



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

RE: 3761058 - SIMQUE - RAULERSON RES.

**MiTek, Inc.**

16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.934.1200

**Site Information:**

Customer Info: AARON SIMQUE HOMES Project Name: Raulerson Res. Model: 344-054.1200  
Lot/Block: N/A Subdivision: N/A  
Address: TBD, TBD  
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: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7  
Wind Code: N/A Wind Speed: 130 mph  
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 41 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	T32259156	CJ01	12/5/23	15	T32259170	T04	12/5/23
2	T32259157	EJ01	12/5/23	16	T32259171	T05G	12/5/23
3	T32259158	HJ03	12/5/23	17	T32259172	T06	12/5/23
4	T32259159	PB01	12/5/23	18	T32259173	T06G	12/5/23
5	T32259160	PB01G	12/5/23	19	T32259174	T07	12/5/23
6	T32259161	PB02	12/5/23	20	T32259175	T08	12/5/23
7	T32259162	PB03	12/5/23	21	T32259176	T09	12/5/23
8	T32259163	PB03G	12/5/23	22	T32259177	T10	12/5/23
9	T32259164	PB04	12/5/23	23	T32259178	T11	12/5/23
10	T32259165	PB05	12/5/23	24	T32259179	T12	12/5/23
11	T32259166	T01	12/5/23	25	T32259180	T13	12/5/23
12	T32259167	T01G	12/5/23	26	T32259181	T14	12/5/23
13	T32259168	T02	12/5/23	27	T32259182	T15	12/5/23
14	T32259169	T03	12/5/23	28	T32259183	T16	12/5/23



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

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: O'Regan, Philip  
My license renewal date for the state of Florida is February 28, 2025.

**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.



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

December 5, 2023

O'Regan, Philip

1 of 2



RE: 3761058 - SIMQUE - RAULERSON RES.

**MiTek, Inc.**

16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200

**Site Information:**

Customer Info: AARON SIMQUE HOMES    Project Name: Raulerson Res.    Model: Custom  
Lot/Block: N/A    Subdivision: N/A  
Address: TBD, TBD  
City: Columbia Cty    State: FL

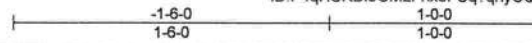
No.	Seal#	Truss Name	Date
29	T32259184	T17	12/5/23
30	T32259185	T18	12/5/23
31	T32259186	T19	12/5/23
32	T32259187	T19G	12/5/23
33	T32259188	T20	12/5/23
34	T32259189	T20G	12/5/23
35	T32259190	T21	12/5/23
36	T32259191	T21G	12/5/23
37	T32259192	T22	12/5/23
38	T32259193	T23	12/5/23
39	T32259194	T23G	12/5/23
40	T32259195	T24	12/5/23
41	T32259196	T24G	12/5/23



Job 3761058	Truss CJ01	Truss Type Jack-Open	Qty 2	Ply 1	SIMQUE - RAULERSON RES. T32259156
Job Reference (optional)					

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:16 2023 Page 1  
ID:F4qHUKBI9OMzFnx3FUq?qnYQ4I-v0VvXpQ4\_vP2JeRn9yKsJnYOxaqPFJ7mxyhXTXyCLx5



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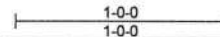
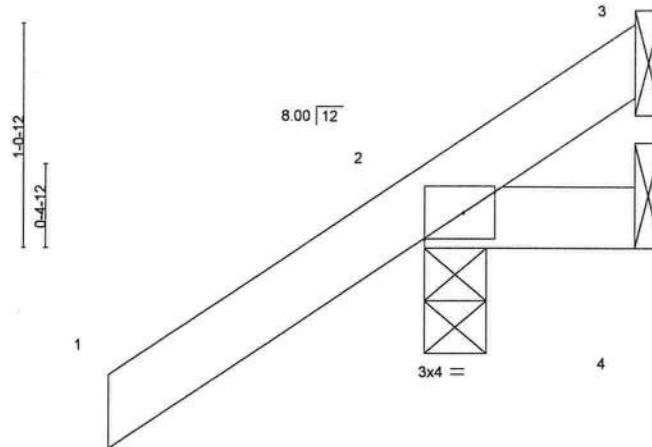


Plate Offsets (X,Y)-- [2:Edge,0-1-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	20.0	Plate Grip DOL 1.25		TC	0.21	Vert(LL)	0.00	7	>999	240	MT20 244/190
TCDL	7.0	Lumber DOL 1.25		BC	0.06	Vert(CT)	0.00	7	>999	180	
BCLL	0.0 *	Rep Stress Incr YES		WB	0.00	Horz(CT)	0.00	2	n/a	n/a	
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MP							Weight: 6 lb FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=58(LC 12)  
Max Uplift 3=5(LC 1), 2=81(LC 12), 4=20(LC 1)  
Max Grav 3=8(LC 8), 2=179(LC 1), 4=24(LC 16)

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

#### NOTES-

- 1) Wind: ASCE 7-22; 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 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) 3, 2, 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  
16013 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

December 5, 2023



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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**MiTek®**

16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

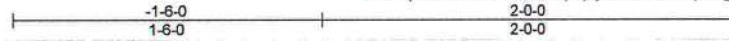


Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259157
3761058	EJ01	Jack-Open	6	1	Job Reference (optional)	

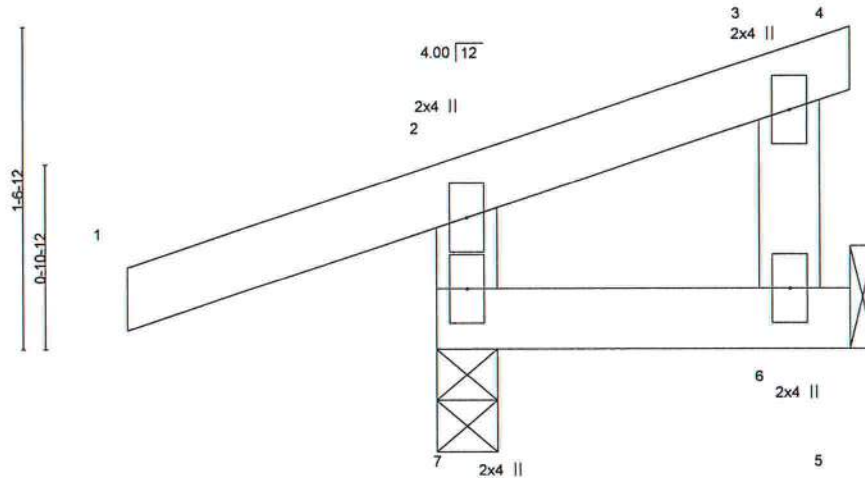
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:16 2023 Page 1

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Scale = 1:10.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.22	Vert(LL)	-0.00	7	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	-0.00	6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00		n/a		
BCDL 10.0	Code	FBC2023/TP12014	Matrix-MS					Weight: 11 lb	FT = 20%

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

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

**REACTIONS.** (size) 7=0-3-8, 5=Mechanical  
Max Horz 7=41(LC 8)  
Max Uplift 7=109(LC 8), 5=17(LC 12)  
Max Grav 7=196(LC 1), 5=40(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-22; 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 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 except (jt=lb) 7=109.

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:

December 5, 2023

**WARNING -** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcsccomponents.com)

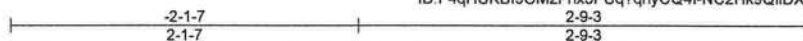
**MiTek®**  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com



Job 3761058	Truss HJ03	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	SIMQUE - RAULERSON RES. Job Reference (optional)	T32259158
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:17 2023 Page 1  
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Scale = 1:13.6

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

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 0.30	Vert(LL)	0.01	6-9	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.13	Vert(CT)	-0.01	6-9	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code FBC2023/TP12014		Matrix-MP							
									Weight: 14 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-3 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 2=0-4-9, 5=Mechanical  
Max Horz 2=82(LC 28)  
Max Uplift 2=-120(LC 8), 5=-87(LC 17)  
Max Grav 2=259(LC 1), 5=104(LC 32)

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

#### NOTES-

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCCL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=120.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 65 lb down and 69 lb up at 1-6-1, and 65 lb down and 69 lb up at 1-6-1 on top chord, and 23 lb down and 43 lb up at 1-6-1, and 23 lb down and 43 lb up at 1-6-1 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, 3-4=-54, 5-7=-20

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Philip J. O'Regan PE No.58126  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16025 Swingle Ridge Rd. Chesterfield, MO 63017  
Date:

December 5,2023

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcsccomponents.com)

**MiTek®**  
16025 Swingle Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

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Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

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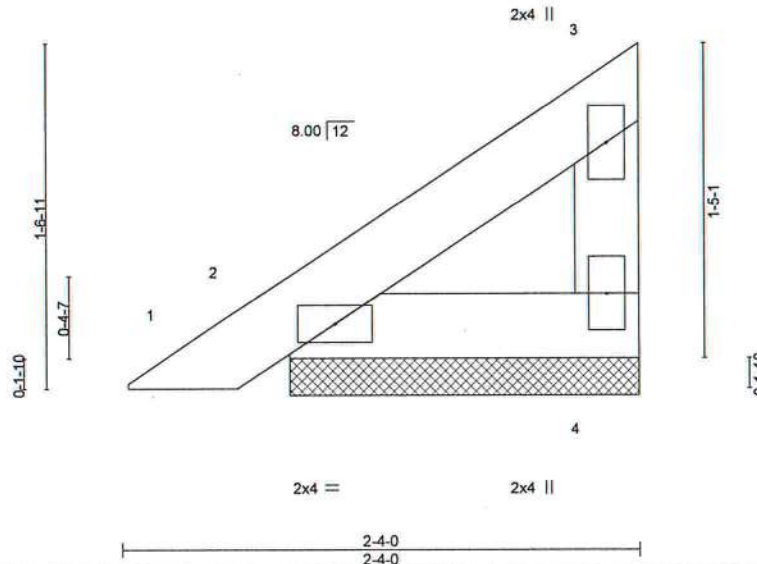
Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.
3761058	PB02	Piggyback	2	1	T32259161
Job Reference (optional)					

Builders FirstSource (Lake City, FL),

Lake City, FL - 32055,

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:20 2023 Page 1  
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Scale = 1:9.9



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 0.03	Vert(LL)	-0.00	1	n/r	120	
TCDL 7.0	Lumber DOL	1.25	BC 0.02	Vert(CT)	0.00	1	n/r	120	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a	n/a	
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-P						
				Weight: 8 lb				FT = 20%	

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 4=1-6-14, 2=1-6-14  
Max Horz 2=48(LC 12)  
Max Uplift 4=28(LC 12), 2=18(LC 12)  
Max Grav 4=53(LC 19), 2=83(LC 1)

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

#### NOTES-

- 1) Wind: ASCE 7-22; 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 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 7) 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 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:

December 5, 2023

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Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

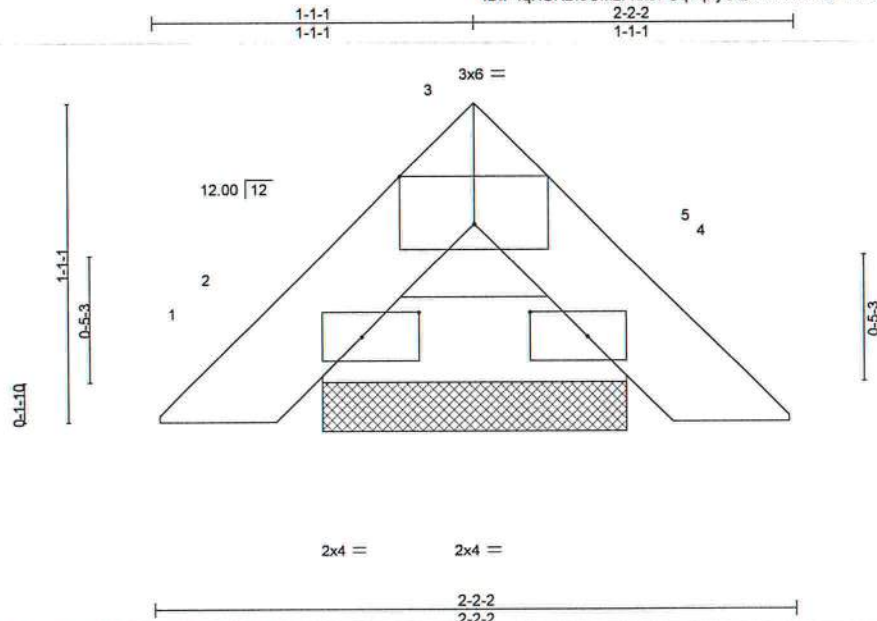


Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.
3761058	PB03G	PIGGYBACK	1	1	T32259163

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:22 2023 Page 1

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Scale = 1:7.5

Plate Offsets (X, Y)--		[2:0-2-6,0-1-0], [3:0-3-0,Edge], [4:0-2-6,0-1-0]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL 20.0	Plate Grip DOL	1.25	TC 0.01	Vert(LL)	-0.00	4	n/r	120	MT20	244/190	
TCDL 7.0	Lumber DOL	1.25	BC 0.01	Vert(CT)	-0.00	4	n/r	120			
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a			
BCDL 10.0	Code	FBC 2023/TPI2014	Matrix-P								
									Weight: 6 lb	FT = 20%	

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 2=1-0-8, 4=1-0-8  
Max Horz 2=22(LC 10)  
Max Uplift 2=18(LC 12), 4=18(LC 13)  
Max Grav 2=57(LC 1), 4=57(LC 1)

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 1-1-1 to 1-11-8 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, 4.
- 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 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:

December 5, 2023



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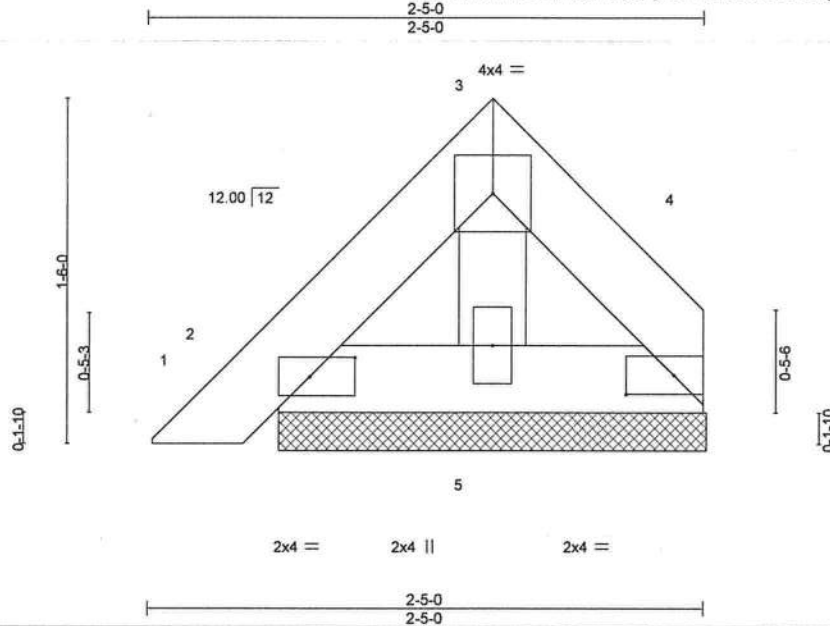


Job 3761058	Truss PB04	Truss Type Piggyback	Qty 3	Ply 1	SIMQUE - RAULERSON RES. T32259164
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:23 2023 Page 1

ID:F4qHUKBI9OMzFnX3FUq?qnYQ4I-CMQZ?CVTL3I3fU74wMV5GKdzPD0OUnnYYIPcdyCLx\_



Scale = 1:9.6

Plate Offsets (X,Y) --		[2:0-2-6,0-1-0], [4:0-2-7,0-1-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.03
TCDL 7.0	Lumber DOL	1.25	BC 0.01
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-P
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.00 1 n/r 120
			Vert(CT) 0.00 1 n/r 120
			Horz(CT) 0.00 4 n/a n/a
			PLATES GRIP
			MT20 244/190
			Weight: 9 lb FT = 20%

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

BRACING-  
TOP CHORD Structural wood sheathing directly applied or 2-5-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=1-10-6, 2=1-10-6, 5=1-10-6  
Max Horz 2=29(LC 9)  
Max Uplift 4=15(LC 13), 2=23(LC 12), 5=2(LC 12)  
Max Grav 4=40(LC 1), 2=63(LC 1), 5=54(LC 3)

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 1-6-0 to 2-5-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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) 4, 2, 5.
- 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 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 6654  
16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

