 lb down and 521 lb up at 14-9-10, 162 lb down and 131 lb up at 16-10-6, 173 lb down and 131 lb up at 18-10-6, 173 lb down and 131 lb up at 20-10-6, 173 lb down and 131 lb up at 22-10-6, 173 lb down and 131 lb up at 24-5-4, 103 lb down and 90 lb up at 26-5-4, 103 lb down and 90 lb up at 28-5-4, 103 lb down and 90 lb up at 30-5-4, and 103 lb down and 90 lb up at 32-5-4, and 452 lb down and 571 lb up at 34-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-5=-54, 5-10=-54, 10-12=-54, 12-13=-54, 20-26=-20, 16-19=-20, 14-15=-20

Concentrated Loads (lb)

Vert: 5=-22(F) 10=-87(F) 22=-749(F) 17=-339(F) 29=-22(F) 30=-22(F) 31=-22(F) 32=-22(F) 33=-22(F) 34=-87(F) 35=-87(F) 36=-87(F) 37=-87(F) 38=-144(F) 40=-144(F) 41=-144(F) 42=-144(F) 43=-144(F) 44=-79(F) 45=-79(F) 46=-79(F) 47=-79(F)

**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



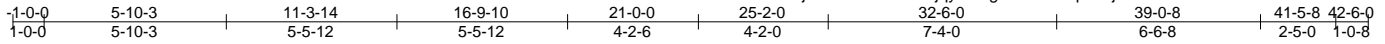
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss T07	Truss Type Hip	Qty 1	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755945
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:18 2023 Page 1

ID:QT9?RVjmS35aOAudzftTjyMd2g-n9TKJbxqRdsjoreW40mr6BYcEr4wzrKuk??J2oznwWF



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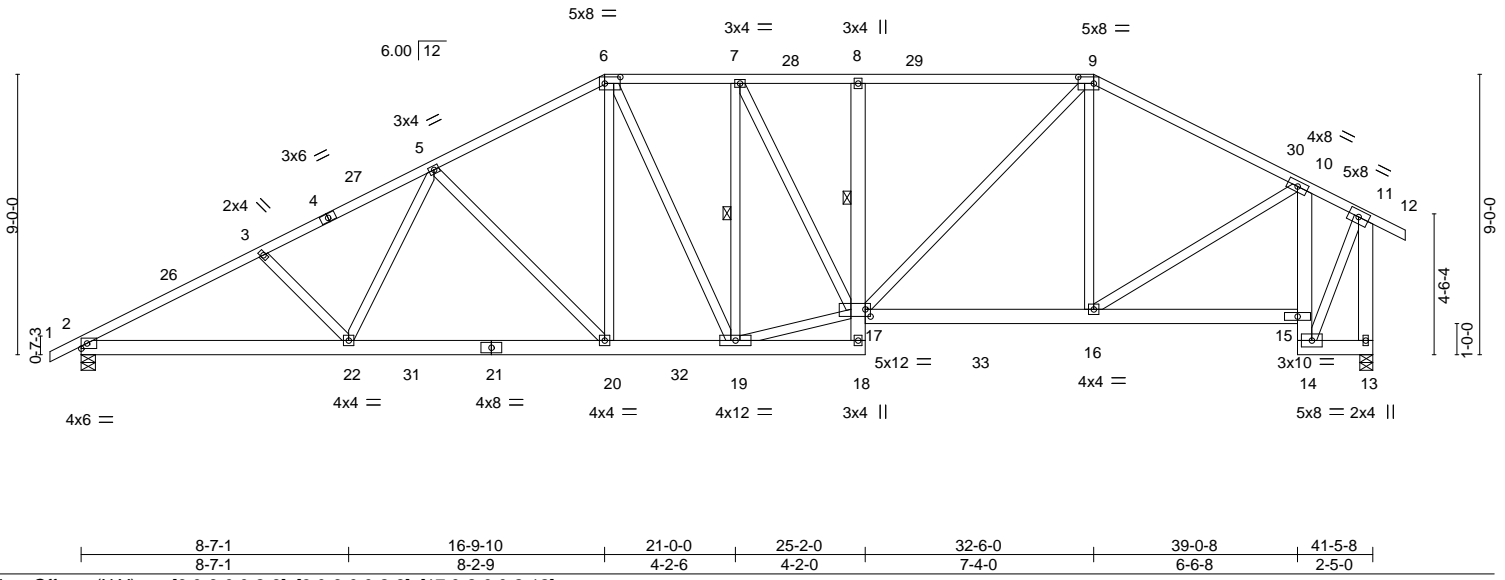


Plate Offsets (X,Y)--	[6:0-6-0,0-2-8], [9:0-6-0,0-2-8], [17:0-2-0,0-2-12]
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LOADING (psf)	SPACING-	CSi.	DEFL.	VERT. LL	VERT. CT	HORIZ. CT	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.72	in (loc) l/defl L/d	-0.20 20-22 >999 240	-0.34 20-22 >999 180	0.13 13 n/a n/a	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.66						
BCLL 0.0 *	Lumber DOL 1.25	WB 0.71						
BCDL 10.0	Rep Stress Incr YES	Matrix-MS						
	Code FBC2020/TPI2014						Weight: 332 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3 *Except* 11-13: 2x6 SP No.2	9-2-1 oc bracing: 2-22 5-11-12 oc bracing: 14-15. 1 Row at midpt 8-17 1 Row at midpt 7-19


REACTIONS.	FORCES.
(size) 2=0-5-8, 13=0-5-0 Max Horz 2=199(LC 11) Max Uplift 2=-373(LC 12), 13=-323(LC 13) Max Grav 2=1733(LC 2), 13=1750(LC 2)	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-3097/657, 3-5=-2936/631, 5-6=-2289/527, 6-7=-2043/495, 7-8=-2195/495, 8-9=-2230/507, 9-10=-1855/393, 10-11=-747/200, 11-13=-1794/392 BOT CHORD 2-22=-648/2715, 20-22=-505/2382, 19-20=-368/2003, 18-19=-87/275, 8-17=-362/176, 16-17=-276/1590, 15-16=-180/775, 14-15=-1221/246, 10-15=-1142/266 WEBS 5-22=-69/485, 5-20=-571/241, 6-20=-138/720, 6-19=-135/270, 7-19=-530/172, 17-19=-314/1834, 7-17=-110/380, 9-17=-240/955, 10-16=-177/960, 11-14=-274/1468

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 3-1-12, Interior(1) 3-1-12 to 16-9-10, Exterior(2R) 16-9-10 to 22-8-0, Interior(1) 22-8-0 to 32-6-0, Exterior(2R) 32-6-0 to 38-4-6, Interior(1) 38-4-6 to 42-6-0 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=-373, 13=323.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job 3323964	Truss T08	Truss Type Hip	Qty 1	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755946
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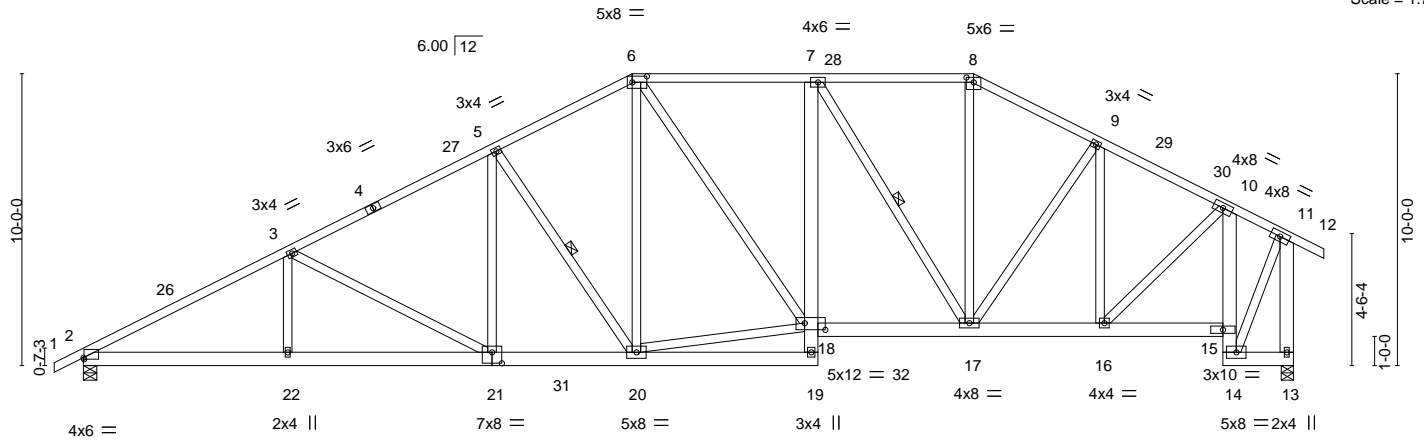
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8,530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:20 2023 Page 1

ID:QT9?RVjmS35aOAudzFTTjyMd2g-jYa5kH4zq6Q19ovCRoJBcd06emvRn3BBJUP6hznwWD

-1-0-0	7-0-0	14-0-0	18-9-10	25-2-0	30-6-0	34-10-0	39-0-8	41-5-8	42-6-0
1-0-0	7-0-0	7-0-0	4-9-10	6-4-6	5-4-0	4-4-0	4-2-8	2-5-0	1-0-8

Scale = 1:78.9



7-0-0	14-0-0	18-9-10	25-2-0	30-6-0	34-10-0	39-0-8	41-5-8
7-0-0	7-0-0	4-9-10	6-4-6	5-4-0	4-4-0	4-2-8	2-5-0