December 5, 2023



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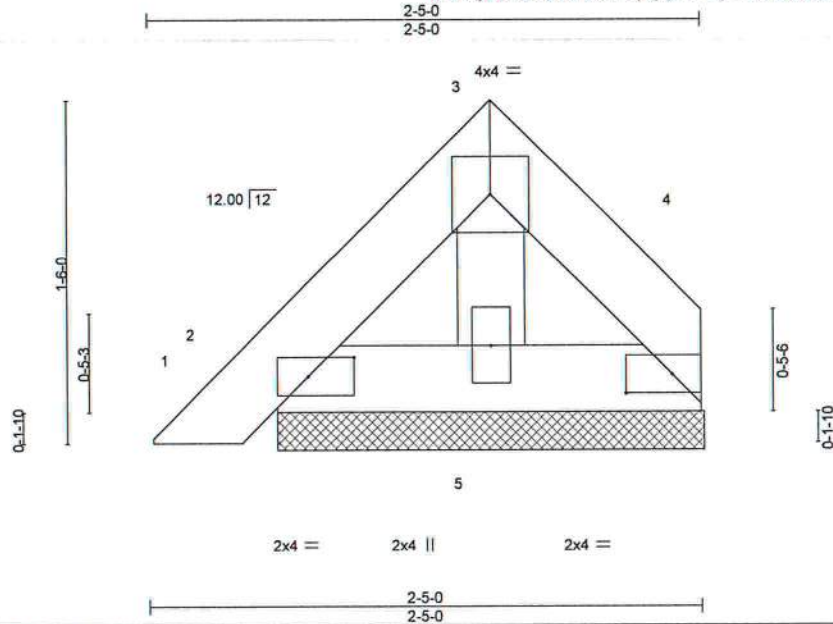
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Chesterfield, MO 63017  
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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.
3761058	PB05	Piggyback	1	2	T32259165

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:24 2023 Page 1

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Scale = 1:9.6

Plate Offsets (X,Y)-- [2:0-2-6,0-1-0], [4:0-2-7,0-1-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.01	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.00	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-P						Weight: 18 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-5-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 4=1-10-6, 2=1-10-6, 5=1-10-6  
Max Horz 2=29(LC 9)  
Max Uplift 4=15(LC 13), 2=23(LC 12), 5=2(LC 12)  
Max Grav 4=40(LC 1), 2=63(LC 1), 5=54(LC 3)

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 7-22; 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 1-6-0 to 2-5-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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) 4, 2, 5.
- 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:

December 5, 2023

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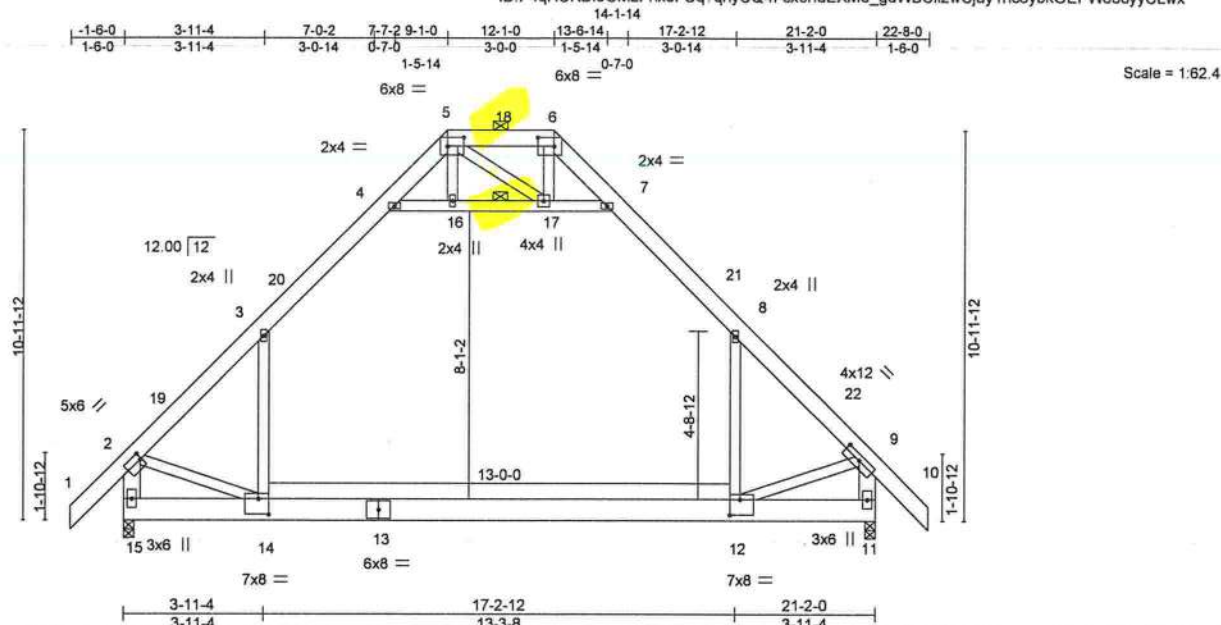


Plate Offsets (X,Y)→		2-0-0		2-0-0		2-0-0		2-0-0		2-0-0		2-0-0		2-0-0		2-0-0	
		2-0-0		2-0-0		2-0-0		2-0-0		2-0-0		2-0-0		2-0-0		2-0-0	
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d		PLATES		GRIP				
TCLL 20.0		Plate Grip DOL	1.25	TC 0.51		Vert(LL)	-0.39 12-14	>634	240		MT20		244/190				
TCDL 7.0		Lumber DOL	1.25	BC 0.56		Vert(CT)	-0.62 12-14	>404	180								
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.46		Horz(CT)	0.01 11	n/a	n/a								
BCDL 10.0		Code FBC2023/TPI2014		Matrix-MS		Attic	-0.28 12-14	575	360		Weight: 192 lb		FT = 20%				

**LUMBER-**

TOP CHORD	2x6 SP M 26 *Except* 5-6: 2x6 SP No.2
BOT CHORD	2x8 SP 2400F 2.0E
WEBS	2x4 SP No.3 *Except* 2-15.9-11: 2x6 SP No.2

**BRACING-**

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-7

### REACTIONS.

(size) 15=0-3-8, 11=0-3-8  
Max Horz 15=-318(LC 10)  
Max Uplift 15=-37(LC 12), 11=-38(LC 13)  
Max Grav 15=1389(LC 2), 11=1389(LC 2)

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

TOP CHORD 2-3=-1542/28, 3-4=-843/146, 4-5=-88/297, 5-6=0/509, 6-7=-80/309, 7-8=-843/146,  
8-9=-1541/28, 2-15=-1647/23, 9-11=-1647/23

BOT CHORD 14-15=-274/435, 12-14=0/925

WEBS 3-14=0/970, 4-16=-1269/153, 16-17=-1265/154, 7-17=-1282/156, 8-12=0/969,  
2-14=-57/805, 9-12=-63/810

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDF=4.2psf; BCDF=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpf=0.18; MWFRS (envelope) gable end zone and C-C 20-11-4 to 20-11-4 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
- 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) Ceiling dead load (5.0 psf) on member(s) 3-4, 7-8, 4-16, 16-17, 7-17; Wall dead load (5.0psf) on member(s) 3-14, 8-12
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 11.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Attic room checked for L/360 deflection.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

December 5, 2023



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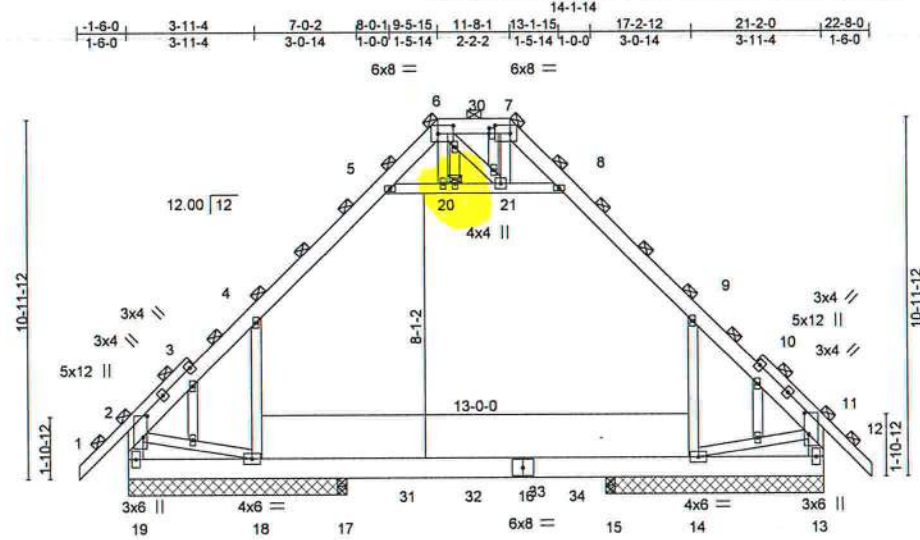
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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.
3761058	T01G	GABLE	1	1	T32259167
Job Reference (optional)					

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:27 2023 Page 1  
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Scale = 1:67.4

		3-11-4		6-4-0		14-10-0		17-2-12		21-2-0	
		3-11-4		2-4-12		8-6-0		2-4-12		3-11-4	
Plate Offsets (X,Y)-- [2-0-7-12,0-1-8], [6-0-5-8,0-3-0], [7-0-5-8,0-3-0], [11-0-7-12,0-1-8], [25-0-2-0,0-0-4]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl		L/d	
TCLL	20.0	Plate Grip DOL 1.25		TC 0.19		Vert(LL) -0.03 15-17		>999		240	
TCDL	7.0	Lumber DOL 1.25		BC 0.18		Vert(CT) -0.04 15-17		>999		180	
BCLL	0.0 *	Rep Stress Incr NO		WB 0.11		Horz(CT) 0.00 13		n/a		n/a	
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS		Attic -0.03 15-17		3283		360	
										PLATES GRIP	
										MT20 244/190	
										Weight: 201 lb FT = 20%	

#### LUMBER-

TOP CHORD 2x6 SP No.2 \*Except\*  
1-3,10-12: 2x4 SP No.2  
BOT CHORD 2x8 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\*  
2-19,11-13: 2x6 SP No.2  
OTHERS 2x4 SP No.3

#### BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 2, 6, 7, 11, 20

#### REACTIONS.

All bearings 6-7-8 except (jt=length) 17=0-3-8, 15=0-3-8.  
(b) - Max Horz 19=309(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 19, 13 except 18=337(LC 30),  
14=335(LC 31)  
Max Grav All reactions 250 lb or less at joint(s) except 19=609(LC 1), 18=364(LC 6),  
14=360(LC 7), 13=609(LC 1), 17=905(LC 14), 15=905(LC 14)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-466/122, 4-5=-507/147, 8-9=-507/146, 9-11=-464/119, 2-19=-554/90,  
11-13=-554/90  
BOT CHORD 18-19=-251/269, 17-18=-81/333, 15-17=-81/333, 14-15=-81/333  
WEBS 4-18=-382/282, 9-14=-379/281, 2-18=-55/309, 11-14=-63/312

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl.,  
GCp=0.18; MWFRS (envelope) gable end zone; end vertical left and right exposed; 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.
- \* 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.
- Ceiling dead load (5.0 psf) on member(s). 4-5, 8-9, 5-20, 20-21, 8-21; Wall dead load (5.0psf) on member(s). 4-18, 9-14
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 17-18, 15-17, 14-15
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 13 except  
(jt=lb) 18=337, 14=335.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

December 5, 2023

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.
3761058	T01G	GABLE	1	1	T32259167
Job Reference (optional)					

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:28 2023 Page 2  
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#### NOTES-

- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 20 lb down and 24 lb up at 6-4-12, 20 lb down and 24 lb up at 8-4-12, 20 lb down and 24 lb up at 10-4-12, 20 lb down and 24 lb up at 10-9-4, and 20 lb down and 24 lb up at 12-9-4, and 20 lb down and 24 lb up at 14-9-4 on bottom chord.  
The design/selection of such connection device(s) is the responsibility of others.
- 15) Attic room checked for L/360 deflection.
- 16) 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, 4-5=-64, 5-6=-54, 6-7=-54, 7-8=-54, 8-9=-64, 9-11=-54, 11-12=-54, 18-19=-20, 14-18=-40, 13-14=-20, 5-8=-10

Drag: 4-18=-10, 9-14=-10

##### Concentrated Loads (lb)

Vert: 17=1(B) 15=1(B) 31=1(B) 32=1(B) 33=1(B) 34=1(B)



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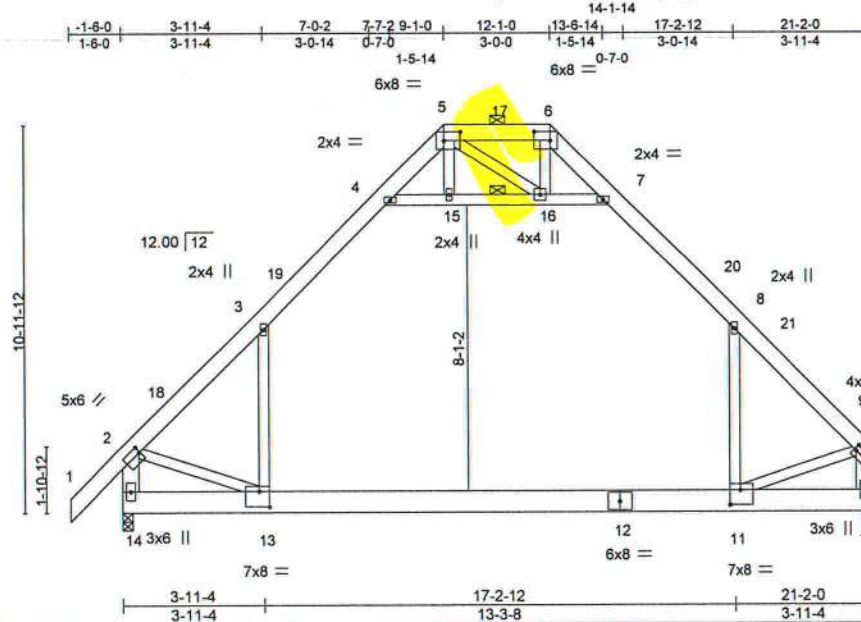
Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259168
3761058	T02	Attic	2	1	Job Reference (optional)	

Builders FirstSource (Lake City, FL),

Lake City, FL - 32055,

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:29 2023 Page 1

ID:F4qHUKBI9OMzFnX3FUq?qnYQ41-1WhqGGaExv2CNexHQBTvLXaYup8do55gxUKJPHyCLwU



Scale = 1:62.4

Plate Offsets (X, Y)-- [2:0-0-8,0-2-4], [5:0-5-8,0-3-0], [6:0-5-8,0-3-0], [9:0-0-12,0-2-0], [11:0-3-8,0-5-0], [13:0-3-8,0-5-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.51	Vert(LL)	-0.39	11-13	>632	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.56	Vert(CT)	-0.62	11-13	>401		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.46	Horz(CT)	0.01	10	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS	Attic	-0.28	11-13	574	Weight: 187 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SP M 26 \*Except\*  
5-6: 2x6 SP No.2  
BOT CHORD 2x8 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\*  
2-14,9-10: 2x6 SP No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-7

#### REACTIONS.

(size) 14=0-3-8, 10=0-3-8  
Max Horz 14=304(LC 9)  
Max Uplift 14=37(LC 12)  
Max Grav 14=1392(LC 2), 10=1310(LC 2)

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

TOP CHORD 2-3=-1551/29, 3-4=-846/146, 4-5=-84/300, 5-6=0/514, 6-7=-75/312, 7-8=-847/146,  
8-9=-1527/23, 2-14=-1656/23, 9-10=-1584/8  
BOT CHORD 13-14=-291/414, 11-13=-4/908  
WEBS 3-13=0/974, 4-15=-1281/154, 15-16=-1277/155, 7-16=-1294/156, 8-11=0/938,  
2-13=-58/811, 9-11=-54/850

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 20-11-4 to 20-11-4 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
- 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.
- Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-15, 15-16, 7-16; Wall dead load (5.0psf) on member(s).3-13, 8-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Attic room checked for L/360 deflection.

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:

December 5, 2023



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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.
3761058	T04	Piggyback Base Girder	1	2	T32259170

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:32 2023 Page 1

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Scale = 1:61.6

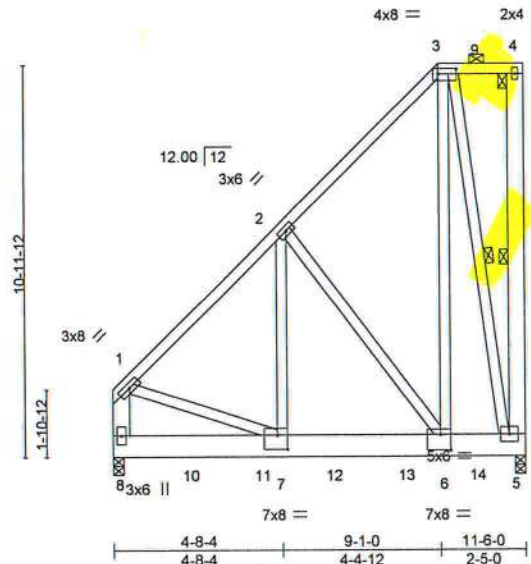


Plate Offsets (X,Y) - [3:0-6-4,0-1-12], [6:0-3-8,0-5-4], [7:0-3-8,0-4-12]

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)	-0.04	6-7	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.19	Vert(CT)	-0.07	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.51	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 282 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x8 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\*  
4-5, 1-8: 2x6 SP No.2

#### BRACING-

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.): 3-4.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-5, 3-5

#### REACTIONS.

(size) 5=0-3-8, 8=0-3-8  
Max Horz 8=323(LC 8)  
Max Uplift 5=-941(LC 8), 8=-461(LC 8)  
Max Grav 5=3013(LC 2), 8=2582(LC 1)

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

TOP CHORD 1-2=-2108/398, 2-3=-733/143, 1-8=-1997/362  
BOT CHORD 7-8=-393/271, 6-7=-525/1435, 5-6=-161/498  
WEBS 2-7=-526/2097, 2-6=-1673/625, 3-6=-729/2651, 3-5=-2349/762, 1-7=-293/1344

#### 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: 2x8 - 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 7-22; 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; end vertical left 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=941, 8=461.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 922 lb down and 215 lb up at 2-0-12, 922 lb down and 215 lb up at 4-0-12, 1055 lb down and 261 lb up at 6-0-12, and 1058 lb down and 266 lb up at 8-0-12, and 1058 lb down and 266 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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:

December 5, 2023

#### LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259170
3761058	T04	Piggyback Base Girder	1	2	Job Reference (optional)	

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:32 2023 Page 2  
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#### LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-54, 3-4=-54, 5-8=-20  
Concentrated Loads (lb)  
Vert: 10=-922(F) 11=-922(F) 12=-922(F) 13=-922(F) 14=-922(F)

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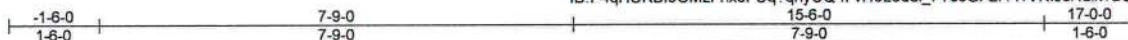


Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.
3761058	T05G	Common Supported Gable	1	1	T32259171

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:33 2023 Page 1

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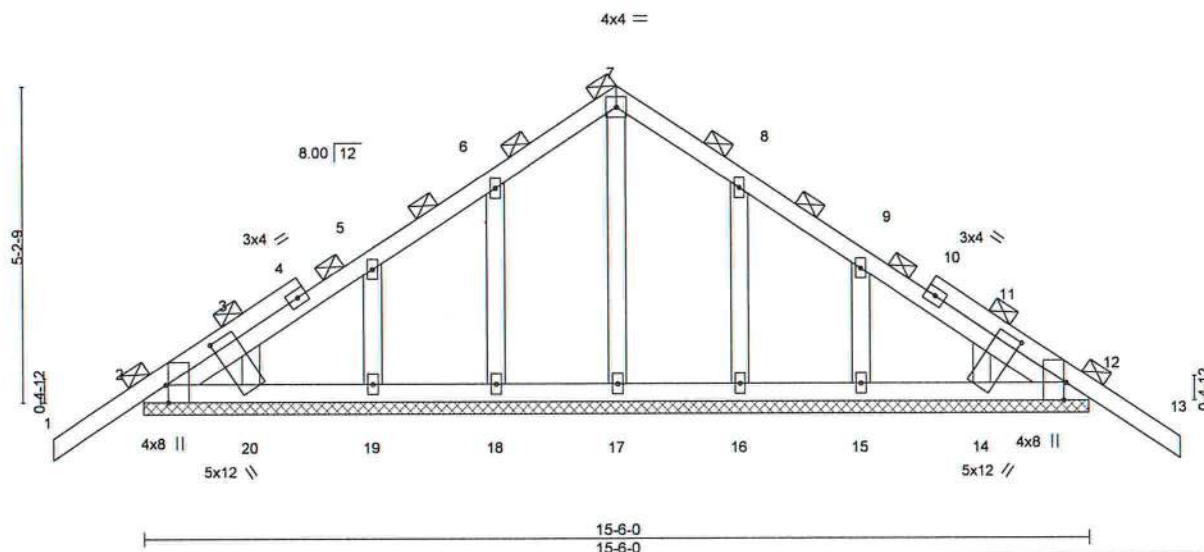


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [12:0-3-8,Edge], [14:0-1-13,0-11-9], [20:0-1-13,0-11-9]

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 0.14	Vert(LL)	-0.01	13	n/r	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	-0.01	13	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	12	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S					Weight: 89 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

All bearings 15-6-0.  
(lb) - Max Horz 2=-144(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 18, 19, 20, 16, 15, 14  
Max Grav All reactions 250 lb or less at joint(s) 2, 12, 17, 18, 19, 20, 16, 15, 14

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 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.
- \* 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, 12, 18, 19, 20, 16, 15, 14.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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16023 Swingle Ridge Rd. Chesterfield, MO 63017  
Date:

December 5,2023



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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259172
3761058	T06	Roof Special Girder	1	1	Job Reference (optional)	

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:34 2023 Page 1

ID: F4qHUKBI9OMzFnX3FUq7qnyCQ4I-NUajJzdNIRgVTPqEDk342aHL3qnyTG7P4m2U4UyCLwp

1-6-0 2-0-0 4-0-0 9-6-0 16-8-0 23-10-0 31-4-0 32-10-0  
1-6-0 2-0-0 2-0-0 5-6-0 7-2-0 7-2-0 7-6-0 1-6-0

4x6 =

Scale = 1:68.3

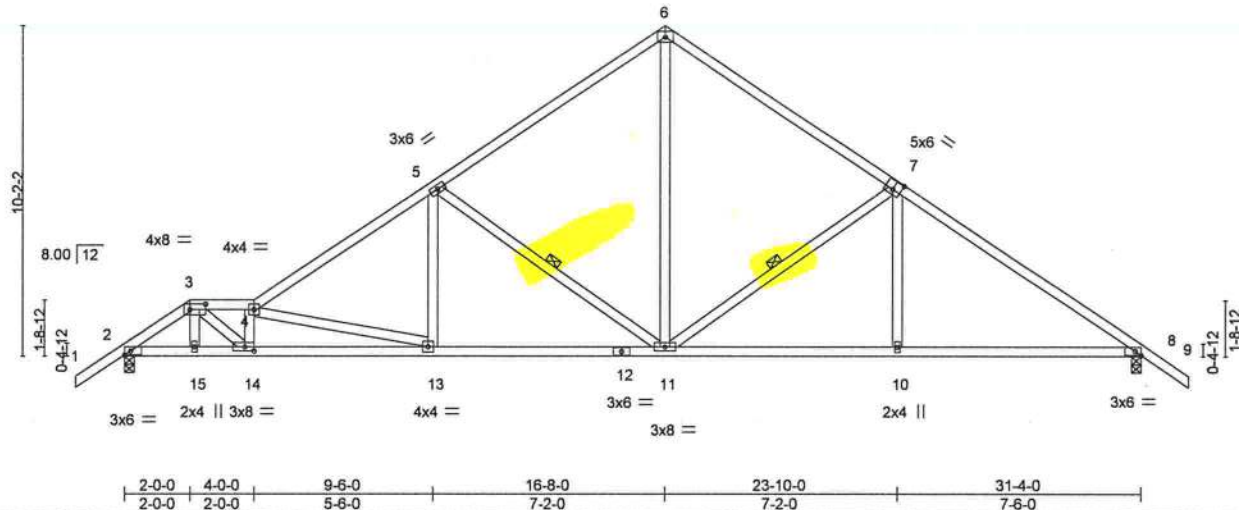


Plate Offsets (X,Y)-- [3:0-5-12,0-2-0], [7:0-3-0,0-3-4], [8:0-2-3,Edge], [14:0-3-8,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.68	Vert(LL)	-0.12 13-14	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.82	Vert(CT)	-0.25 11-13	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.81	Horz(CT)	0.08 8	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 176 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-6-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-4-7 oc bracing.  
WEBS 1 Row at midpt 5-11, 7-11

#### REACTIONS.

(size) 2=0-3-8, 8=0-3-8  
Max Horz 2=266(LC 7)  
Max Uplift 2=394(LC 8), 8=322(LC 9)  
Max Grav 2=1268(LC 1), 8=1242(LC 1)

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

TOP CHORD 2-3=-1849/538, 3-4=-2696/744, 4-5=-1927/494, 5-6=-1240/376, 6-7=-1242/388,  
7-8=-1738/405  
BOT CHORD 2-15=-549/1490, 14-15=-554/1493, 13-14=-864/2786, 11-13=-442/1572, 10-11=-229/1364,  
8-10=-228/1367  
WEBS 3-14=-372/1530, 4-14=-896/267, 4-13=-1254/436, 5-13=-75/513, 5-11=-783/385,  
6-11=-249/900, 7-11=-578/318, 7-10=0/307

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=394, 8=322.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 98 lb down and 107 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-54, 3-4=-54, 4-6=-54, 6-9=-54, 16-19=-20  
Concentrated Loads (lb)  
Vert: 15=-30(F)

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Philip J. O'Regan PE No.58126  
MiTek Inc. DBA MiTek USA FL Cert 6654  
16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

December 5, 2023

#### WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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**MiTek®**

16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

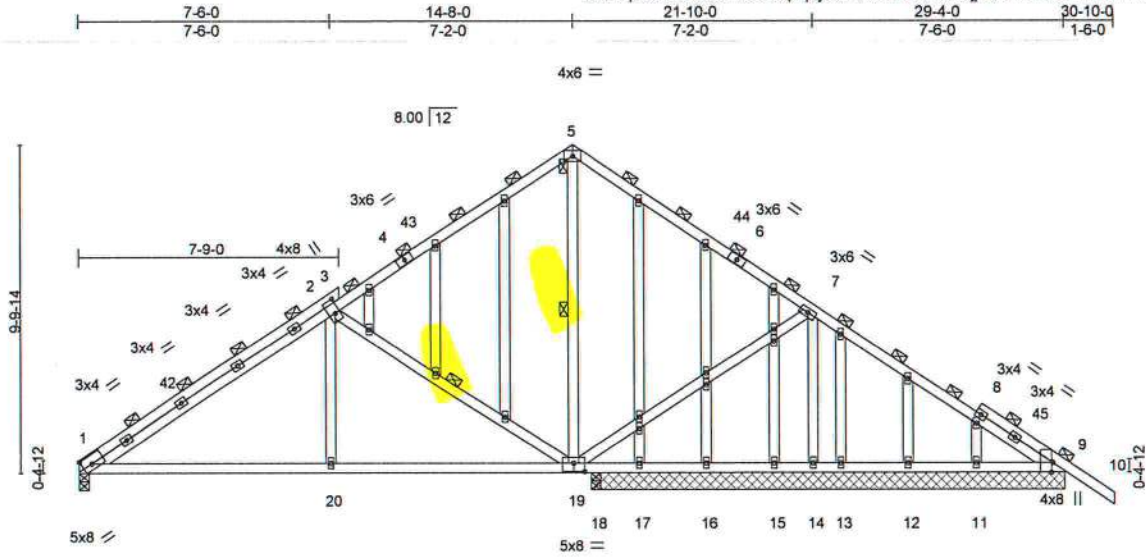


Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259173
3761058	T06G	GABLE	1	1	Job Reference (optional)	

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:36 2023 Page 1

ID: F4qHUKBI9OMzFnX3FUq?nyCQ4I-KsITkfdH2wCjjzdK95Y7?Ni4eYExHciY3Xb9NyCLwn



Scale = 1:65.9

Plate Offsets (X,Y)-- [1:Edge,0-3-0], [2:0-5-0,0-1-12], [9:0-3-8,Edge], [19:0-4-0,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.58	Vert(LL)	-0.06	19-20	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.50	Vert(CT)	-0.12	19-20	>999	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.35	Horz(CT)	0.02	18	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS						
								Weight: 226 lb	FT = 20%

#### 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 2-0-0 oc purlins (6-0-0 max.).  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:  
10-0-0 oc bracing: 1-20, 19-20.  
WEBS 1 Row at midpt 5-19, 2-19

#### REACTIONS.

All bearings 14-1-8 except (jt=length) 1=0-3-8, 18=0-3-8.  
(lb) - Max Horz 1=-249(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 9, 13, 12 except 1=-145(LC 12), 14=-263(LC 13), 17=-195(LC 1), 11=-108(LC 13), 18=-233(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 9, 17, 16, 15, 13, 12, 11, 9 except 1=642(LC 1), 14=793(LC 1), 18=527(LC 1)

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

TOP CHORD 1-2=-825/172, 2-5=-317/161, 5-7=-326/123  
BOT CHORD 1-20=-192/749, 19-20=-192/750  
WEBS 7-19=-35/368, 7-14=-787/273, 2-19=-628/334, 2-20=0/311

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 18-10-15 to 30-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- \* 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) 9, 13, 12, 9 except (jt=lb) 1=145, 14=263, 17=195, 11=108, 18=233.
- 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:

December 5, 2023

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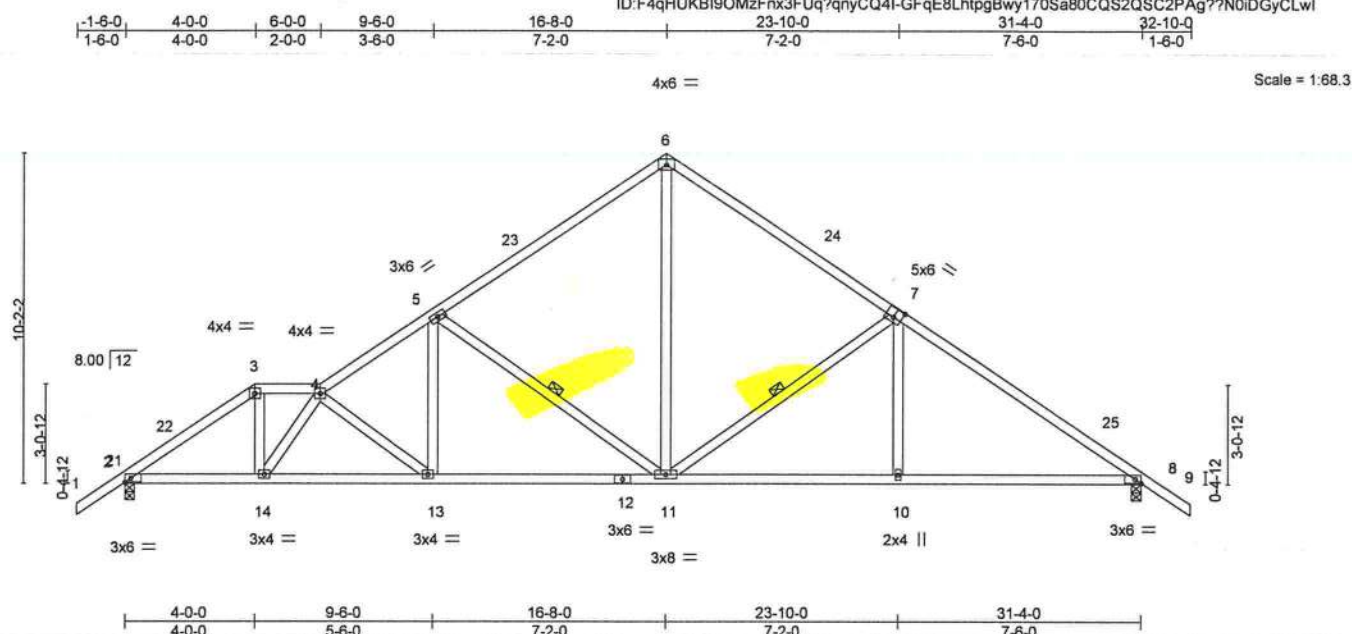


Plate Offsets (X,Y)-- [7:0-3-0,0-3-4], [8:0-2-3,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.59	Vert(LL)	-0.10	11-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.22	11-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 176 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD	Structural wood sheathing directly applied or 3-9-12 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 7-10-11 oc bracing.
WEBS	1 Row at midpt                      5-11, 7-11

### REACTIONS.

(size) 2=0-3-8, 8=0-3-8  
Max Horz 2=-266(LC 10)  
Max Uplift 2=-334(LC 12), 8=-317(LC 13)  
Max Grav 2=1240(LC 1), 8=1240(LC 1)

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

TOP CHORD 2-3=-1808/441, 3-4=-1490/410, 4-5=-1865/478, 5-6=-1235/367, 6-7=-1239/380,  
7-8=-1734/397

BOT CHORD 2-14=-445/1448, 13-14=-563/1984, 11-13=-418/1554, 10-11=-222/1361, 8-10=-222/1363

WEBS 3-14=-142/813, 4-14=-888/198, 4-13=-548/184, 5-13=-75/510, 5-11=-761/363,  
6-11=-237/892, 7-11=-577/317, 7-10=0/306

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCp=0.18; MWFRS (envelope) gable end zone and C-C 21-1-3 to 32-10-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=334. 8=317.