Plate Offsets (X,Y)-- [2:0-0-4,0-0-10], [6:0-6-0,0-2-8], [8:0-3-0,0-2-12], [18:0-8-8,0-2-12], [21:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSi.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.63	Vert(LL) -0.17 21-22 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.63	Vert(CT) -0.29 21-22 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.13 13 n/a n/a		
	Code FBC2020/TPI2014			Weight: 347 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-0-6 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 9-4-3 oc bracing: 2-22,21-22
WEBS 2x4 SP No.3 *Except* 11-13: 2x6 SP No.2	WEBS 6-0-0 oc bracing: 14-15. 1 Row at midpt 5-20, 7-17

**REACTIONS.** (size) 2=0-5-8, 13=0-5-0  
 Max Horz 2=210(LC 11)  
 Max Uplift 2=-368(LC 12), 13=-322(LC 13)  
 Max Grav 2=1710(LC 2), 13=1726(LC 2)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3044/629, 3-5=-2523/548, 5-6=-2069/501, 6-7=-1955/482, 7-8=-1577/412, 8-9=-1799/431, 9-10=-1633/367, 10-11=-738/205, 11-13=-1762/393  
 BOT CHORD 2-22=-628/2662, 21-22=-628/2662, 20-21=-436/2195, 7-18=-51/383, 17-18=-355/1966, 16-17=-269/1421, 15-16=-162/724, 14-15=-1177/227, 10-15=-1133/245  
 WEBS 3-21=-538/219, 5-21=-70/505, 5-20=-714/260, 6-20=-131/511, 18-20=-289/1597, 6-18=-114/373, 7-17=-779/204, 8-17=-117/594, 9-17=-82/329, 9-16=-488/123, 10-16=-148/962, 11-14=-255/1411

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 3-1-12, Interior(1) 3-1-12 to 18-9-10, Exterior(2R) 18-9-10 to 24-11-4, Interior(1) 24-11-4 to 30-6-0, Exterior(2R) 30-6-0 to 36-4-6, Interior(1) 36-4-6 to 42-6-0 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=368, 13=322.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

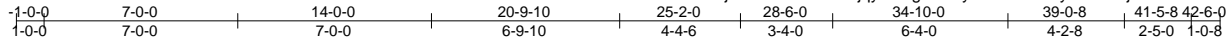
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd        Chesterfield, MO 63017</p>
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Job 3323964	Truss T09	Truss Type Hip	Qty 1	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755947
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:22 2023 Page 1

ID:QT9?RVjmS35aOAudzFTTjyMd2g-fwir9y?LVRM8GSylJsmG1jLVSSVvh?UedzWBaznwWB



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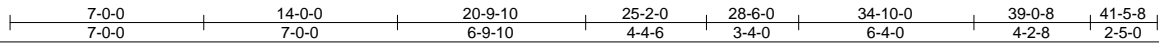
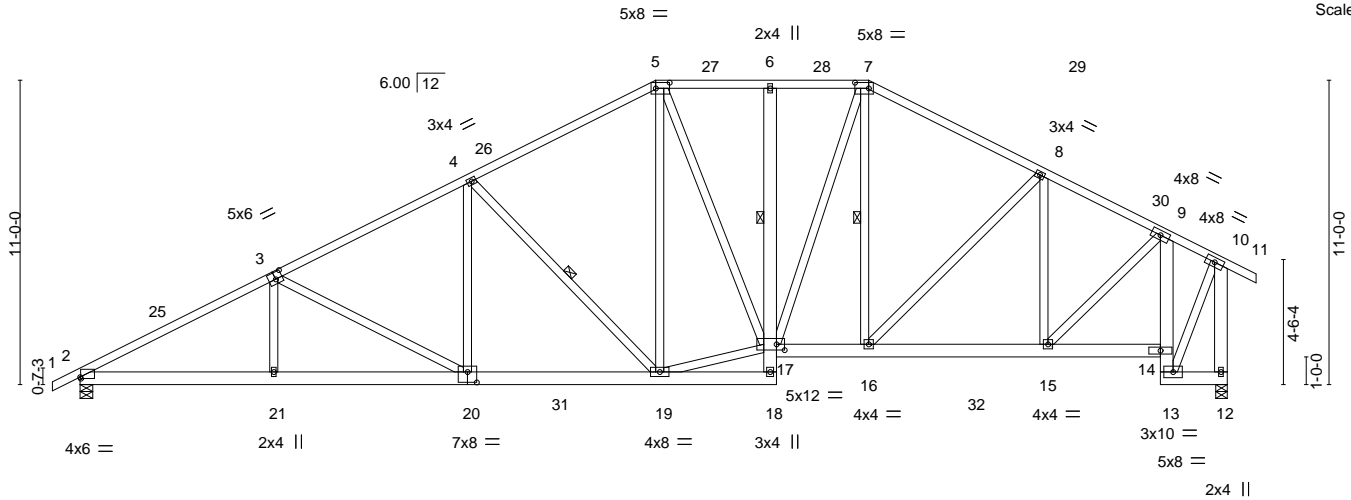


Plate Offsets (X, Y)--	[2:0-0-4,0-0-10], [3:0-3-0,0-3-0], [5:0-6-0,0-2-8], [7:0-6-0,0-2-8], [17:0-3-8,0-2-8], [20:0-4-0,0-4-8]
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LOADING (psf)	SPACING-	CSi.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.62	Vert(LL) -0.16 19-20 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.60	Vert(CT) -0.28 19-20 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.12 12 n/a n/a		
	Code FBC2020/TPI2014			Weight: 354 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-0-4 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3 *Except* 10-12: 2x6 SP No.2	9-3-6 oc bracing: 2-21 9-3-8 oc bracing: 20-21 6-0-0 oc bracing: 13-14. 1 Row at midpt 6-17 1 Row at midpt 4-19, 7-16

REACTIONS.
(size) 2=0-5-8, 12=0-5-0
Max Horz 2=221(LC 11)
Max Uplift 2=-366(LC 12), 12=-316(LC 13)
Max Grav 2=1709(LC 2), 12=1735(LC 2)


FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3037/624, 3-4=-2535/545, 4-5=-1903/466, 5-6=-1703/455, 6-7=-1708/454, 7-8=-1803/436, 8-9=-1656/366, 9-10=-742/205, 10-12=-1769/394
BOT CHORD 2-21=-637/2655, 20-21=-637/2655, 19-20=-450/2210, 16-17=-262/1552, 15-16=-274/1451, 14-15=-158/718, 13-14=-1177/223, 9-14=-1151/238
WEBS 3-20=-511/211, 4-20=-57/553, 4-19=-832/297, 5-19=-119/468, 17-19=-257/1471, 5-17=-86/306, 7-17=-168/525, 8-16=-64/254, 8-15=-483/142, 9-15=-160/1013, 10-13=-251/1409

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 3-1-12, Interior(1) 3-1-12 to 20-9-10, Exterior(2R) 20-9-10 to 26-8-0, Interior(1) 26-8-0 to 28-6-0, Exterior(2R) 28-6-0 to 34-4-6, Interior(1) 34-4-6 to 42-6-0 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=366, 12=316.

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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:

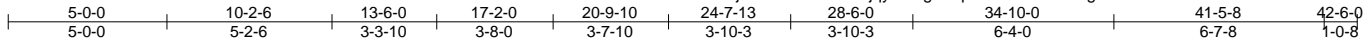
February 7, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job 3323964	Truss T10	Truss Type PIGGYBACK BASE	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755948
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:24 2023 Page 1

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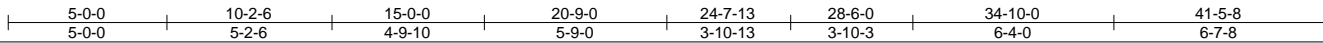
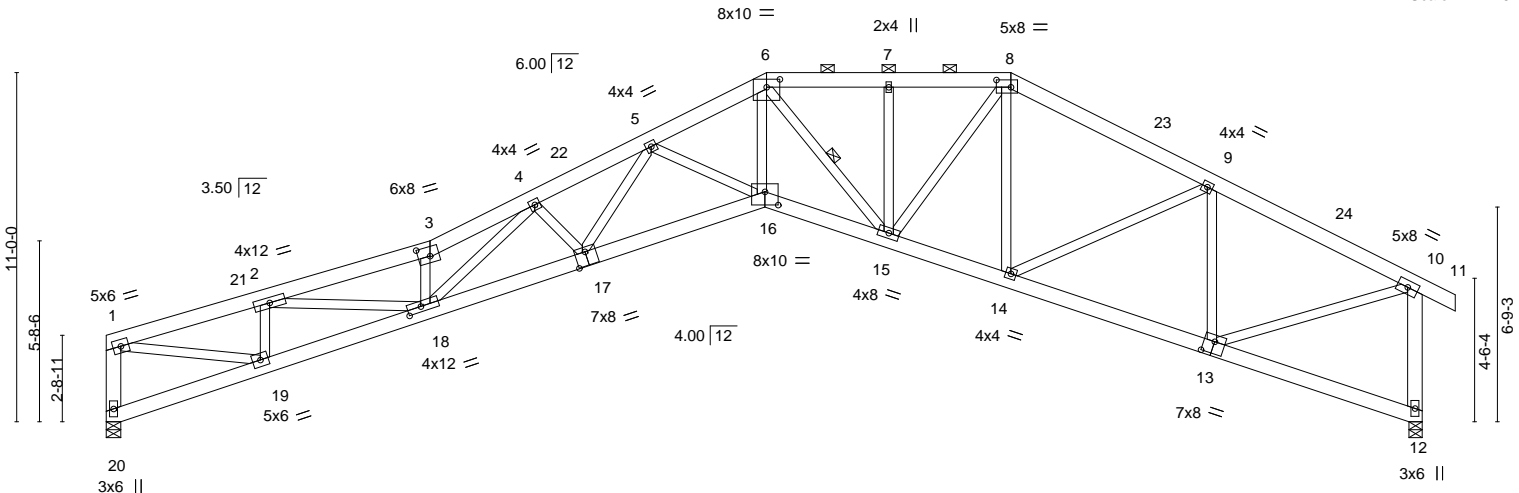