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  
16015 Swingley Ridge Rd. Chesterfield, MO 63017  
Data:

December 5, 2023



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**WARNING – Verify design parameters and READ NOTES on this and INCLUDED LITERATURE REFERENCE PAGE 11/17/15 16/17/18/19/20/21 BEFORE USE.**

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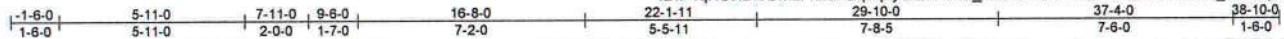
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Chesterfield, MO 63017  
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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259175
3761058	T08	GABLE	1	1	Job Reference (optional)	

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:40 2023 Page 1

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Scale = 1:70.5

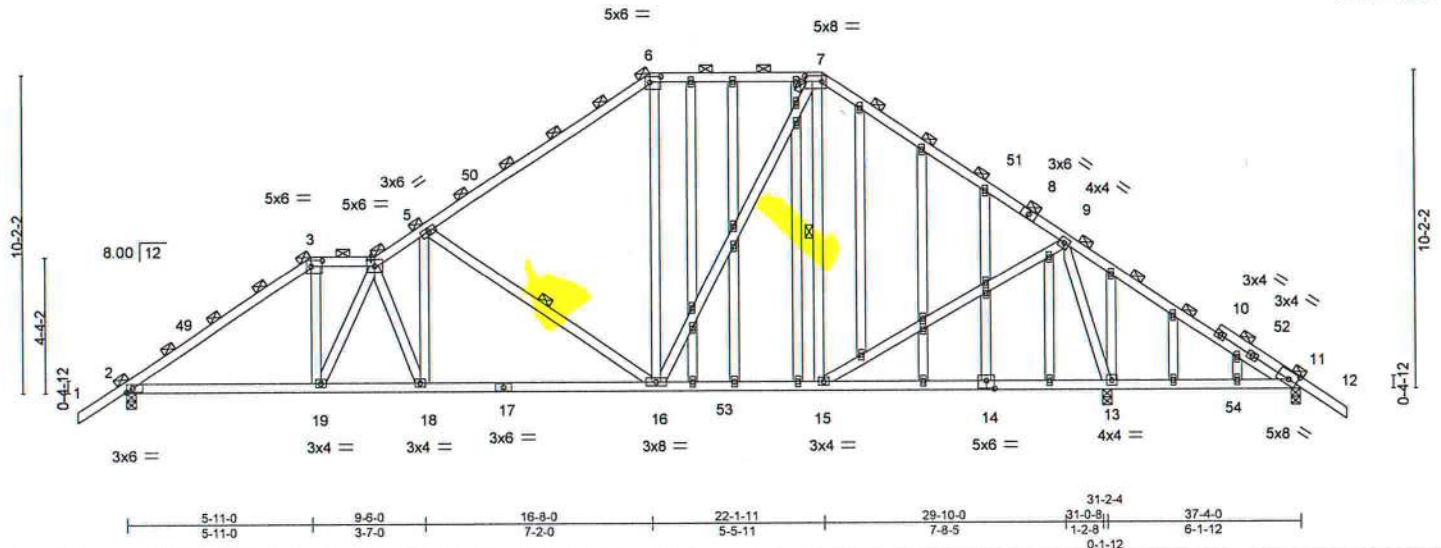


Plate Offsets (X,Y)-- [3:0-4-4,0-2-4], [6:0-4-4,0-2-4], [7:0-6-4,0-2-4], [11:0-3-5,0-3-0], [14:0-3-0,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.73	Vert(LL)	-0.16 13-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.63	Vert(CT)	-0.32 13-15	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.05 13	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 322 lb	FT = 20%

#### 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 2-0-0 oc purlins (3-10-10 max.).  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 5-16, 7-15

#### REACTIONS.

(size) 2=0-3-8, 11=0-3-8, 13=0-3-8  
Max Horz 2=-268(LC 10)  
Max Uplift 2=-320(LC 12), 11=-115(LC 27), 13=-383(LC 13)  
Max Grav 2=1265(LC 19), 11=86(LC 26), 13=1891(LC 2)

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

TOP CHORD 2-3=-1766/405, 3-4=-1436/397, 4-5=-1802/417, 5-6=-1178/309, 6-7=-904/326,  
7-9=-971/257, 9-11=-174/641  
BOT CHORD 2-19=-389/1549, 18-19=-418/1801, 16-18=-396/1694, 15-16=-88/764, 11-13=-458/227  
WEBS 3-19=-71/718, 4-19=-615/92, 4-18=-339/60, 5-18=-10/513, 5-16=-893/367,  
6-16=-70/386, 7-16=-172/459, 9-15=-117/828, 9-13=-1639/437

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 27-5-1 to 38-10-0 zone; porch 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.
- \* 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=320, 11=115, 13=383.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

December 5, 2023

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Job 3761058	Truss T09	Truss Type Piggyback Base	Qty 1	Ply 1	SIMQUE - RAULERSON RES. T32259176
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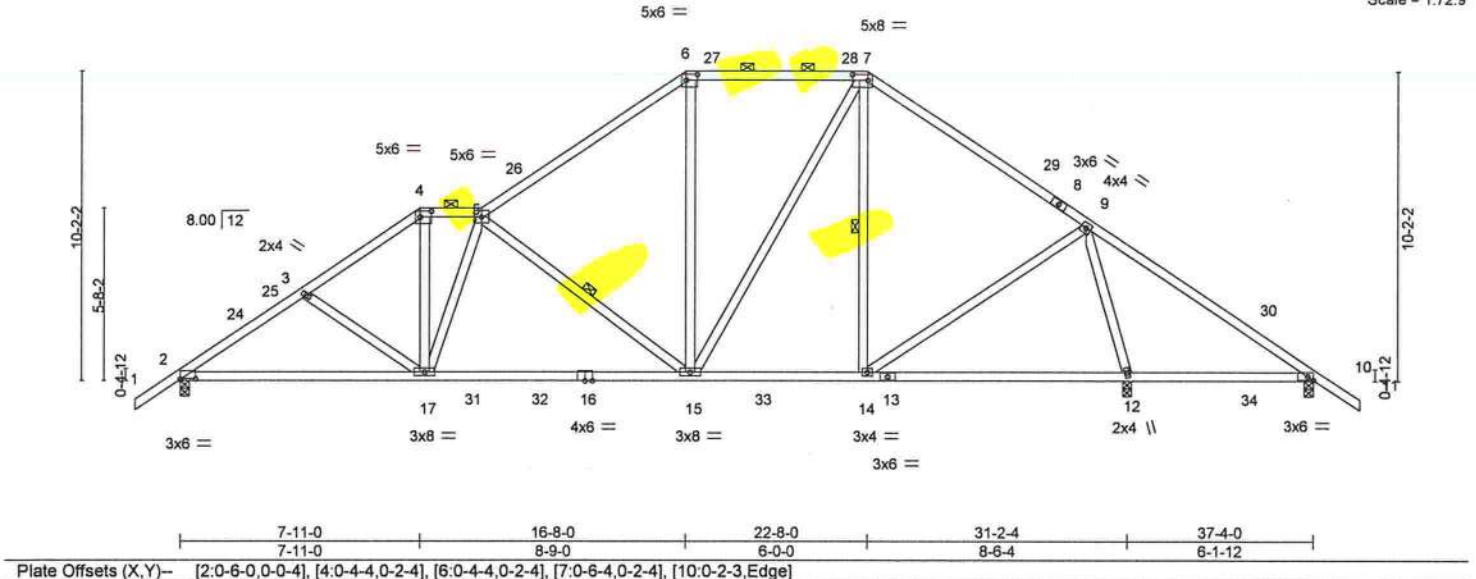
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:41 2023 Page 1

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1-6-0 4-1-11 7-11-0 9-11-0 16-8-0 22-8-0 29-10-0 37-4-0 38-10-0  
1-6-0 4-1-11 3-9-5 2-0-0 6-9-0 6-0-0 7-2-0 7-6-0 1-6-0

Scale = 1:72.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.66	Vert(LL)	0.08 12-23	MT20	GRIP
TCDL	7.0	Lumber DOL	1.25	BC	0.83	Vert(CT)	-0.34 15-17		244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.05 12		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS					
								Weight: 226 lb FT = 20%	

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

REACTIONS.	
(size)	2=0-3-8, 12=0-3-8, 10=0-3-8
Max Horz	2=-267(LC 10)
Max Uplift	2=-326(LC 12), 12=-282(LC 12), 10=-134(LC 8)
Max Grav	2=1300(LC 19), 12=1784(LC 2), 10=209(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1865/451, 3-4=-1718/405, 4-5=-1404/379, 5-6=-1232/339, 6-7=-963/342, 7-9=-991/301, 9-10=-72/468
BOT CHORD	2-17=-459/1678, 15-17=-369/1622, 14-15=-91/767, 10-12=-292/115
WEBS	4-17=-180/836, 5-17=-448/163, 5-15=-795/334, 6-15=-73/399, 7-15=-170/510, 9-14=-128/777, 9-12=-1516/328

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; 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 27-11-6 to 38-10-0 zone; porch 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=326, 12=282, 10=134.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Philip J. O'Regan PE No.58116  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingle Ridge Rd. Chesterfield, MO 63017  
Date:

December 5, 2023

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259177
3761058	T10	Piggyback Base	1	1	Job Reference (optional)	

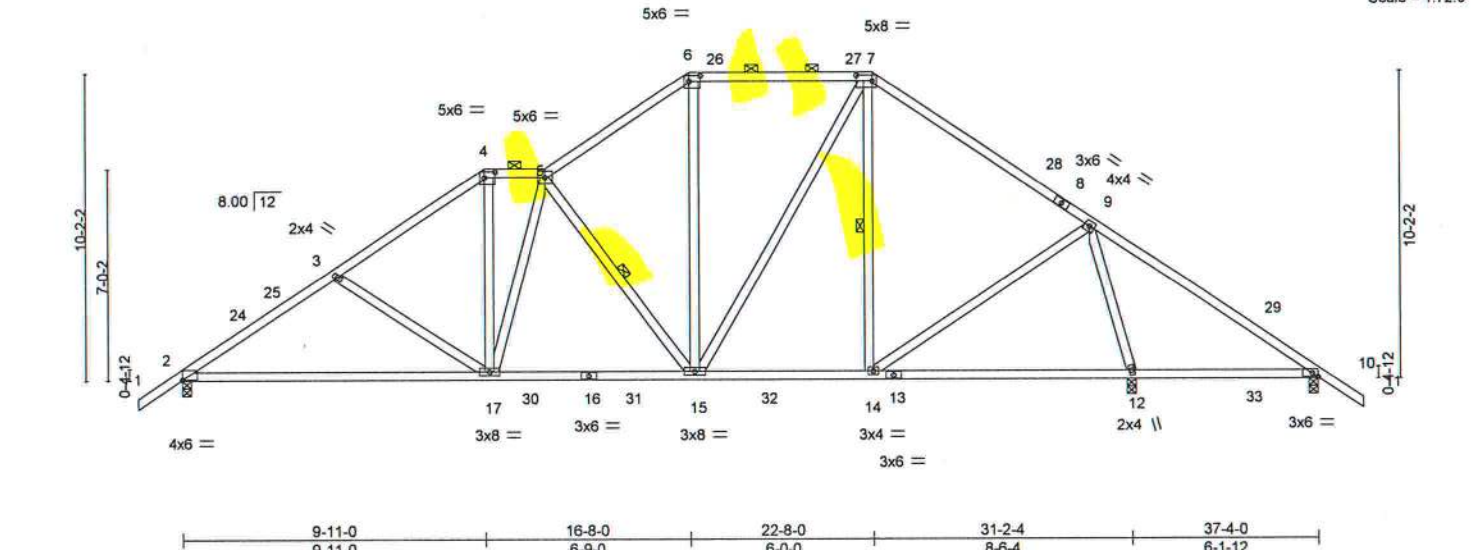
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:43 2023 Page 1

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1-6-0 5-0-15 9-11-0 11-11-0 16-8-0 22-8-0 29-10-0 37-4-0 38-10-0  
1-6-0 5-0-15 4-10-1 2-0-0 4-9-0 6-0-0 7-2-0 7-8-0 1-6-0

Scale = 1:72.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.64	Vert(LL)	0.08 12-23	>964	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.89	Vert(CT)	-0.43 17-20	>869	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.05 12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 231 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-1 oc purlins, except  
2-0-0 oc purlins (5-2-0 max.): 4-5, 6-7.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 5-15, 7-14

#### REACTIONS.

(size) 2=0-3-8, 12=0-3-8, 10=0-3-8  
Max Horz 2=-267(LC 10)  
Max Uplift 2=-327(LC 12), 12=-278(LC 12), 10=-130(LC 8)  
Max Grav 2=1310(LC 19), 12=1762(LC 2), 10=221(LC 26)

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

TOP CHORD 2-3=-1810/451, 3-4=-1608/389, 4-5=-1291/375, 5-6=-1204/359, 6-7=-965/343,  
7-9=-1010/303, 9-10=-66/429  
BOT CHORD 2-17=-448/1640, 15-17=-278/1414, 14-15=-91/783, 10-12=-261/110  
WEBS 3-17=-338/221, 4-17=-119/717, 5-17=-254/117, 5-15=-722/296, 6-15=-97/432,  
7-15=-164/472, 9-14=-127/766, 9-12=-1497/323

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 27-11-6 to 38-10-0 zone; porch 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=327, 12=278, 10=130.
- 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:

December 5, 2023

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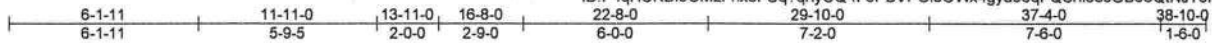
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Chesterfield, MO 63017  
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Job 3761058	Truss T11	Truss Type Piggyback Base	Qty 1	Ply 1	SIMQUE - RAULERSON RES. T32259178
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:44 2023 Page 1

ID: F4qHUKBI9OMzFnX3FUq?gnyCQ4I-5PBVPoleOWx4gya9oqFQShi3sGBooQtNJTORvvyCLwf



5x6 =

5x8 =

Scale = 1:71.8

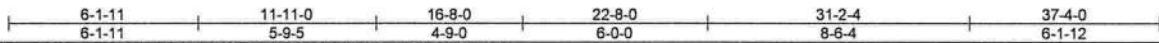
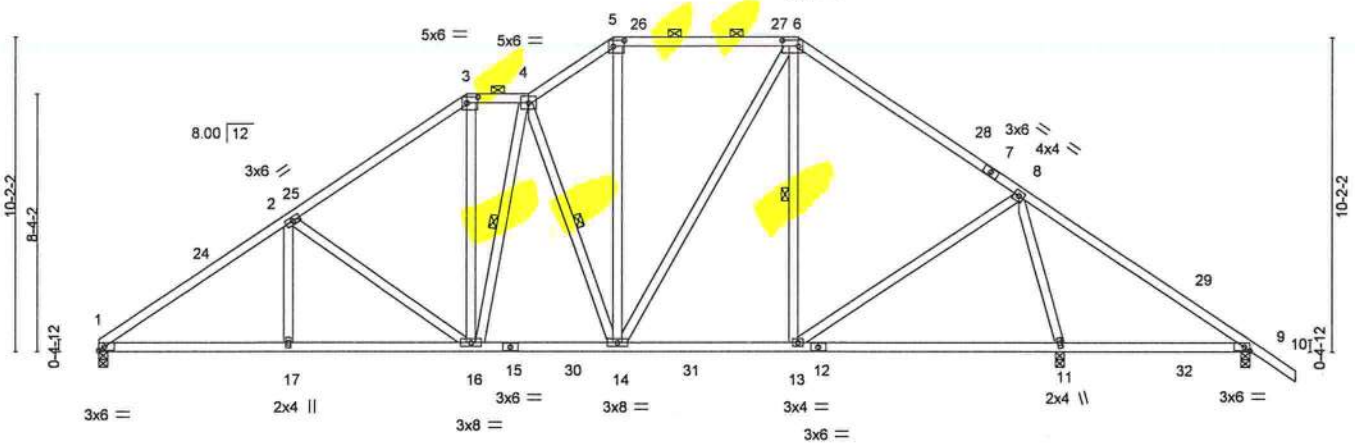


Plate Offsets (X,Y)-- [3:0-4-4,0-2-4], [5:0-4-4,0-2-4], [6:0-6-4,0-2-4], [9:0-2-3,Edge]

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 0.64	Vert(LL)	0.08 11-23	>964	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.55	Vert(CT)	-0.22 11-13	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.81	Horz(CT)	0.05 11	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS						
								Weight: 240 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-0-1 oc purlins, except 2-0-0 oc purlins (5-4-3 max.): 3-4, 5-6.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 4-16, 4-14, 6-13

#### REACTIONS.

(size) 1=0-3-8, 11=0-3-8, 9=0-3-8  
Max Horz 1=-259(LC 8)  
Max Uplift 1=-290(LC 12), 11=-270(LC 12), 9=-131(LC 8)  
Max Grav 1=1230(LC 19), 11=1756(LC 2), 9=222(LC 26)

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

TOP CHORD 1-2=-1877/440, 2-3=-1441/383, 3-4=-1141/374, 4-5=-1159/371, 5-6=-963/340, 6-8=-1012/304, 8-9=-53/420  
BOT CHORD 1-17=-426/1659, 16-17=-426/1659, 14-16=-206/1206, 13-14=-94/784, 9-11=-255/99  
WEBS 2-17=0/254, 2-16=-565/262, 3-16=-106/567, 4-14=-667/294, 5-14=-118/451, 6-14=-161/458, 8-13=-124/763, 8-11=-1492/315

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 27-11-6 to 38-10-0 zone; porch 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) 1=290, 11=270, 9=131.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

December 5, 2023



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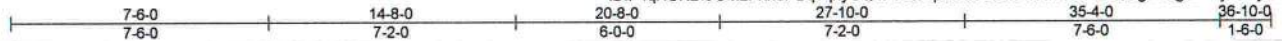


Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259179
3761058	T12	Piggyback Base	1	1	Job Reference (optional)	

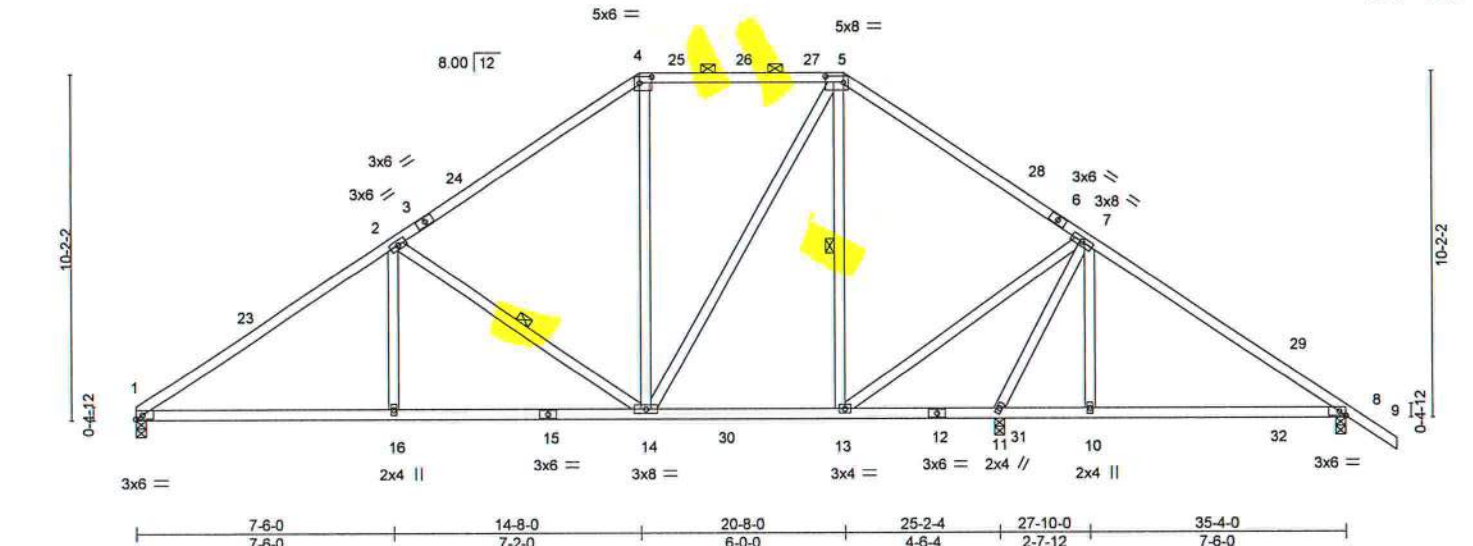
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:46 2023 Page 1

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Scale = 1:64.8



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.60	Vert(LL)	-0.11 16-19	MT20	244/190		
TCDL	7.0	Lumber DOL	1.25	BC	0.66	Vert(CT)	-0.21 16-19				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.03 11				
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							
								Weight: 210 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-2-4 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 2-14, 5-13

REACTIONS.	
(size)	1=0-3-8, 11=0-3-8, 8=0-3-8
Max Horz	1=259(LC 8)
Max Uplift	1=262(LC 12), 11=254(LC 13), 8=189(LC 13)
Max Grav	1=1061(LC 19), 11=1322(LC 2), 8=555(LC 28)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-1470/377, 2-4=-934/303, 4-5=-696/318, 5-7=-672/243, 7-8=-505/222
BOT CHORD	1-16=-356/1347, 14-16=-356/1347, 13-14=-92/523, 11-13=-313/143, 10-11=-84/358, 8-10=-85/359
WEBS	2-16=0/321, 2-14=-716/327, 5-14=-181/528, 5-13=-391/122, 7-13=-161/978, 7-10=-153/266, 7-11=-1417/395

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; 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 25-7-15 to 36-10-0 zone; porch right exposed; C-C for members and for C & 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) 1=262, 11=254, 8=189.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

December 5, 2023



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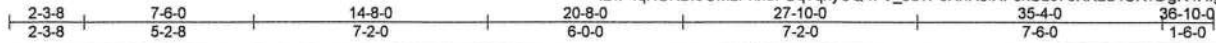


Job 3761058	Truss T13	Truss Type Piggyback Base	Qty 2	Ply 1	SIMQUE - RAULERSON RES. T32259180
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:47 2023 Page 1

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Scale = 1:67.9

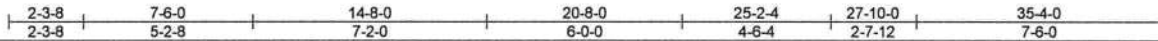
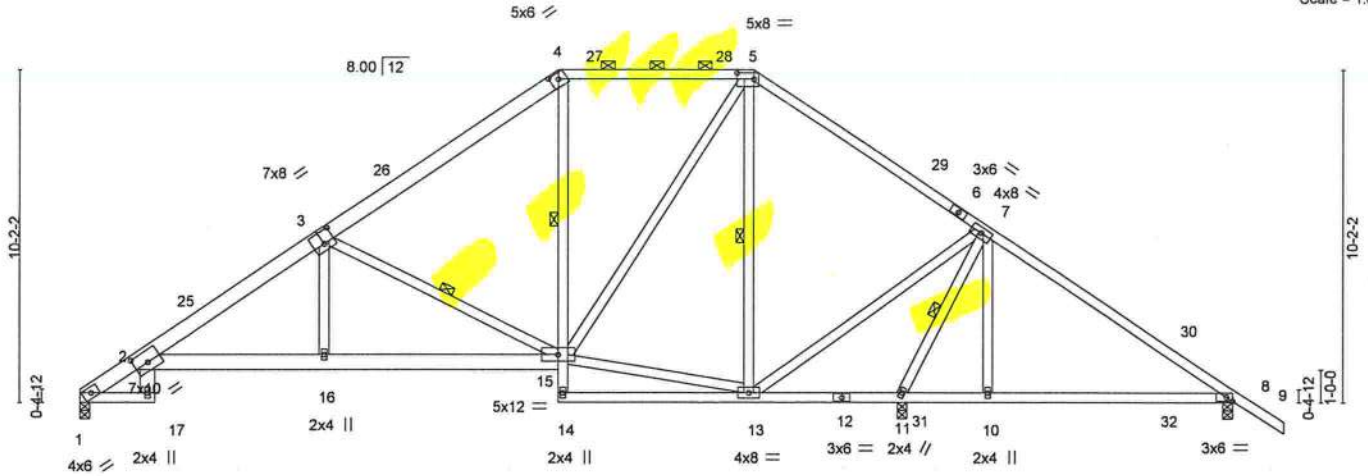


Plate Offsets (X,Y)-- [2:0-5-0,0-4-0], [3:0-4-0,0-4-8], [4:0-3-0,0-2-3], [5:0-6-4,0-2-4], [8:0-2-3,Edge]

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 0.67	Vert(LL)	-0.14	2-16	>999	240	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.85	Vert(CT)	-0.27	2-16	>999	180	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.52	Horz(CT)	0.16	11	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS						
Weight: 242 lb									FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2 \*Except\*  
3-4: 2x6 SP No.2, 1-3: 2x6 SP M 26  
BOT CHORD 2x4 SP No.2 \*Except\*  
2-17,2-15: 2x6 SP No.2, 4-14: 2x4 SP No.3  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.  
BOT CHORD Rigid ceiling directly applied or 5-11-15 oc bracing. Except:  
1 Row at midpt 4-15  
1 Row at midpt 3-15, 5-13, 7-11

#### REACTIONS.

(size) 1=0-3-8, 11=0-3-8, 8=0-3-8  
Max Horz 1=-256(LC 10)  
Max Uplift 1=-192(LC 12), 11=-373(LC 12), 8=-259(LC 8)  
Max Grav 1=832(LC 1), 11=1629(LC 1), 8=369(LC 26)

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

TOP CHORD 2-21=-572/251, 2-3=-1419/340, 3-4=-717/222, 4-5=-487/230, 5-7=-364/220, 7-8=-193/444  
BOT CHORD 2-16=-344/1216, 15-16=-345/1227, 11-13=-959/381, 10-11=-275/178, 8-10=-275/178  
WEBS 3-16=0/383, 3-15=-871/404, 5-15=-193/624, 5-13=-711/200, 7-13=-315/1370, 7-11=-1793/476, 7-10=-152/268

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 25-7-15 to 36-10-0 zone; porch 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=192, 11=373, 8=259.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

December 5,2023

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259181
3761058	T14	Piggyback Base	3	1	Job Reference (optional)	

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:49 2023 Page 1

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2-3-8	7-6-0	14-8-0	20-8-0	27-10-0	35-4-0	36-10-0
2-3-8	5-2-8	7-2-0	6-0-0	7-2-0	7-6-0	1-6-0

Scale = 1:67.9

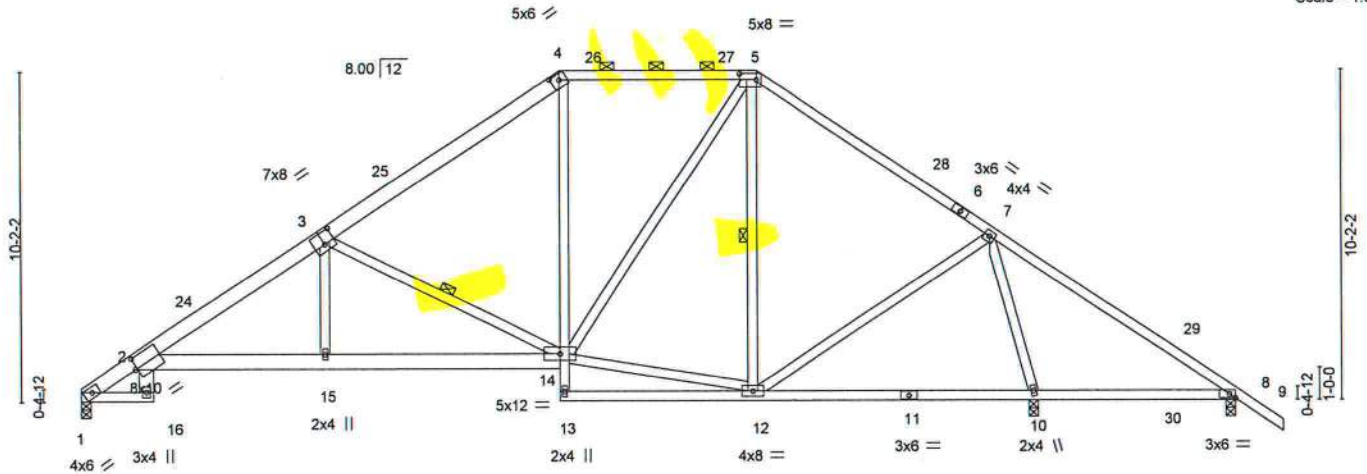


Plate Offsets (X,Y) [2:0-0-11,0-4-4], [3:0-4-0,0-4-8], [4:0-3-0,0-2-3], [5:0-6-4,0-2-4], [8:0-2-3,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.75	Vert(LL)	-0.15	2-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.50	Vert(CT)	-0.28	2-15	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.89	Horz(CT)	0.18	10	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS						Weight: 234 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2 \*Except\*  
3-4: 2x6 SP No.2, 1-3: 2x6 SP M 26  
BOT CHORD 2x4 SP No.2 \*Except\*  
2-16: 2x6 SP No.2, 2-14: 2x6 SP M 26, 4-13: 2x4 SP No.3  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (5-11-1 max.): 4-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 10-12,8-10.  
WEBS 1 Row at midpt 3-14, 5-12

#### REACTIONS.

(size) 1=0-3-8, 10=0-3-8, 8=0-3-8  
Max Horz 1=-256(LC 10)  
Max Uplift 1=-237(LC 12), 10=-365(LC 12), 8=-294(LC 10)  
Max Grav 1=995(LC 1), 10=1789(LC 1), 8=84(LC 12)

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

TOP CHORD 2-20=-670/264, 2-3=-1803/447, 3-4=-1040/270, 4-5=-758/289, 5-7=-724/266, 7-8=-220/823  
BOT CHORD 2-15=-431/1521, 14-15=-433/1536, 4-14=-60/277, 8-10=-573/238  
WEBS 3-15=-16/427, 3-14=-926/420, 12-14=-41/452, 5-14=-177/512, 5-12=-373/165, 7-12=-180/774, 7-10=-1643/410

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCp=0.18; MWFRS (envelope) gable end zone and C-C 25-7-15 to 36-10-0 zone; porch 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=237, 10=365, 8=294.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Date:

December 5, 2023

#### WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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**MiTek®**  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com



Job 3761058	Truss T15	Truss Type Piggyback Base	Qty 3	Ply 1	SIMQUE - RAULERSON RES. Job Reference (optional)	T32259182
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

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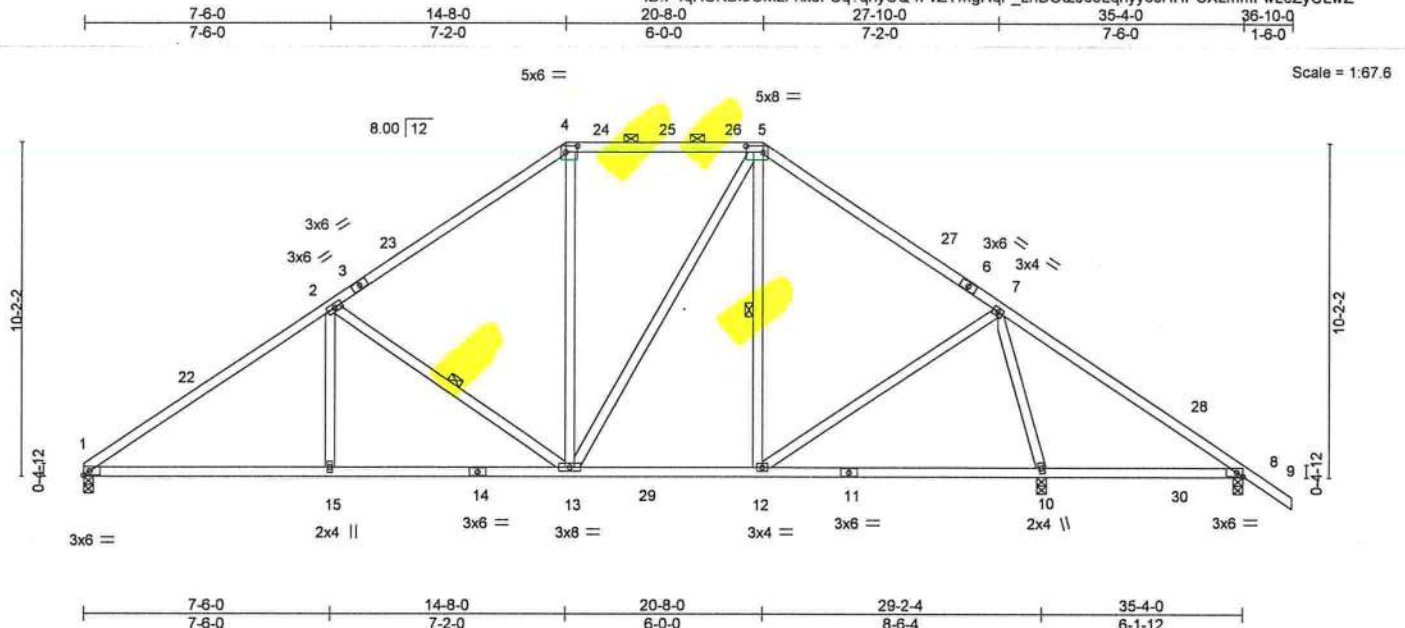