Plate Offsets (X,Y)--	[3:0-4-8,0-3-8], [6:0-5-0,0-3-0], [8:0-5-8,0-2-12], [13:0-4-0,0-4-8], [16:0-5-0,0-5-0], [17:0-4-0,0-5-4], [18:0-5-2,0-2-0]
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LOADING (psf)	SPACING-	CS.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.40	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.86	Vert(LL) -0.45 16-17 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.98	Vert(CT) -0.84 16-17 >585 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.65 12 n/a n/a		
	Code FBC2020/TPI2014			Weight: 329 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-9-2 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-11 max.): 6-8.
BOT CHORD 2x6 SP No.2 *Except* 17-20: 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 6-2-9 oc bracing.
WEBS 2x4 SP No.3 *Except* 1-20,10-12: 2x6 SP No.2, 1-19,6-16: 2x4 SP No.2	WEBS 1 Row at midpt 6-15

**REACTIONS.** (size) 20=0-5-8, 12=0-5-0  
 Max Horz 20=192(LC 11)  
 Max Uplift 20=317(LC 12), 12=279(LC 13)  
 Max Grav 20=1516(LC 1), 12=1587(LC 1)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-20=-1480/437, 1-2=-3135/896, 2-3=-5811/1680, 3-4=-6292/1883, 4-5=-5810/1731,  
 5-6=-4664/1394, 6-7=-2973/962, 7-8=-2973/962, 8-9=-2460/773, 9-10=-1853/544,  
 10-12=-1535/511  
 BOT CHORD 18-19=-979/3134, 17-18=-1666/5714, 16-17=-1440/5063, 15-16=-1131/4306,  
 14-15=-570/2239, 13-14=-480/1701  
 WEBS 1-19=-827/2950, 2-19=-1309/429, 2-18=-704/2568, 3-18=-1328/443, 4-18=-213/387,  
 4-17=-384/205, 5-17=-247/763, 5-16=-760/322, 6-16=-921/3361, 6-15=-1838/495,  
 8-15=-393/1422, 8-14=-356/122, 9-14=-126/623, 9-13=-895/319, 10-13=-431/1639

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 4-4-8, Interior(1) 4-4-8 to 20-9-10, Exterior(2R) 20-9-10 to 24-7-13, Interior(1) 24-7-13 to 28-6-0, Exterior(2R) 28-6-0 to 32-7-12, Interior(1) 32-7-12 to 42-6-0 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 20, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=317, 12=279.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been electronically signed and sealed by O'Regan, 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.

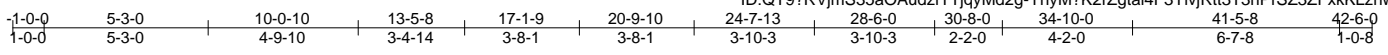
Philip J. O'Regan PE No.58126  
 MiTek Inc. DBA MiTek USA FL Cert 6634  
 16023 Swingley Ridge Rd. Chesterfield, MO 63017  
 Date:

February 7, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd        Chesterfield, MO 63017</p>
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Job 3323964	Truss T11	Truss Type Piggyback Base	Qty 1	Ply 1	AMIRA BLDRS - VARNER RES. T29755949
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:26 2023 Page 1  
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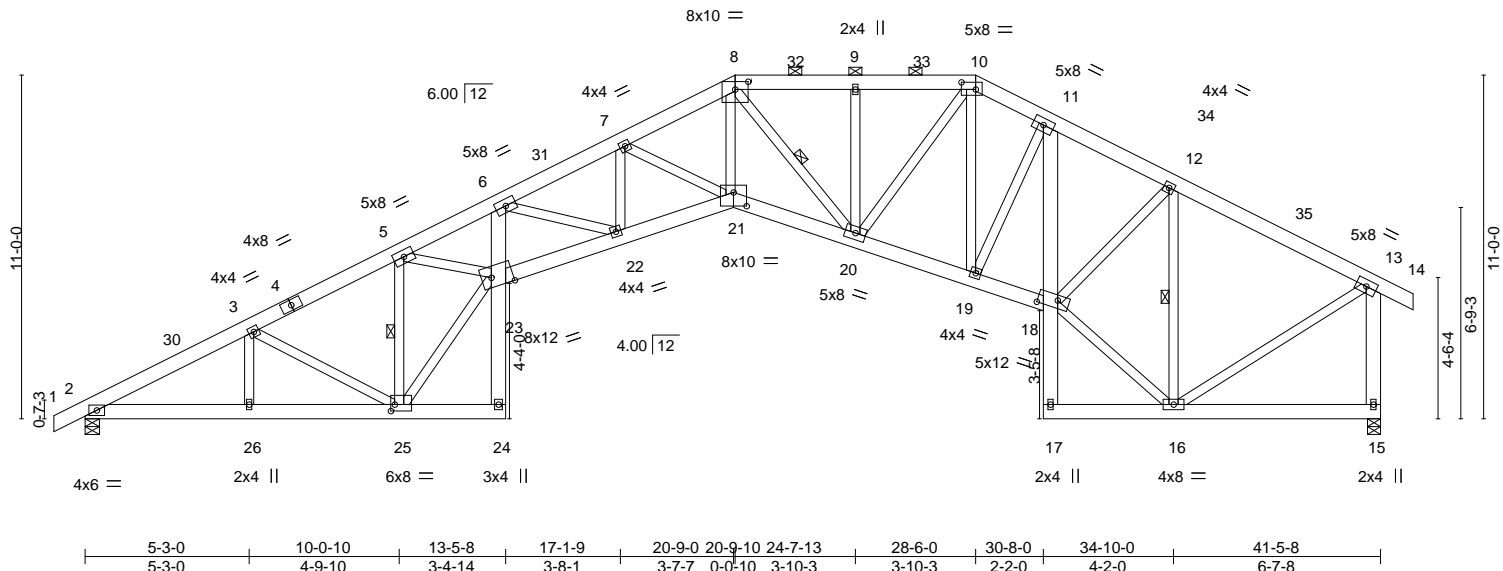


Plate Offsets (X,Y)--	[8:0-5-0,0-3-0], [10:0-5-8,0-2-12], [18:0-7-8,0-3-0], [21:0-5-0,0-5-4], [23:0-8-4,0-3-12], [25:0-1-8,0-2-8]
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LOADING (psf)	SPACING-	CSi.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.75	Vert(LL) -0.43 22 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.82	Vert(CT) -0.79 22 >625 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.63 15 n/a n/a		
	Code FBC2020/TPI2014			Weight: 383 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-8-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-7 max.): 8-10.
BOT CHORD 2x6 SP No.2 *Except* 21-23: 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 8-1-3 oc bracing.
WEBS 2x4 SP No.3 *Except* 23-25,5-23,8-21: 2x4 SP No.2, 13-15: 2x6 SP No.2	WEBS 1 Row at midpt 5-25, 8-20, 12-16

**REACTIONS.** (size) 2=0-5-8, 15=0-5-0  
 Max Horz 2=219(LC 11)  
 Max Uplift 2=-365(LC 12), 15=-318(LC 13)  
 Max Grav 2=1579(LC 1), 15=1595(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2902/647, 3-5=-2582/596, 5-6=-6329/1476, 6-7=-5502/1228, 7-8=-4704/1057,  
 8-9=-3004/731, 9-10=-3004/731, 10-11=-2412/601, 11-12=-2321/558, 12-13=-1354/340,  
 13-15=-1529/390  
 BOT CHORD 2-26=-677/2546, 25-26=-677/2546, 6-23=-142/493, 22-23=-1358/6026, 21-22=-1089/5162,  
 20-21=-843/4334, 19-20=-416/2249, 18-19=-410/2124, 11-18=-393/97  
 WEBS 5-25=-2726/676, 23-25=-882/3638, 5-23=-745/3452, 6-22=-892/333, 7-22=-146/499,  
 7-21=-833/329, 8-20=-1836/411, 10-20=-307/1463, 10-19=-340/111, 11-19=-76/302,  
 16-18=-303/1468, 12-18=-213/1224, 12-16=-1594/378, 13-16=-236/1307, 8-21=-695/3392,  
 3-25=-344/151

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCdL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 3-1-12, Interior(1) 3-1-12 to 20-9-10, Exterior(2R) 20-9-10 to 26-8-0, Interior(1) 26-8-0 to 28-6-0, Exterior(2R) 28-6-0 to 34-4-6, Interior(1) 34-4-6 to 42-6-0 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) 2=-365, 15=318.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been electronically signed and sealed by O'Regan, 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:

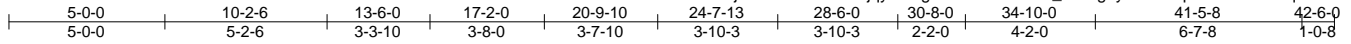
February 7, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 16023 Swingley Ridge Rd Chesterfield, MO 63017
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Job 3323964	Truss T12	Truss Type Piggyback Base	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755950
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:28 2023 Page 1

ID:QT9?RVjms35aOAudzFTTjyMd2g-U436Q0355H71\_NPRg7yBWizOqtRBjJcM1YQqODzwnW5



Scale = 1:73.9

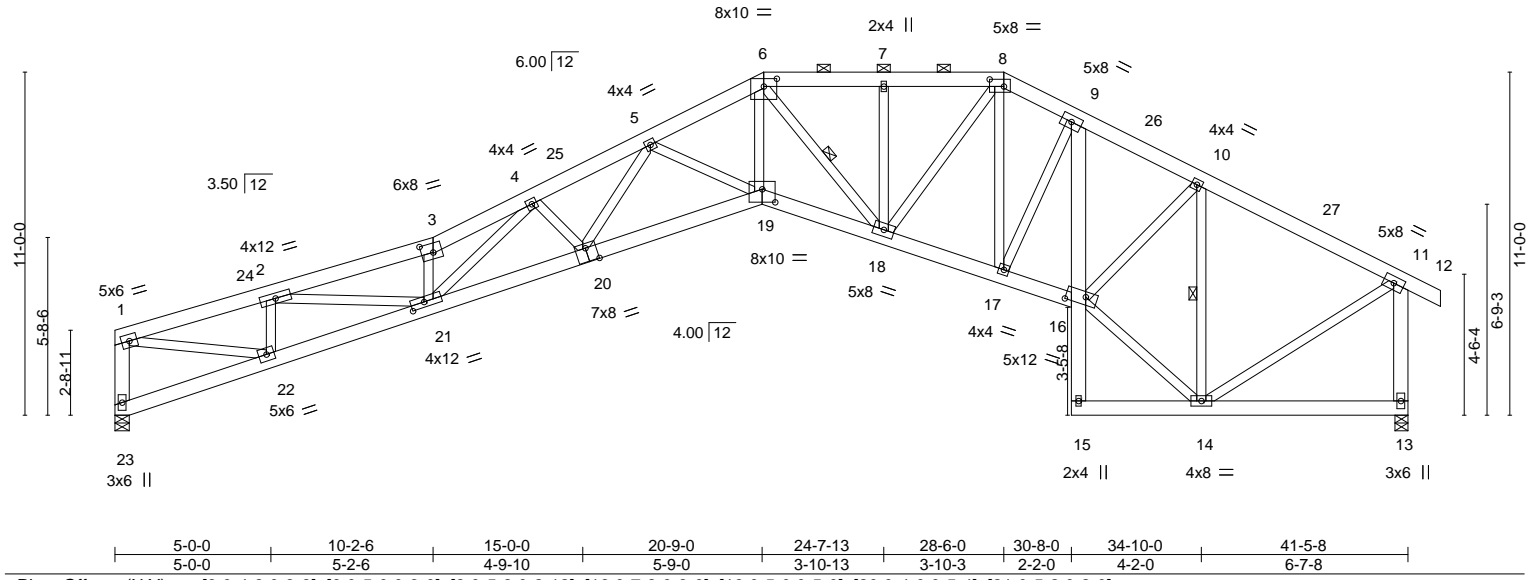


Plate Offsets (X, Y)--	[3:0-4-8,0-3-8], [6:0-5-0,0-3-0], [8:0-5-8,0-2-12], [16:0-7-8,0-3-0], [19:0-5-0,0-5-0], [20:0-4-0,0-5-4], [21:0-5-2,0-2-0]
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LOADING (psf)	SPACING-	CSi.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.40	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.86	Vert(LL) -0.46 19-20 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.98	Vert(CT) -0.85 19-20 >578 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.66 13 n/a n/a		
	Code FBC2020/TPI2014			Weight: 365 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-9-2 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-12 max.): 6-8.
BOT CHORD 2x6 SP No.2 *Except* 20-23: 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 6-2-10 oc bracing.
WEBS 2x4 SP No.3 *Except* 1-23,11-13: 2x6 SP No.2, 1-22,6-19: 2x4 SP No.2	WEBS 1 Row at midpt 6-18, 10-14

**REACTIONS.** (size) 23=0-5-8, 13=0-5-0  
 Max Horz 23=191(LC 11)  
 Max Uplift 23=317(LC 12), 13=279(LC 13)  
 Max Grav 23=1516(LC 1), 13=1587(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-23=-1479/437, 1-2=-3135/895, 2-3=-5813/1679, 3-4=-6290/1879, 4-5=-5806/1725, 5-6=-4664/1393, 6-7=-2976/961, 7-8=-2976/961, 8-9=-2394/792, 9-10=-2306/737, 10-11=-1346/439, 11-13=-1521/499  
 BOT CHORD 21-22=-978/3134, 20-21=-1672/5734, 19-20=-1439/5064, 18-19=-1130/4306, 17-18=-565/2232, 16-17=-555/2110, 9-16=-390/98  
 WEBS 1-22=-826/2949, 2-22=-1311/429, 2-21=-704/2569, 3-21=-1319/438, 4-21=-200/364, 4-20=-390/208, 5-20=-242/753, 5-19=-761/323, 6-19=-921/3361, 6-18=-1833/493, 8-18=-395/1441, 8-17=-332/112, 9-17=-77/299, 14-16=-406/1459, 10-16=-293/1214, 10-14=-1584/499, 11-14=-328/1299

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 4-4-8, Interior(1) 4-4-8 to 20-9-10, Exterior(2R) 20-9-10 to 24-7-13, Interior(1) 24-7-13 to 28-6-0, Exterior(2R) 28-6-0 to 32-7-12, Interior(1) 32-7-12 to 42-6-0 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=317, 13=279.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

**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

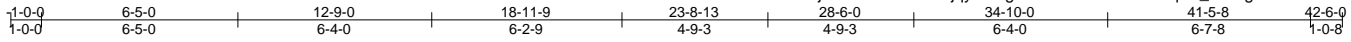
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 3323964	Truss T13	Truss Type Piggyback Base	Qty 7	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755951
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:30 2023 Page 1

ID:QT9?RVjms35aOAudzFTTjyMd2g-QTBsrh5McvN0EhZqnY\_fbi2llg60nJZfUsvxT6zmnwW3



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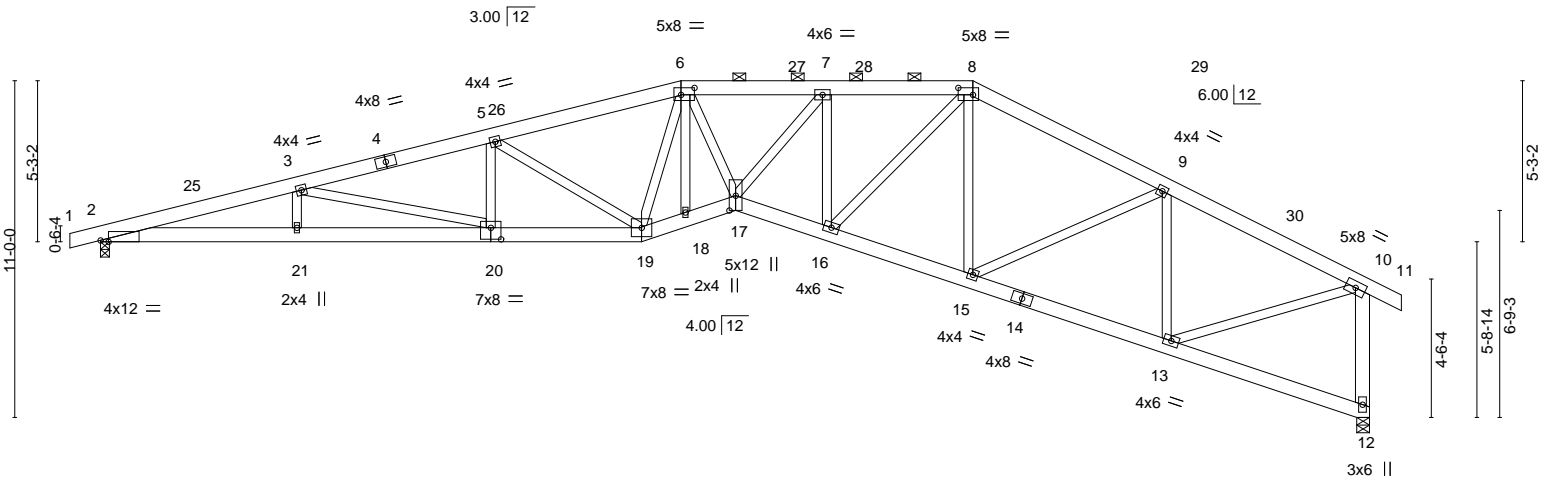