Plate Offsets (X,Y)--		[4:0-4-4,0-2-4], [5:0-6-4,0-2-4], [8:0-2-3,Edge]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL 20.0		Plate Grip DOL 1.25		TC 0.62		Vert(LL) -0.12 10-12 >999 240		MT20 244/190	
TCDL 7.0		Lumber DOL 1.25		BC 0.69		Vert(CT) -0.23 10-12 >999 180			
BCLL 0.0 *		Rep Stress Incr YES		WB 0.72		Horz(CT) 0.04 10 n/a n/a			
BCDL 10.0		Code FBC2023/TPI2014		Matrix-MS				Weight: 202 lb FT = 20%	

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-11-0 oc purlins, except  
2-0-0 oc purlins (5-9-2 max.); 4-5.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 2-13, 5-12

**REACTIONS.** (size) 1=0-3-8, 10=0-3-8, 8=0-3-8  
Max Horz 1=-259(LC 8)  
Max Uplift 1=-286(LC 12), 10=-284(LC 13), 8=-136(LC 8)  
Max Grav 1=1164(LC 19), 10=1592(LC 2), 8=253(LC 26)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1666/418, 2-4=-1124/345, 4-5=-855/354, 5-7=-947/301, 7-8=-36/321  
BOT CHORD 1-15=-390/1499, 13-15=-390/1499, 12-13=-93/718  
WEBS 2-15=0/325, 2-13=-718/326, 4-13=-78/349, 5-13=-159/384, 7-12=-113/653, 7-10=-1322/316

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 25-7-15 to 36-10-0 zone; porch 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) 1=286, 10=284, 8=136.
- 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:

December 5, 2023



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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259183
3761058	T16	Piggyback Base	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:51 2023 Page 1

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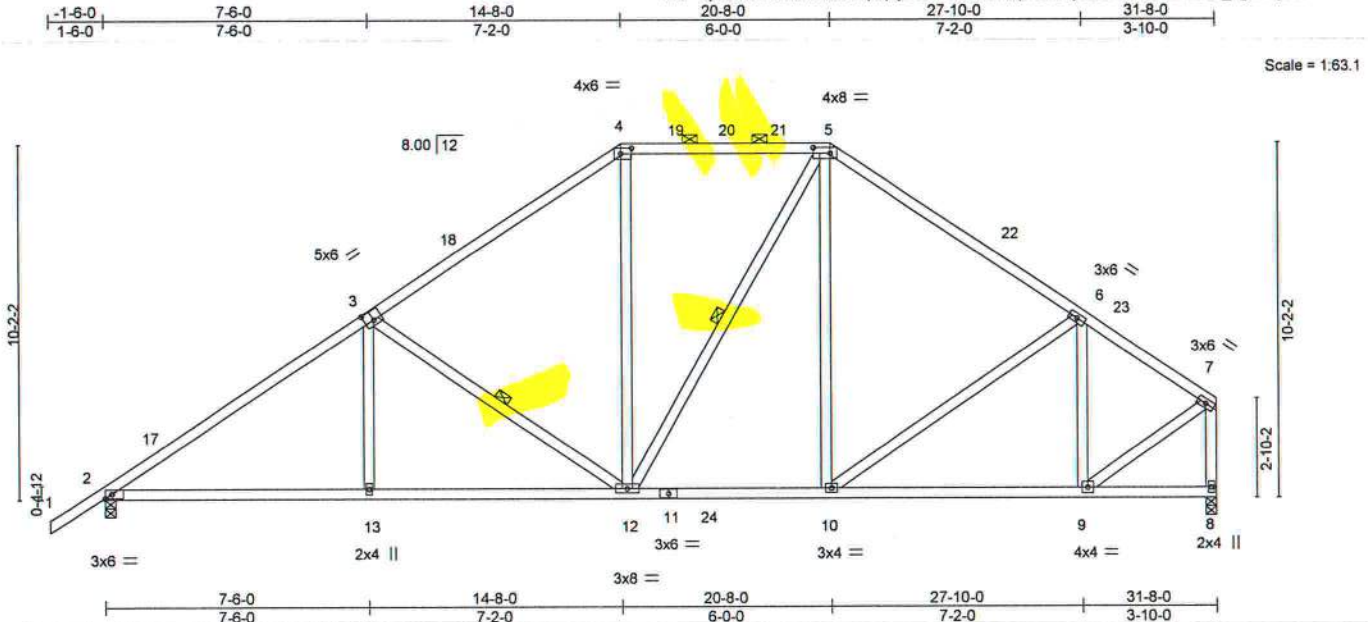


Plate Offsets (X,Y)-- [3:0-3-0,0-3-4], [4:0-3-12,0-2-0], [5:0-5-12,0-2-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.57	Vert(LL)	-0.11 13-16	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 0.70	Vert(CT)	-0.20 13-16	>999	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.41	Horz(CT)	0.06 8	n/a	n/a
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-MS				
						Weight: 200 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-9-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-0 max.): 4-5.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 8-3-2 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 3-12, 5-12
<b>REACTIONS.</b>			
(size) 2=0-3-8, 8=0-3-8			
Max Horz 2=252(LC 12)			
Max Uplift 2=-341(LC 12), 8=-277(LC 13)			
Max Grav 2=1363(LC 19), 8=1274(LC 2)			
<b>FORCES.</b>			
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.			
TOP CHORD	2-3=-1884/438, 3-4=-1340/373, 4-5=-1037/377, 5-6=-1240/330, 6-7=-1064/251, 7-8=-1240/281		
BOT CHORD	2-13=-476/1629, 12-13=-477/1625, 10-12=-150/956, 9-10=-180/877		
WEBS	3-13=0/320, 3-12=-698/318, 4-12=-91/467, 5-12=-134/255, 5-10=-43/286, 6-9=-442/169, 7-9=-222/1072		

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; 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 31-6-4 to 31-6-4 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.
  - 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=341, 8=277.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

December 5,2023

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259185
3761058	T18	Piggyback Base	2	1	Job Reference (optional)	

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:54 2023 Page 1

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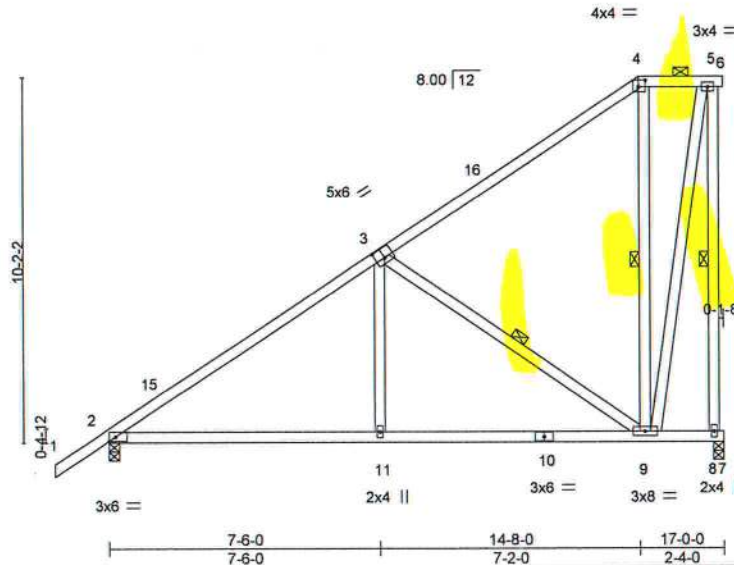


Plate Offsets (X,Y)-- [3:0-3-0,0-3-4], [4:0-2-4,0-2-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.59	Vert(LL)	0.09 11-14	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.53	Vert(CT)	-0.15 11-14	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.56	Horz(CT)	0.01 8	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS						
								Weight: 121 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.  
BOT CHORD Rigid ceiling directly applied or 9-11-1 oc bracing.  
WEBS 1 Row at midpt 5-8, 3-9, 4-9

#### REACTIONS.

(size) 8=0-3-8, 2=0-3-8  
Max Horz 2=412(LC 12)  
Max Uplift 8=-281(LC 12), 2=-127(LC 12)  
Max Grav 8=625(LC 1), 2=704(LC 1)

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

TOP CHORD 2-3=-789/60, 3-4=-267/0, 5-8=-616/266  
BOT CHORD 2-11=-322/616, 9-11=-323/613  
WEBS 3-11=0/329, 3-9=-603/324, 5-9=-292/617

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 16-8-12 to 16-8-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=281, 2=127.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Date:

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Job 3761058	Truss T19	Truss Type Piggyback Base	Qty 2	Ply 1	SIMQUE - RAULERSON RES. T32259186
Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:55 2023 Page 1 ID:F4qHUKBI9OMzFnx3FUq?qnycQ4I-GWLf9uYpuKWWewHyex?O0fy3l_Eta_VvXe5KnyCLwU					
Job Reference (optional)					

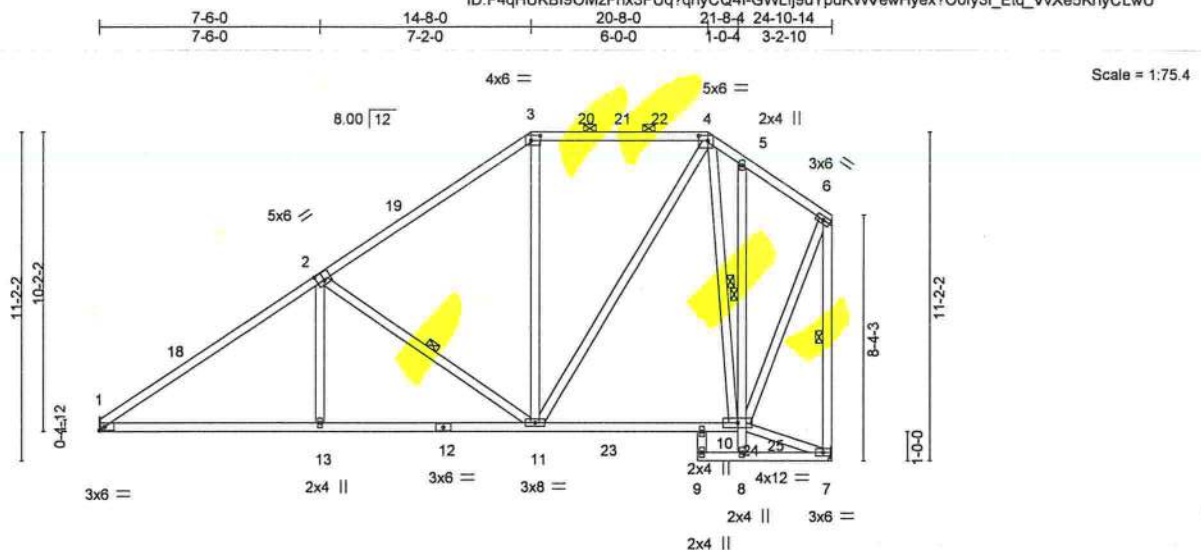


Plate Offsets (X,Y)-- [2:0-3-0,0-3-4], [3:0-3-12,0-2-0], [4:0-3-12,0-2-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL 20.0		Plate Grip DOL 1.25		TC 0.59		Vert(LL) -0.12 10-11 >999 240		MT20	244/190
TCDL 7.0		Lumber DOL 1.25		BC 0.65		Vert(CT) -0.21 13-17 >999 180			
BCLL 0.0 *		Rep Stress Incr YES		WB 0.56		Horz(CT) 0.04 7 n/a n/a			
BCDL 10.0		Code FBC2023/TPI2014		Matrix-MS				Weight: 190 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-3-1 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
1 Row at midpt 5-10  
10-0-0 oc bracing: 8-10  
WEBS 1 Row at midpt 2-11, 4-10, 6-7

**REACTIONS.** (size) 1=Mechanical, 7=Mechanical  
Max Horz 1=318(LC 12)  
Max Uplift 1=226(LC 12), 7=246(LC 12)  
Max Grav 1=1042(LC 19), 7=1078(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1427/312, 2-3=-878/239, 3-4=-649/264, 4-5=-396/158, 5-6=-426/115, 6-7=-1068/248  
BOT CHORD 1-13=-471/1245, 11-13=-472/1241, 10-11=-90/379  
WEBS 2-13=0/312, 2-11=-703/328, 4-11=-221/595, 4-10=-476/211, 6-10=-186/855

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; 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 24-9-2 to 24-9-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=226, 7=246.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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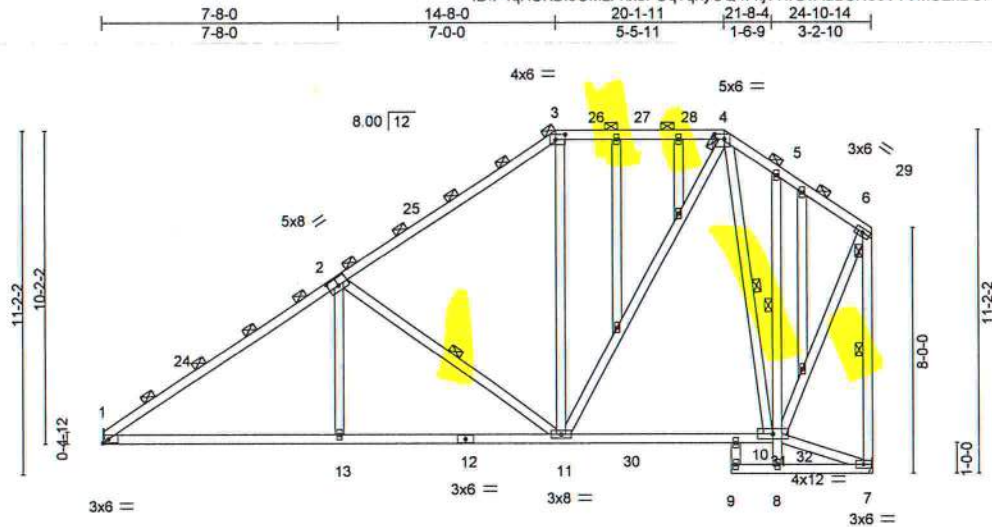
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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259187
3761058	T19G	GABLE	1	1	Job Reference (optional)	

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:58:56 2023 Page 1

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#### LUMBER-

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

#### BRACING-

TOP CHORD 2-0-0 oc purlins (4-2-14 max.), except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
1 Row at midpt 5-10  
10-0-0 oc bracing: 8-10  
WEBS 1 Row at midpt 2-11, 4-10, 6-7

#### REACTIONS.

(size) 1=Mechanical, 7=Mechanical  
Max Horz 1=311(LC 12)  
Max Uplift 1=227(LC 12), 7=241(LC 12)  
Max Grav 1=1043(LC 19), 7=1075(LC 2)

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

TOP CHORD 1-2=-1422/313, 2-3=-877/240, 3-4=-648/265, 4-5=-427/173, 5-6=-441/116,  
6-7=-1064/243  
BOT CHORD 1-13=-465/1243, 11-13=-465/1249, 10-11=-97/407  
WEBS 2-13=0/312, 2-11=-710/328, 4-11=-210/577, 4-10=-435/185, 6-10=-180/848

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22: 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 24-9-2 to 24-9-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=227, 7=241.
- 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:

December 5,2023

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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 and OSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcsccomponents.com)