Plate Offsets (X,Y)--	[2:0-3-2,Edge], [6:0-5-4,0-2-12], [8:0-5-12,0-2-12], [17:0-5-13,0-2-8], [20:0-4-0,0-4-8]
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LOADING (psf)	SPACING-	CSi.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.33	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.90	Vert(LL) -0.32 18 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.63	Vert(CT) -0.60 19-20 >827 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.33 12 n/a n/a		
	Code FBC2020/TPI2014			Weight: 316 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
10-12: 2x6 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-0-8 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-3 max.): 6-8.  
BOT CHORD Rigid ceiling directly applied or 6-7-9 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 12=0-5-0  
Max Horz 2=-142(LC 13)  
Max Uplift 2=-419(LC 8), 12=-336(LC 13)  
Max Grav 2=1579(LC 1), 12=1595(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-5026/1402, 3-5=-4361/1276, 5-6=-3574/1084, 6-7=-4108/1225, 7-8=-3230/1020,  
8-9=-2480/782, 9-10=-1866/569, 10-12=-1542/513  
BOT CHORD 2-21=-1241/4851, 20-21=-1241/4851, 19-20=-1076/4208, 18-19=-912/3780,  
17-18=-905/3766, 16-17=-811/3399, 15-16=-527/2260, 13-15=-465/1710  
WEBS 3-20=-685/221, 5-20=-23/386, 5-19=-944/300, 6-19=-628/158, 6-17=-282/1216,  
7-17=-336/1413, 7-16=-1345/400, 8-16=-411/1551, 8-15=-346/116, 9-15=-115/636,  
9-13=-901/326, 10-13=-445/1649

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 3-1-12, Interior(1) 3-1-12 to 18-11-9, Exterior(2R) 18-11-9 to 24-9-15, Interior(1) 24-9-15 to 28-6-0, Exterior(2R) 28-6-0 to 34-4-6, Interior(1) 34-4-6 to 42-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 4) 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=419, 12=336.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

**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  
Chesterfield, MO 63017

Job 3323964	Truss T13G	Truss Type GABLE	Qty 2	Ply 2	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755952
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8,530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:34 2023 Page 1

ID:QT9?RVjmS35aOaudzfTTjqyMd2g-JERNg38sg7tRilsbON2blYCVrIcnjA9FPUi9ctznwW?

-1-0-0	6-5-0	12-9-0	18-11-9	23-8-13	28-6-0	34-10-0	41-5-8	42-6-0
1-0-0	6-5-0	6-4-0	6-2-9	4-9-3	4-9-3	6-4-0	6-7-8	1-0-8

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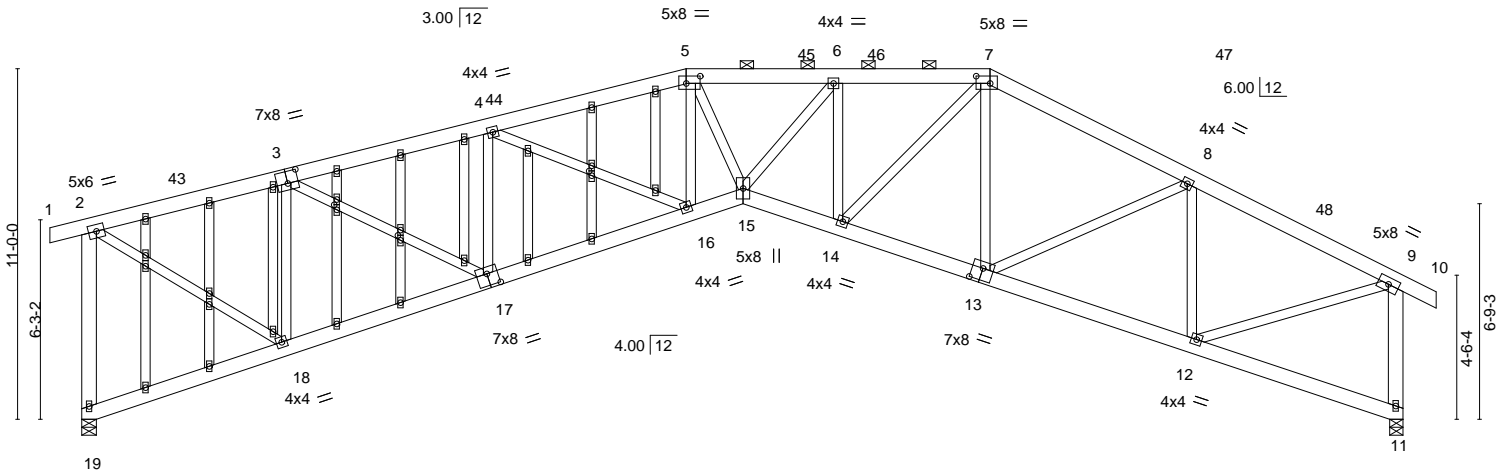


Plate Offsets (X, Y)--	[3:0-4-0,0-4-8], [5:0-5-4,0-2-12], [7:0-5-4,0-2-12], [13:0-4-0,0-4-8], [17:0-4-0,0-4-8], [30:0-1-14,0-1-0], [33:0-1-14,0-1-0], [40:0-1-12,0-1-0]
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LOADING (psf)	SPACING-	CSi.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.11	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.34	Vert(LL) -0.12 15 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.33	Vert(CT) -0.22 15 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.18 11 n/a n/a		
	Code FBC2020/TPI2014			Weight: 747 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 (6-0-0 max.): 5-7.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	
2-19,9-11: 2x6 SP No.2	
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 19=0-5-8, 11=0-5-0  
 Max Horz 19=207(LC 11)  
 Max Uplift 19=431(LC 8), 11=-325(LC 13)  
 Max Grav 19=1583(LC 1), 11=1586(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-19=-1531/478, 2-3=-1596/542, 3-4=-2873/942, 4-5=-3730/1191, 5-6=-4054/1307, 6-7=-3199/1070, 7-8=-2470/804, 8-9=-1855/562, 9-11=-1534/523  
 BOT CHORD 18-19=-205/250, 17-18=-500/1610, 16-17=-858/2911, 15-16=-1034/3719, 14-15=-928/3364, 13-14=-596/2243, 12-13=-495/1700  
 WEBS 2-18=-469/1757, 3-18=-1292/415, 3-17=-382/1392, 4-17=-929/330, 4-16=-199/907, 5-16=-436/143, 5-15=-311/1155, 6-15=-382/1378, 6-14=-1320/436, 7-14=-453/1529, 7-13=-334/134, 8-13=-144/634, 8-12=-893/328, 9-12=-446/1639

- NOTES-**
- 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.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 3-1-12, Interior(1) 3-1-12 to 18-11-9, Exterior(2R) 18-11-9 to 24-9-15, Interior(1) 24-9-15 to 28-6-0, Exterior(2R) 28-6-0 to 34-4-6, Interior(1) 34-4-6 to 42-6-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.


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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:

February 7, 2023

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job 3323964	Truss T13G	Truss Type GABLE	Qty 2	Ply <b>2</b>	AMIRA BLDRS - VARNER RES. T29755952 Job Reference (optional)
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:34 2023 Page 2  
ID:QT9?RVjmS35aOAudzFTTjyMd2g-JERNg38sg7tRilSB0N2bIYCVrlcnjA9FPUt9ctznwW?

**NOTES-**

- 11) \* 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.
- 12) Bearing at joint(s) 19, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=431, 11=325.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Studding applied to ply: 1(Front)

**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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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss T14	Truss Type Monopitch	Qty 11	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755953
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:35 2023 Page 1

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8-0-0

-1-0-0  
1-0-0

Scale = 1:17.2

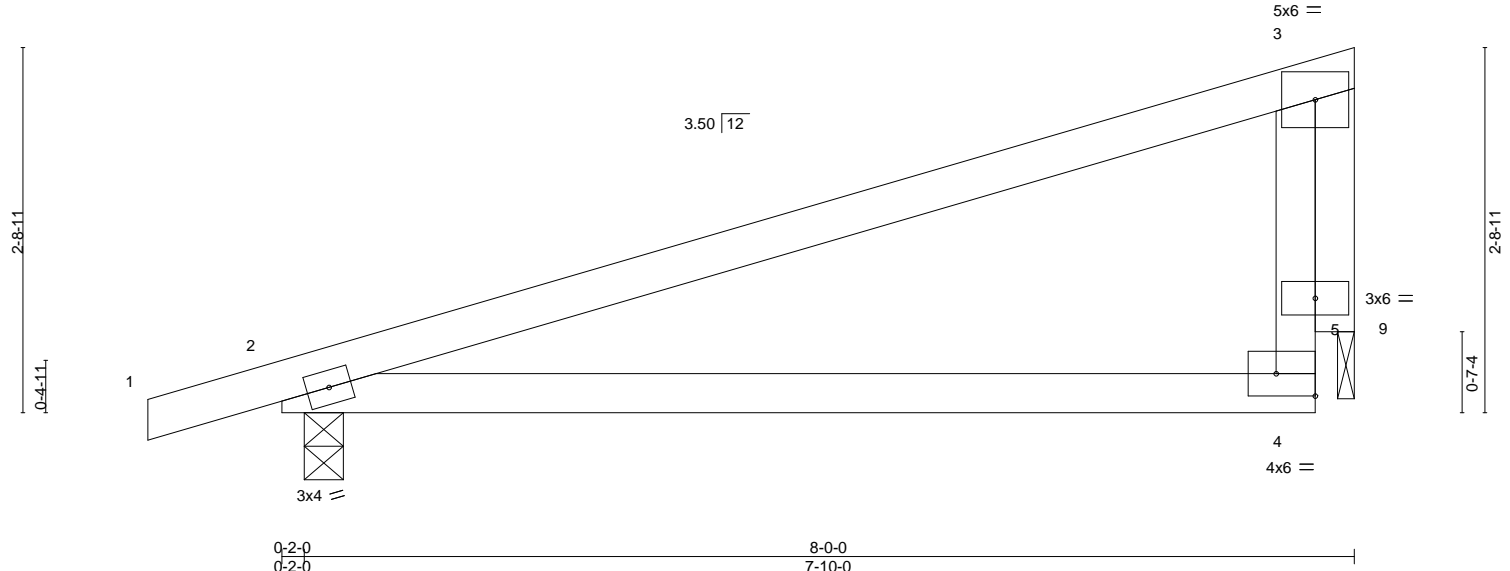


Plate Offsets (X, Y)--	[4:Edge,0-2-0]	8-0-0 7-10-0
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.61	Vert(LL)	0.30	4-8	>314	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.67	Vert(CT)	0.26	4-8	>368		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.41	Horz(CT)	-0.01	2	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR						
	Code FBC2020/TPI2014						Weight: 31 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 7-8-6 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-3-8, 9=0-1-8  
 Max Horz 2=89(LC 8)  
 Max Uplift 2=-173(LC 8), 9=-140(LC 8)  
 Max Grav 2=350(LC 1), 9=263(LC 1)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 4-5=-258/153, 3-5=-258/153  
 BOT CHORD 2-4=-261/163  
 WEBS 3-9=-277/437

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 7-6-12 zone; cantilever left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=173, 9=140.