**MiTek®**  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com



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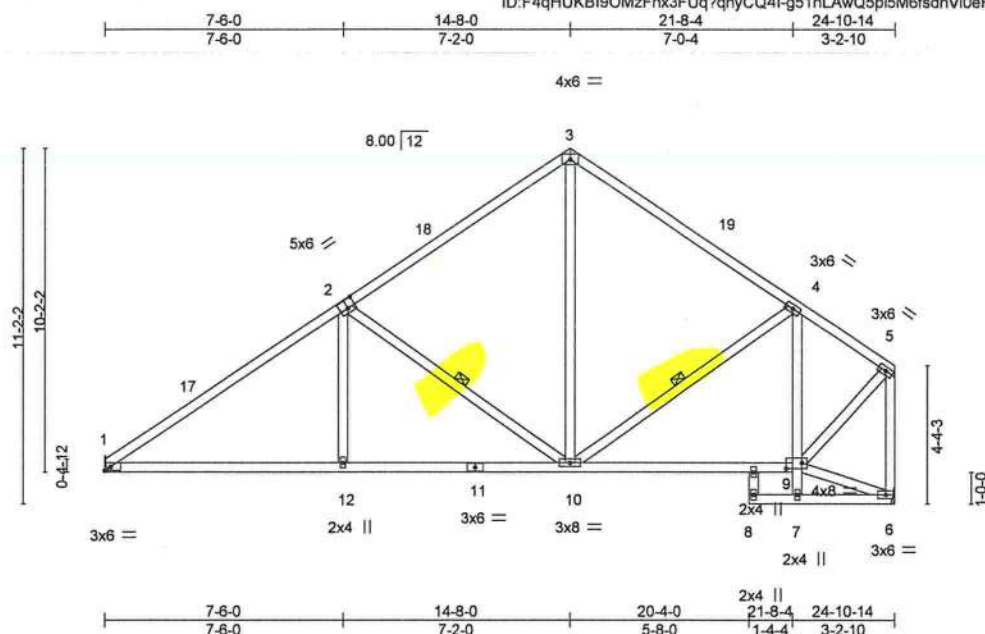


Plate Offsets (X,Y)--		[2-0-3-0-0-3-4], [9-0-6-0-0-2-4]		7-0-0		7-2-0		3-0-0		1-4		3-2-10	
<b>LOADING</b>	(psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.61	Vert(LL)	0.11	12-16	>999	240	MT20	244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.56	Vert(CT)	-0.18	12-16	>999	180			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.04	6	n/a	n/a			
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 156 lb	FT = 20%	

**LUMBER-**  
**TOP CHORD** 2x4 SP No.2  
**BOT CHORD** 2x4 SP No.2 \*Except\*  
 4-7: 2x4 SP No.3  
**WEBS** 2x4 SP No.3

BRACING- TOP CHORD	Structural wood sheathing directly applied or 4-4-1 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 10-0-0 oc bracing: 7-9
WEBS	1 Row at midpt                      2-10. 4-10

**REACTIONS.** (size) 1=Mechanical, 6=Mechanical  
Max Horz 1=233(LC 9)  
Max Uplift 1=-227(LC 12), 6=-195(LC 12)  
Max Grav 1=921(LC 1), 6=942(LC 1)

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

TOP CHORD	1-2=1327/314, 2-3=821/264, 3-4=817/277, 4-5=632/148, 5-6=920/195
BOT CHORD	1-12=3085/1065, 10-12=385/1062, 9-10=117/515, 4-9=415/160
WEBS	2-12=0/308, 2-10=592/326, 3-10=133/505, 5-9=157/761

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; 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 24-9-2 to 24-9-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) 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) except (jt=lb) 1=227. 6=195.

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  
16025 Swingley Ridge Rd. Chesterfield, MO 63017  
Data:

December 5, 2023



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MiTek®

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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259189
3761058	T20G	GABLE	1	1	Job Reference (optional)	

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

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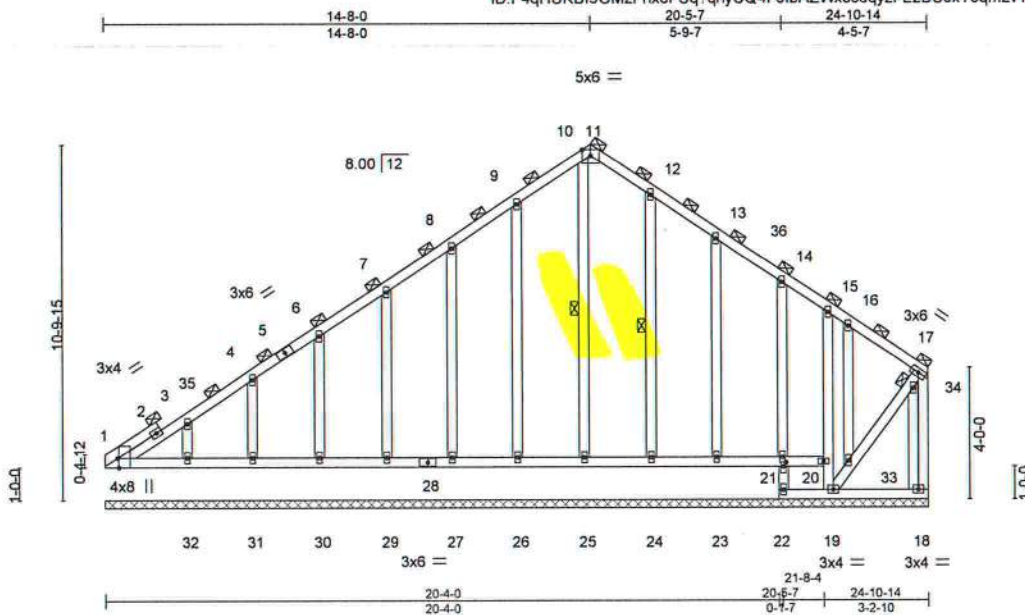


Plate Offsets (X,Y)=[1:0-3-8,Edge], [21:0-1-8,0-1-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.09	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.14	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	19	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S					Weight: 202 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
15-19: 2x4 SP No.3  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

#### BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:  
6-0-0 oc bracing: 19-20  
WEBS 1 Row at midpt 10-25, 12-24  
JOINTS 1 Brace at Jt(s): 11, 34, 17

#### REACTIONS.

All bearings 24-10-14.  
(lb) - Max Horz 1=227(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 22, 18, 26, 27, 29, 30, 31, 32, 24 except 19=236(LC 13),  
23=122(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 22, 18, 26, 27, 29, 30, 31, 32, 25, 24, 23 except  
19=329(LC 20)

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

TOP CHORD 1-3=253/195

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 24-7-5 to 24-9-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 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.
- \* 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) 1, 22, 18, 26, 27, 29, 30, 31, 32, 24 except (jt=lb) 19=236, 23=122.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 26, 27, 29, 30, 31, 32, 25, 24, 23.
- 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:

December 5,2023

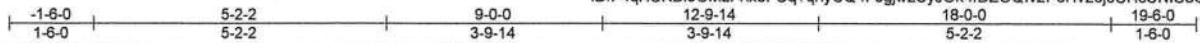
#### WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Job 3761058	Truss T21	Truss Type Common	Qty 3	Ply 1	SIMQUE - RAULERSON RES. T32259190
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,					
8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:59:01 2023 Page 1					
ID:F4qHUKB19OMzFnX3FUq?qnYcQ4l-5gIwzCyJOk4fDZOQlv2PeHv2oj0UHcCNIS5QXQyCLwO					
Job Reference (optional)					



4x4 =

Scale = 1:39.2

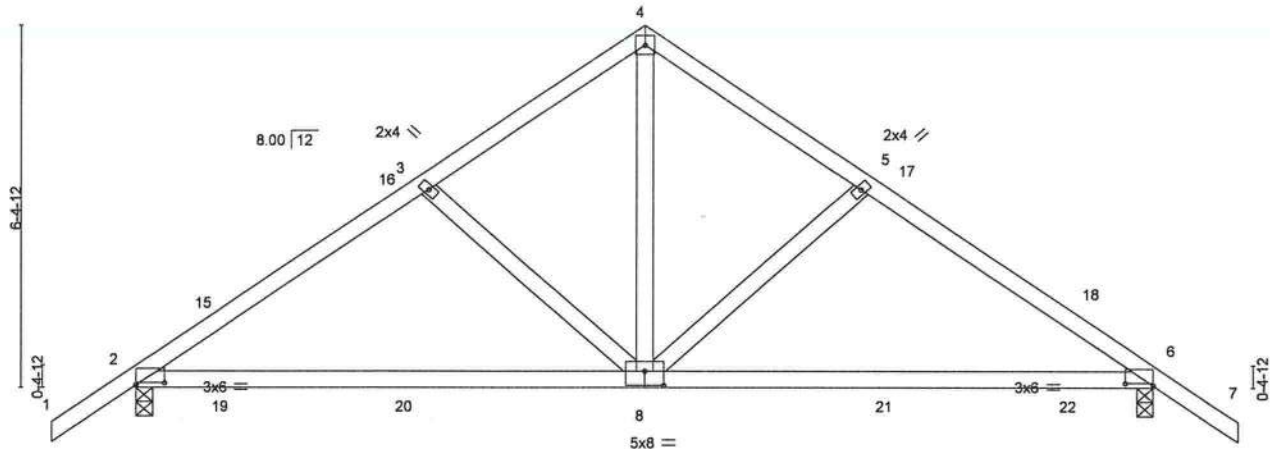


Plate Offsets (X,Y) - [2-0-6-0,0-0-7], [6-0-6-0,0-0-8], [8-0-4-0,0-0-3-0]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.32	Vert(LL)	0.13 8-11 >999 240
TCDL 7.0	Lumber DOL	1.25	BC 0.73	Vert(CT)	-0.23 8-11 >957 180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.26	Horz(CT)	0.02 6 n/a n/a
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS		
				PLATES	GRIP
				MT20	244/190
				Weight: 88 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 2=0-3-8, 6=0-3-8  
Max Horz 2=-173(LC 10)  
Max Uplift 2=-202(LC 12), 6=-202(LC 13)  
Max Grav 2=747(LC 1), 6=747(LC 1)

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

TOP CHORD 2-3=-879/435, 3-4=-689/417, 4-5=-689/417, 5-6=-879/435  
BOT CHORD 2-8=-273/696, 6-8=-291/696  
WEBS 4-8=-371/525, 5-8=-253/195, 3-8=-253/194

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 13-2-15 to 19-6-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=202, 6=202.

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:

December 5, 2023

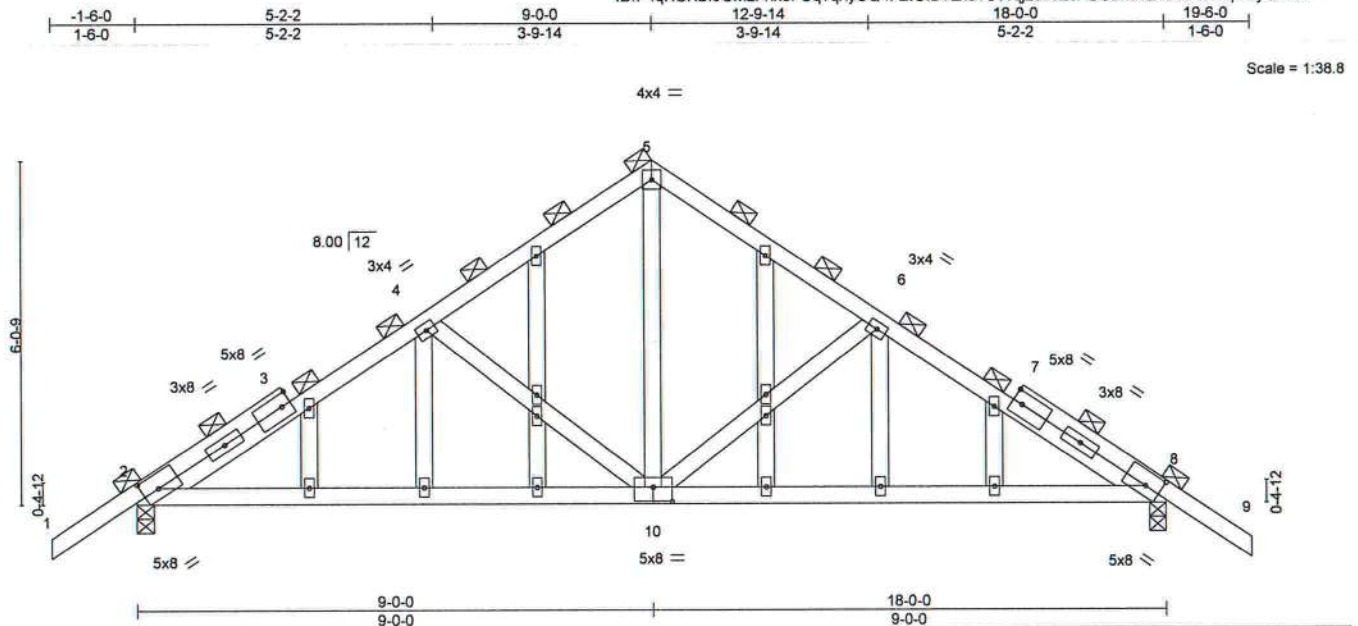
**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.  
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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259191
3761058	T21G	GABLE	1	1	Job Reference (optional)	

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:59:02 2023 Page 1  
ID:F4qHUKBI9OMzFnx3FUq?qnYcQ4I-ZIGIBYzx91CWqjzscZeAUSBM7O8032XW6qz4tyCLwN



Scale = 1:38.8

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.46	Vert(LL)	0.10 10-25	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.63	Vert(CT)	-0.18 10-28	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.29	Horz(CT)	0.01 8	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 119 lb	FT = 20%

#### 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 2-0-0 oc purlins (5-4-14 max.).  
BOT CHORD Rigid ceiling directly applied or 9-1-10 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 8=0-3-8  
Max Horz 2=-164(LC 10)  
Max Uplift 2=-204(LC 12), 8=-204(LC 13)  
Max Grav 2=744(LC 1), 8=744(LC 1)

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

TOP CHORD 2-4=-898/572, 4-5=-701/511, 5-6=-701/511, 6-8=-898/572  
BOT CHORD 2-10=-388/744, 8-10=-395/744  
WEBS 4-10=-282/253, 5-10=-459/535, 6-10=-282/253

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; 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 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=204, 8=204.
- 10) 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:

December 5, 2023

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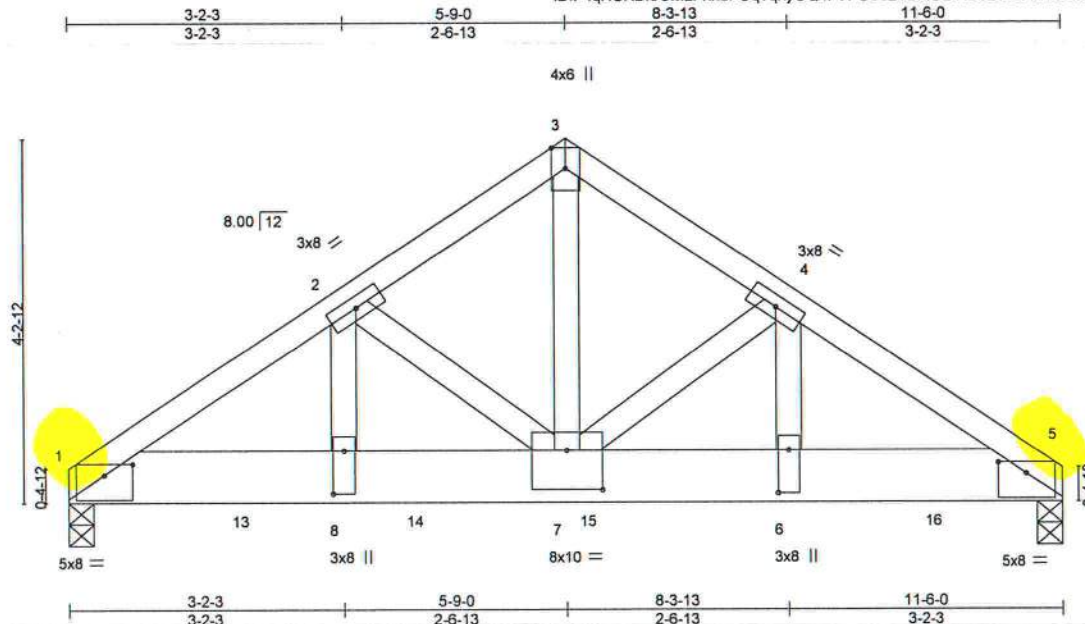


Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259193
3761058	T23	Common Girder	1	1	Job Reference (optional)	