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:

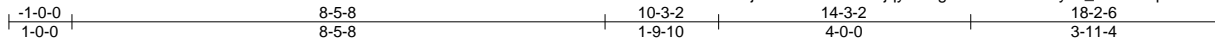
February 7, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd        Chesterfield, MO 63017</p>
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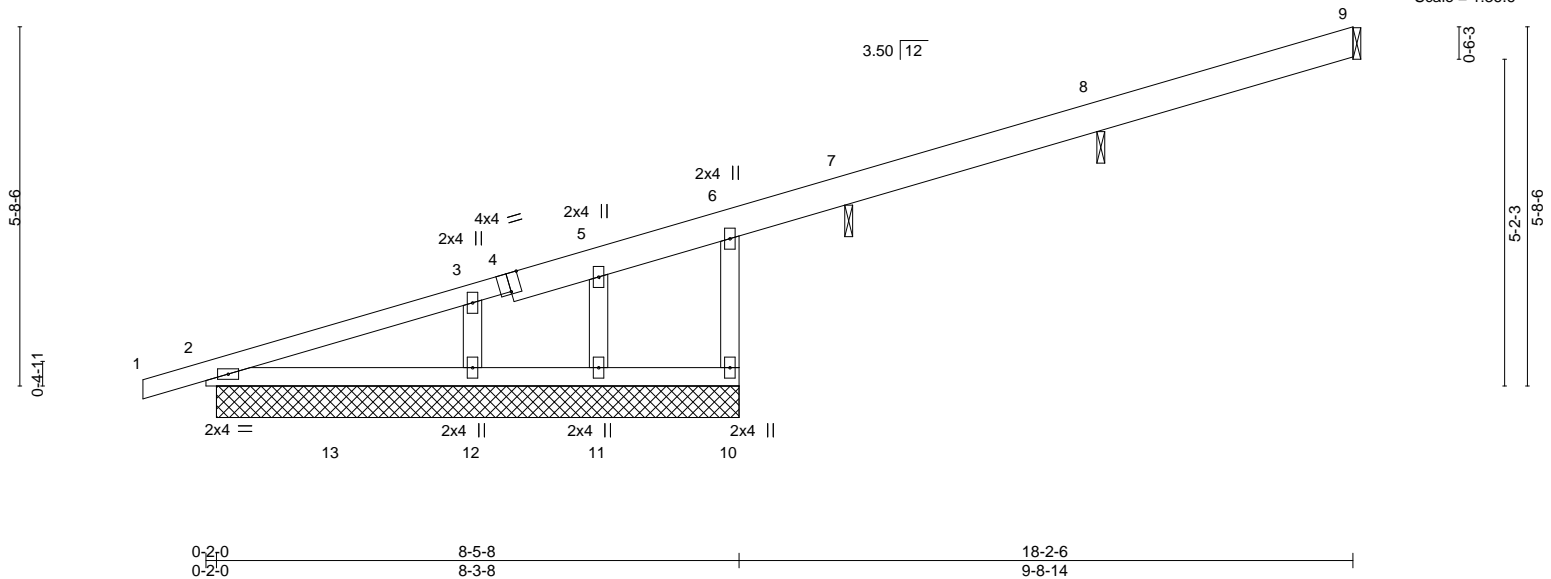
Job 3323964	Truss T14G	Truss Type Monopitch Supported Gable	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755954
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:36 2023 Page 1

ID:QT9?RVjms35aOAudzFTjyMd2g-FdY85I97CI79yc0\_8o53rzlq95K6B8NYtoMFmznwVz



Scale = 1:36.6



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.18	Vert(LL)	0.03	2-12	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.22	Vert(CT)	0.03	2-12	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	-0.00	9	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-S						
								Weight: 61 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2 *Except* 1-4: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 8-3-8 except (jt=length) 9=Mechanical, 8=0-1-8, 7=0-1-8.  
 (lb) - Max Horz 2=191(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 9, 10, 2, 11, 7 except 12=172(LC 8), 8=115(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) 9, 10, 2, 11, 8, 7 except 12=311(LC 1)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-355/107, 3-5=-255/72  
 WEBS 3-12=-219/324

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 18-1-10 zone; cantilever left exposed ; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 4) Gable studs spaced at 2-0-0 oc.
  - 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) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8, 7.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 10, 2, 11, 7 except (jt=lb) 12=172, 8=115.
  - 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 7.

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:

February 7, 2023

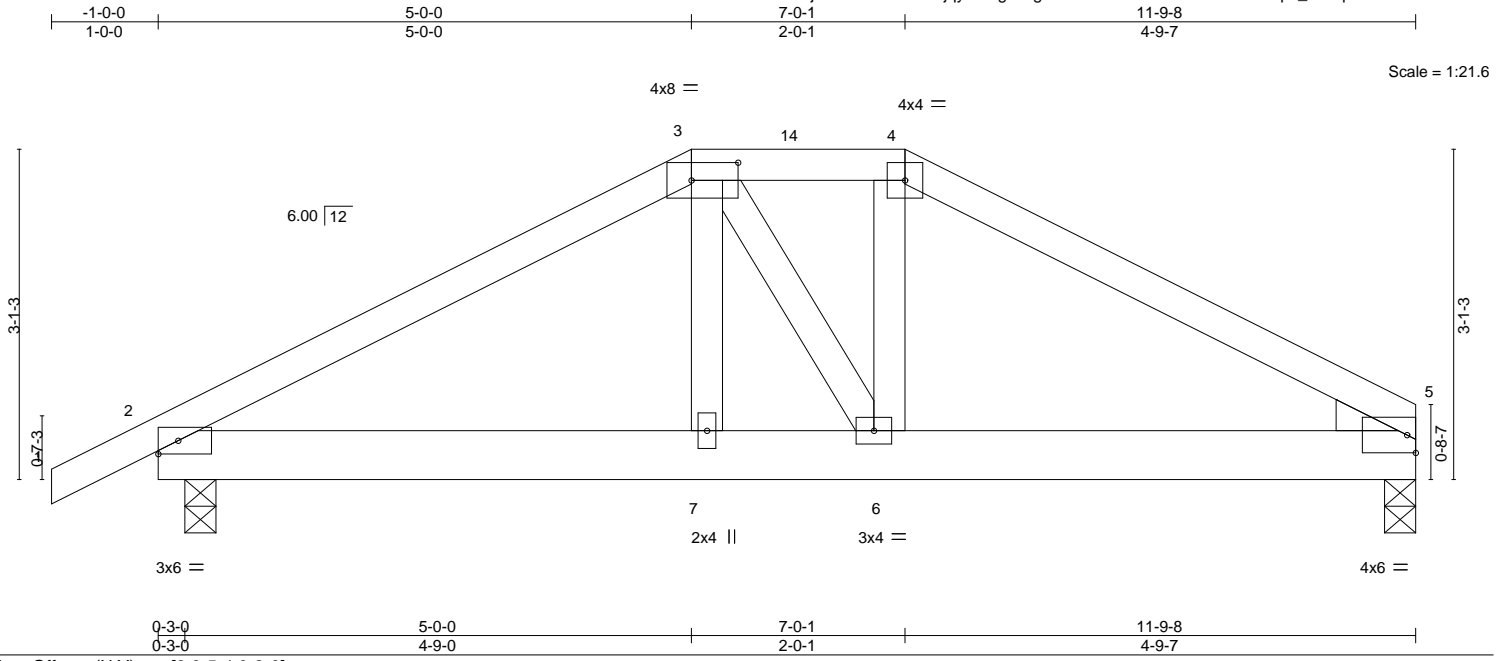
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd        Chesterfield, MO 63017</p>
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Job 3323964	Truss T15	Truss Type Hip Girder	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755955
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:38 2023 Page 1

ID:QT9?RVjmS35aOAudzFTTjyMd2g-B?guWQBnkMntBwAMFD7XwON7pv\_af2rqK6rMkeznwVx



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.30	Vert(LL)	0.02	7	>999	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.28	Vert(CT)	-0.03	7	>999		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.10	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS						
	Code FBC2020/TPI2014							
							Weight: 61 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-7-14 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 2=0-3-8  
Max Horz 2=54(LC 8)  
Max Uplift 5=288(LC 4), 2=-291(LC 8)  
Max Grav 5=659(LC 1), 2=695(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1002/471, 3-4=-851/448, 4-5=-1011/476  
BOT CHORD 2-7=-406/838, 6-7=-411/849, 5-6=-400/844  
WEBS 3-7=-110/257

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BC DL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; cantilever left exposed ; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=288, 2=291.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 80 lb down and 73 lb up at 5-0-0, and 197 lb down and 173 lb up at 7-0-1 on top chord, and 118 lb down and 122 lb up at 5-0-0, and 118 lb down and 122 lb up at 6-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).


**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-54, 3-4=-54, 4-5=-54, 8-11=-20

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>  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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 16023 Swingley Ridge Rd Chesterfield, MO 63017
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Job 3323964	Truss T15	Truss Type Hip Girder	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES.  Job Reference (optional)	T29755955
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:38 2023 Page 2  
ID:QT9?RVjms35aOAudzfTTjyMd2g-B?guWQBNkMnBwAMFD7XwON7pv\_af2rqK6rMkeznwVx

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 3=-61(B) 4=-150(B) 7=-108(B) 6=-108(B)

**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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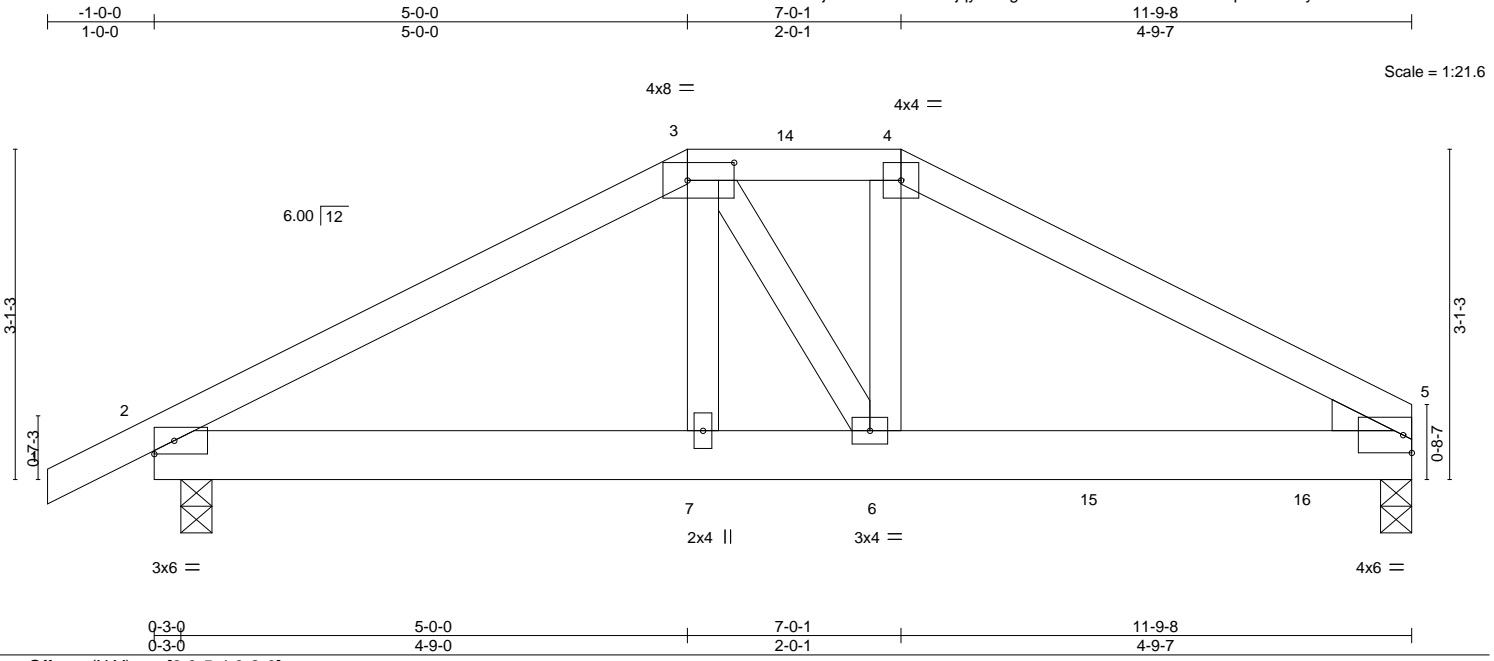


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 3323964	Truss T16	Truss Type Hip Girder	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755956
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:40 2023 Page 1

ID:QT9?RVjmsS35aOAudzFTTjyMd2g-7Ooex6CdGzebQDKIne9??pSU2ifC7yQ7nQKToXznwVv



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.25	in (loc) l/def L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.34	Vert(LL) -0.02 6-10 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.09	Vert(CT) -0.03 6-10 >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.01 5 n/a n/a		
	Code FBC2020/TPI2014			Weight: 61 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-6-5 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 2=0-3-8  
Max Horz 2=54(LC 8)  
Max Uplift 5=344(LC 9), 2=-262(LC 8)  
Max Grav 5=832(LC 1), 2=687(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-982/414, 3-4=-886/423, 4-5=-1041/437  
BOT CHORD 2-7=-360/821, 6-7=-364/826, 5-6=-363/874

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; cantilever left exposed ; porch left and right exposed; 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) 5=344, 2=262.
  - 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 82 lb down and 74 lb up at 5-0-0, and 82 lb down and 74 lb up at 7-0-1 on top chord, and 119 lb down and 123 lb up at 5-0-0, 49 lb down and 47 lb up at 6-11-4, and 154 lb down and 96 lb up at 8-10-3, and 155 lb down and 96 lb up at 10-10-3 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).


**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-54, 3-4=-54, 4-5=-54, 8-11=-20

This item has been electronically signed and sealed by O'Regan, 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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MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

February 7, 2023

Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd  Chesterfield, MO 63017</p>
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Job 3323964	Truss T16	Truss Type Hip Girder	Qty 2	Ply 1	AMIRA BLDRS - VARNER RES.  Job Reference (optional)	T29755956
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:40 2023 Page 2  
ID:QT9?RVjmS35aOAudzFTjyMd2g-7Ooex6CdGzebQDKINe9??pSU2ifC7yQ7nQKToXznwVv

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 3=-64(F) 4=-64(F) 7=-111(F) 6=-45(F) 15=-154(F) 16=-155(F)

**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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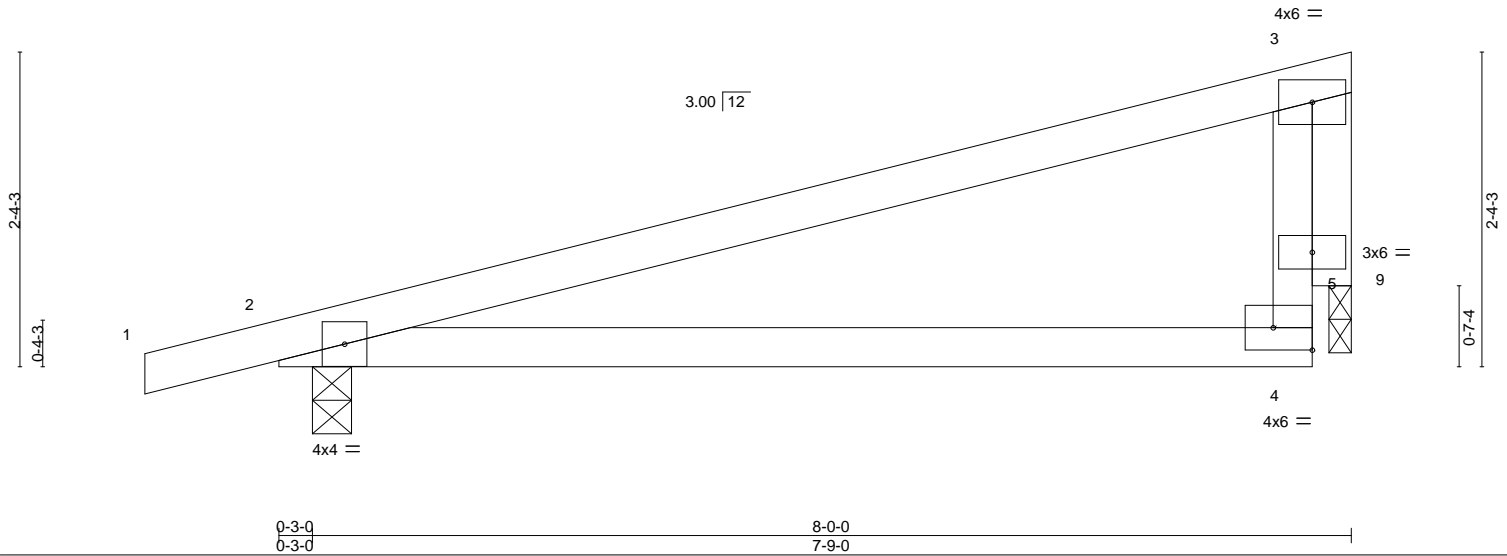
Job 3323964	Truss T17	Truss Type Monopitch	Qty 32	Ply 1	AMIRA BLDRS - VARNER RES. Job Reference (optional)	T29755957
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Feb 6 07:45:41 2023 Page 1  
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Scale = 1:17.2



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.61	Vert(LL)	0.30	4-8	>321	240	MT20	244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	0.25	4-8	>376	180	Weight: 30 lb FT = 20%		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	-0.01	2	n/a	n/a			
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MR									

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 7-4-3 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 9=0-2-0  
Max Horz 2=77(LC 8)  
Max Uplift 2=-176(LC 8), 9=-137(LC 8)  
Max Grav 2=350(LC 1), 9=264(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-227/257, 4-5=-257/152, 3-5=-257/152  
BOT CHORD 2-4=-304/193  
WEBS 3-9=-283/441

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 7-6-12 zone; cantilever left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=176, 9=137.