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:59:04 2023 Page 1

ID:F4qHUKBI9OMzFnx3FUq?nyCQ4I-VFO3cE?BhfSE4167z1bFvXZSw6UUthq\_QJ48lyCLwL



Scale = 1:25.6

Plate Offsets (X,Y)-- [1:0-4-0,0-1-9], [5:0-4-0,0-1-9], [6:0-6-0,0-1-8], [7:0-5-0,0-5-8], [8:0-6-0,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.36	Vert(LL)	-0.06	7	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.39	Vert(CT)	-0.11	7	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.66	Horz(CT)	0.03	5	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 75 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x8 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\*  
3-7: 2x4 SP No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 1=0-3-8, 5=0-3-8  
Max Horz 1=-95(LC 25)  
Max Uplift 1=-650(LC 8), 5=-723(LC 9)  
Max Grav 1=2535(LC 1), 5=2867(LC 2)

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

TOP CHORD 1-2=-3828/985, 2-3=-2823/754, 3-4=-2824/756, 4-5=-3949/1005  
BOT CHORD 1-8=-830/3163, 7-8=-830/3163, 6-7=-794/3273, 5-6=-794/3273  
WEBS 3-7=-764/2930, 4-7=-1260/369, 4-6=-296/1338, 2-7=-1069/343, 2-8=-270/1104

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=650, 5=723.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 901 lb down and 247 lb up at 2-0-12, 901 lb down and 247 lb up at 4-0-12, 981 lb down and 247 lb up at 6-0-12, and 981 lb down and 246 lb up at 8-0-12, and 981 lb down and 246 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-54, 3-5=-54, 1-5=-20  
Concentrated Loads (lb)  
Vert: 6=-901(B) 13=-901(B) 14=-901(B) 15=-901(B) 16=-901(B)

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  
16013 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

December 5, 2023

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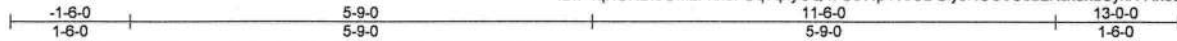


Job 3761058	Truss T23G	Truss Type Common Supported Gable	Qty 1	Ply 1	SIMQUE - RAULERSON RES. T32259194
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:59:06 2023 Page 1

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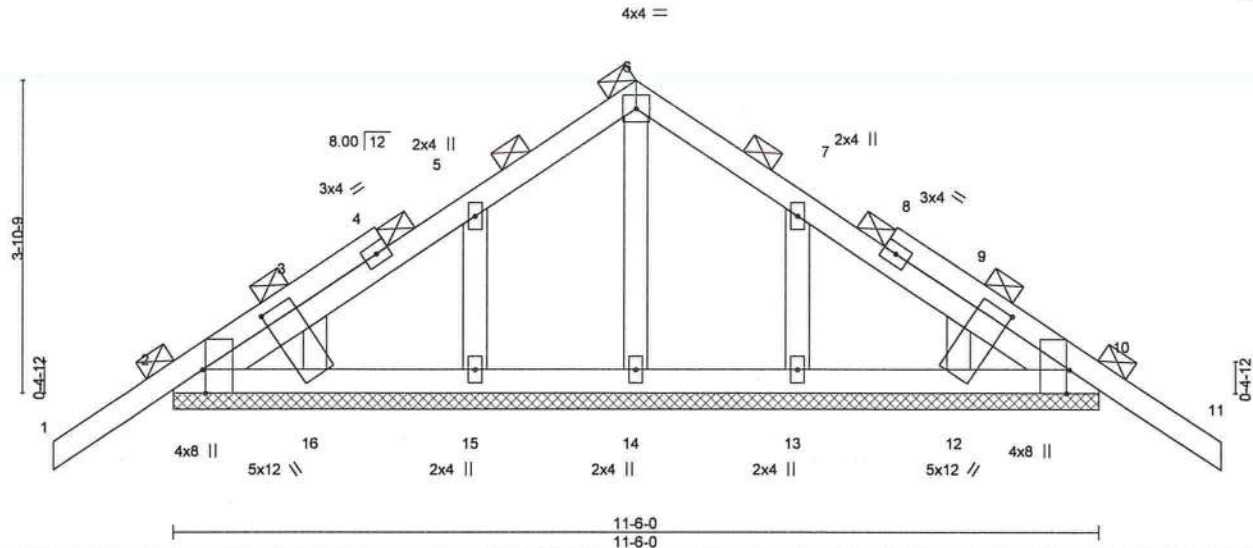


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [10:0-3-8,Edge], [12:0-1-13,0-11-9], [16:0-1-13,0-11-9]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.17	Vert(LL)	-0.01	11	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	-0.01	11	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	10	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S						Weight: 64 lb	FT = 20%

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

**BRACING-**  
TOP CHORD 2-0-0 oc purlins (6-0-0 max.).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 11-6-0.  
(lb) - Max Horz 2--111(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 16, 13, 12  
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 16, 13, 12

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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.
- 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.
- \* 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, 10, 15, 16, 13, 12.
- 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 PE Cert 6634  
16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

December 5, 2023



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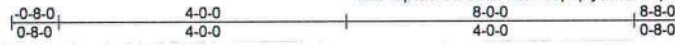
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Job	Truss	Truss Type	Qty	Ply	SIMQUE - RAULERSON RES.	T32259195
3761058	T24	KINGPOST	4	1	Job Reference (optional)	

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:59:07 2023 Page 1

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4x4 =

Scale = 1:30.8

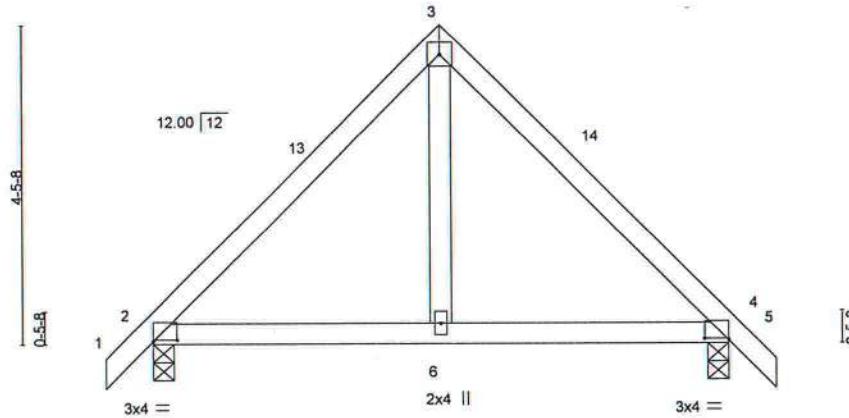


Plate Offsets (X,Y)-- [2:0-4-0,0-0-3], [4:0-4-0,0-0-3]

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 0.21	Vert(LL)	-0.01	6-9	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.20	Vert(CT)	-0.02	6-9	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS						Weight: 38 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 2=0-3-8, 4=0-3-8  
Max Horz 2=115(LC 11)  
Max Uplift 2=-80(LC 12), 4=-80(LC 13)  
Max Grav 2=332(LC 1), 4=332(LC 1)

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

TOP CHORD 2-3=-304/168, 3-4=-304/168

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 8-0-0 to 8-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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, 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 IL Cert 6634  
16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

December 5, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcsccomponents.com)

**MiTek®**

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Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com



Job 3761058	Truss T24G	Truss Type GABLE	Qty 1	Ply 1	SIMQUE - RAULERSON RES. T32259196
Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.730 s Nov 13 2023 MiTek Industries, Inc. Mon Dec 4 11:59:08 2023 Page 1					
Job Reference (optional) ID: F4qHUKBI9OMzFnx3FUq?qnYQ4I-00eZRB2iltYgYeQnClg2QliGbYXHQQvPv2HHWwCLwH					

0-8-0 4-0-0 8-0-0 8-8-0  
0-8-0 4-0-0 4-0-0 0-8-0

4x4 =

Scale = 1:30.8

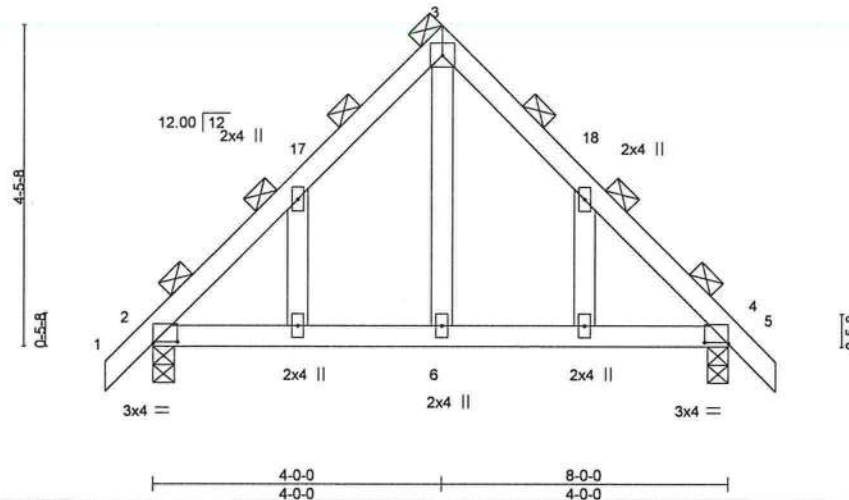


Plate Offsets (X,Y)-- [2:0-4-0,0-0-3], [4:0-4-0,0-0-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.22	Vert(LL)	-0.01 6-16 >999	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.20	Vert(CT)	-0.02 6-16 >999	180	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00 4 n/a	n/a	
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 44 lb FT = 20%

#### 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 2-0-0 oc purlins (6-0-0 max.).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 4=0-3-8  
Max Horz 2=115(LC 11)  
Max Uplift 2=80(LC 12), 4=80(LC 13)  
Max Grav 2=332(LC 1), 4=332(LC 1)

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

TOP CHORD 2-3=-304/168, 3-4=-304/168

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; 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 8-0-0 to 8-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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 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.
- \* 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, 4.
- 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  
16015 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

December 5, 2023



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

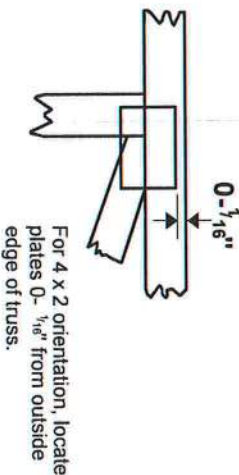
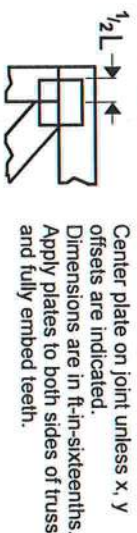
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 and OSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbccomponents.com)

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# Symbols

## PLATE LOCATION AND ORIENTATION



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

For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

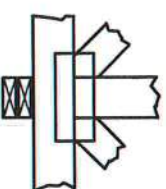
## PLATE SIZE

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

## LATERAL BRACING LOCATION



## BEARING

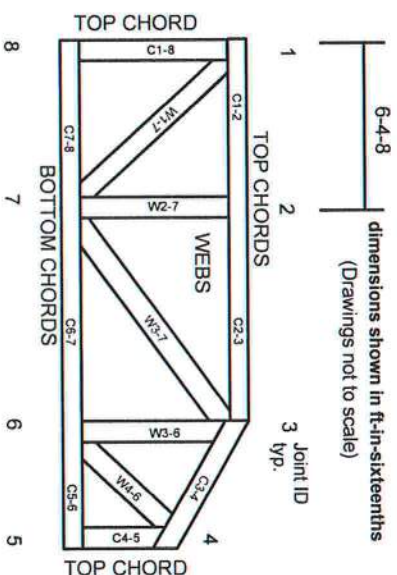


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



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

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

## Product Code Approvals

ICC-ES Reports:  
ESR-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

## Design General Notes

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

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

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MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

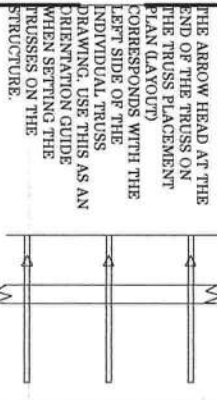
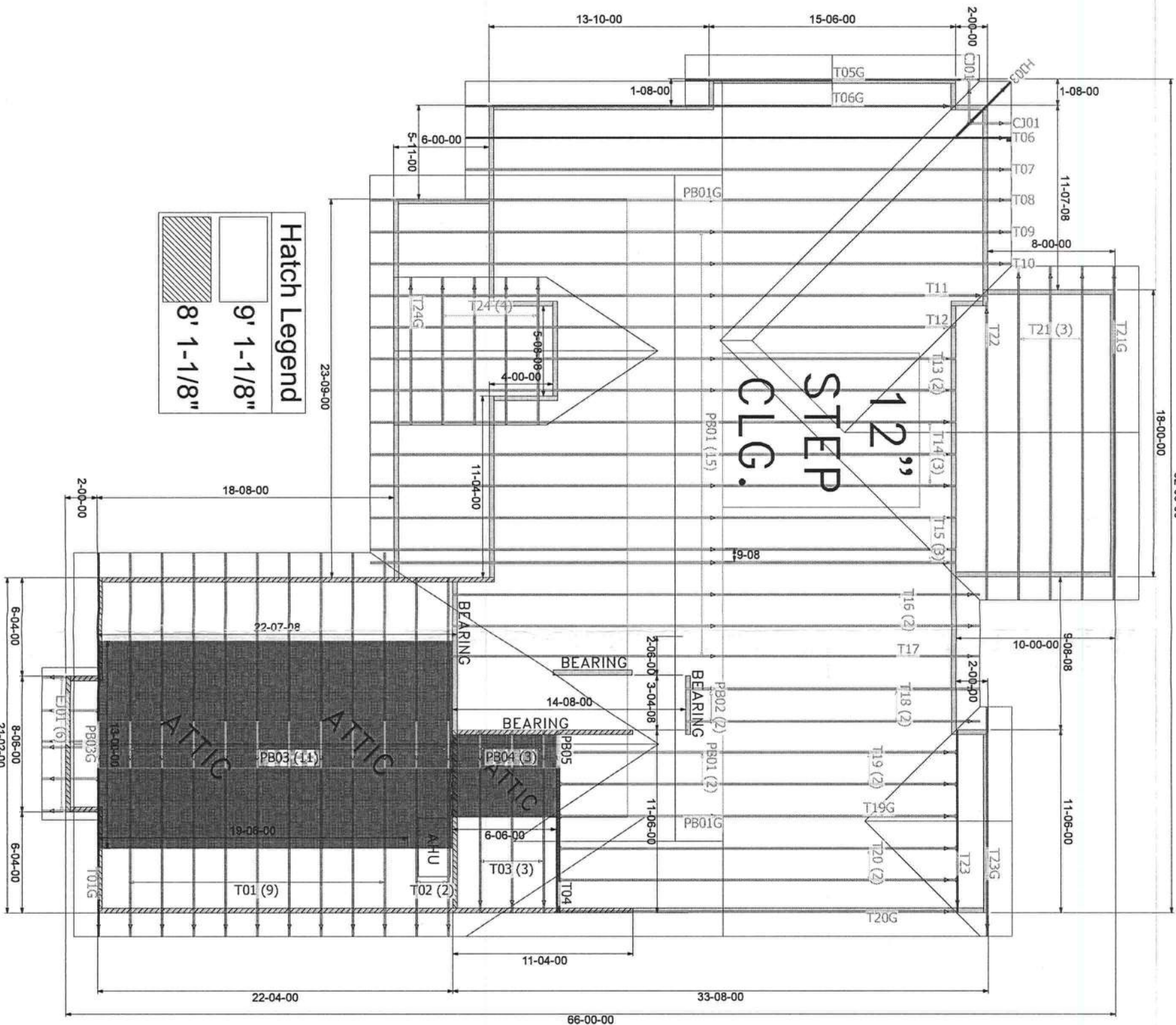
## General Safety Notes

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

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



8/12 PITCH - 18" 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 2x4 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 girders.
- 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.  
860-835-4541

ACQ lumber is corrative to truss plates. Any ACQ lumber that comes in contact with truss plates (i.e. scabbed on tails) must have an approved barrier applied first.

Refer to BCSI-B1 Summary Sheet-Guide for handling, installing and bracing of Metal Plate Connected Wood Truss prior to and during truss installation.

It is the responsibility of the Contractor to ensure of the proper orientation of the truss placement plans as to the construction documents and field conditions of the structure orientation. If a reversed or flipped layout is required, it will be supplied at no extra cost by Builders FirstSource.

It is the responsibility of the Contractor to make sure the placement of trusses are adjusted for plumbing drops, can lights, etc., 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:  
**AARON SIMQUE HOMES**  
Legal Address:  
**Raulerson Res.**

Model: <b>Custom</b>		
Date: <b>12-4-23</b>	Drawn By: <b>KLH</b>	Original Ref #: <b>3761058</b>
3rd Floor 1 Job#: <b>N/A</b>	3rd Floor 2 Job#: <b>N/A</b>	Roof Job #: <b>3761058</b>