This item has been electronically signed and sealed by O'Regan, 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:

February 7, 2023

**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**

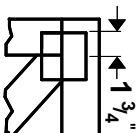
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



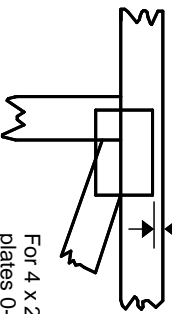
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

4 X 4

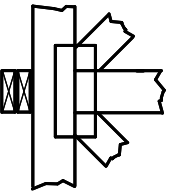
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



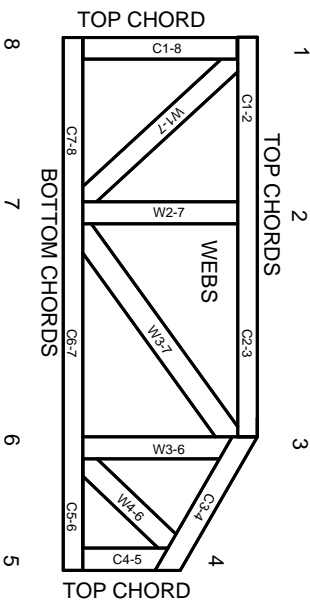
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

# Numbering System

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



**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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# General Safety Notes

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

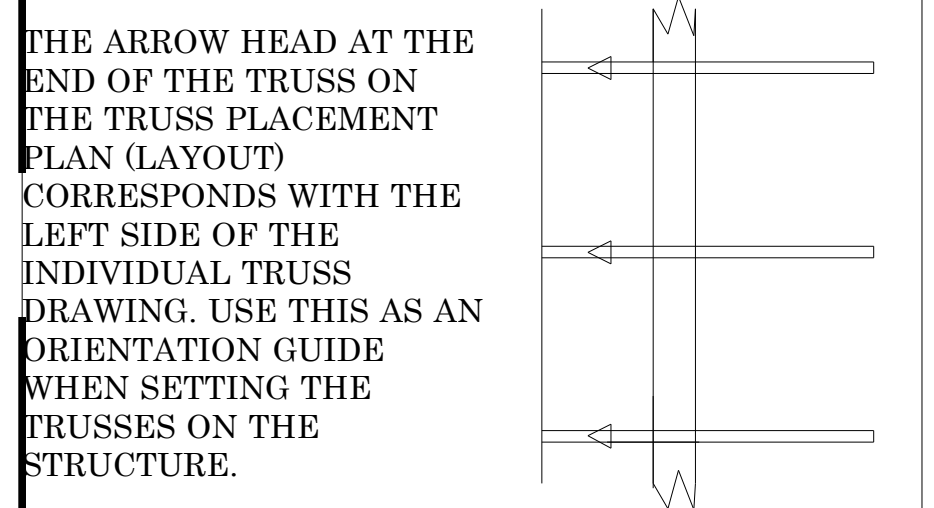
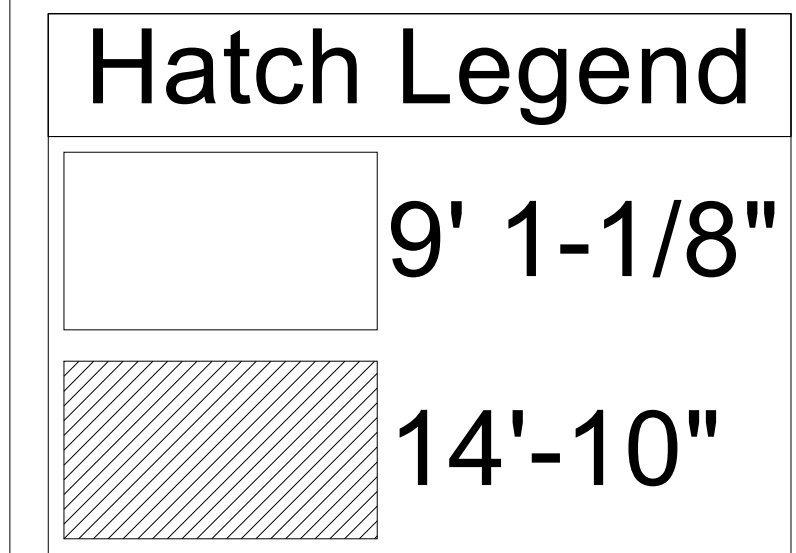
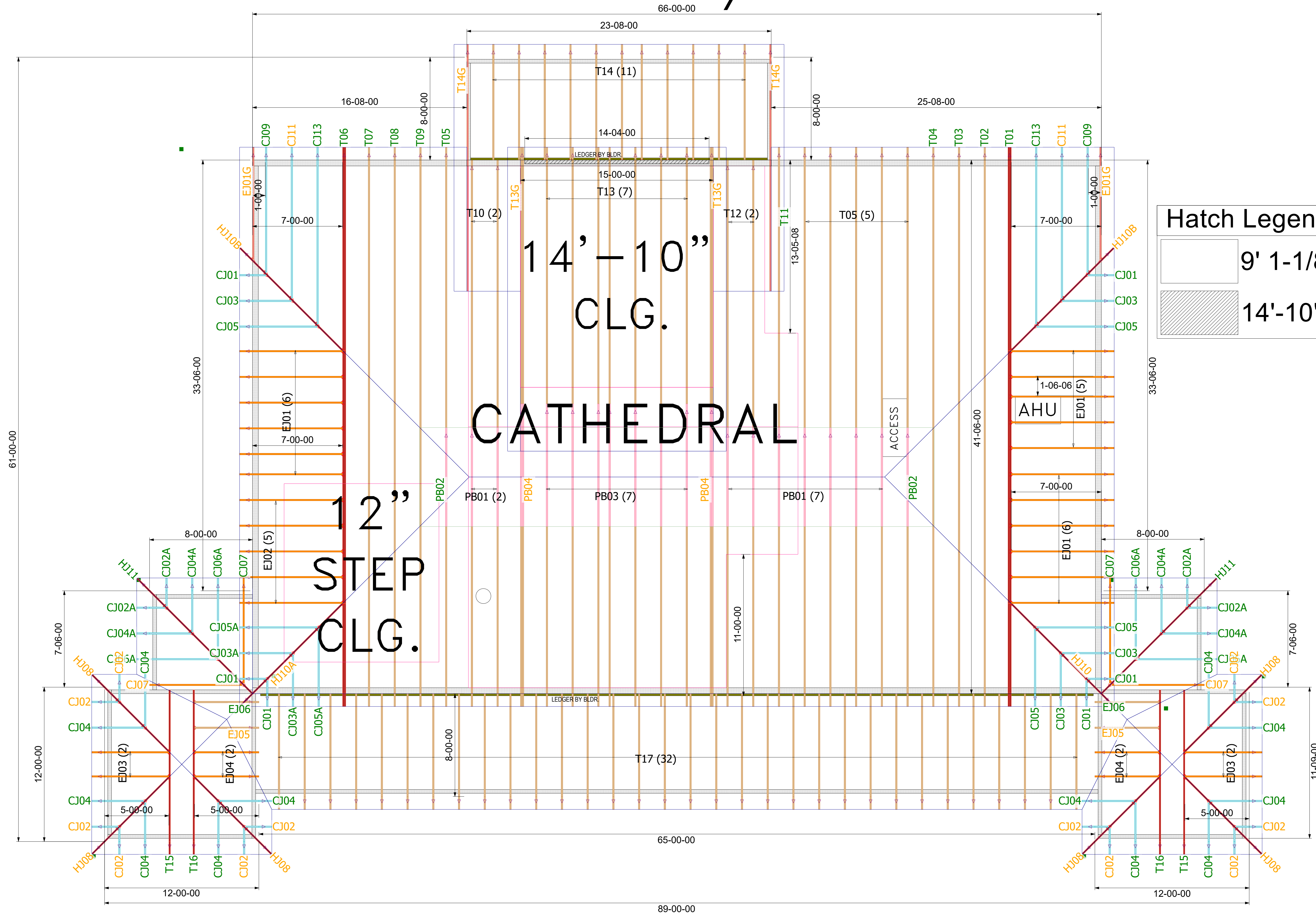
1. Additional stability/bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T or I bracing should be considered.
3. Never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



MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020

# 6/12 - 3.5/12 - 3/12 PITCH

## 12" O/H



- General Notes:
- Per ANSI/TPI 1-2002 all " Truss to Wall" connections are the responsibility of the Building Designer, not the Truss 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 corrosive to truss plates. Any ACQ lumber that comes in contact with truss plates (i.e. scabbled 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 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**  
PHONE: 386-755-6894  
FAX: 386-755-7973

**Jacksonville**  
PHONE: 904-772-6100  
FAX: 904-772-1973

**Tallahassee**  
PHONE: 850-576-5177

Builder: **AMIRA BLDRS.**  
Legal Address: **Varner Res.**

Model:	Custom	
Date:	11-4-22	Original Ref #: 3323964
Drawn By:	KLH	
Floor 1 Job#:	N/A	Roof Job #: 3323964