



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

73

RE: 4124614 - GIEBEIG - BEADLE RES.

**Site Information:**

Customer Info: GIEBEIG CONST. Project Name: Beadle Res. Model: Custom  
Lot/Block: N/A Subdivision: N/A  
Address: TBD US 441, N/A  
City: Columbia Cty State: FL

MiTek, Inc.

16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200

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

Name: License #:  
Address:  
City: State:

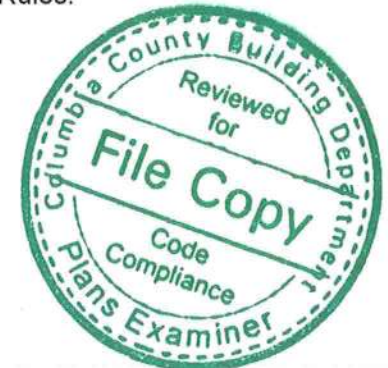
**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: FBC2023/TPI2014  
Wind Code: ASCE 7-22  
Roof Load: 37.0 psf

Design Program: MiTek 20/20 8.7  
Wind Speed: 130 mph  
Floor Load: N/A psf

This package includes 9 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
1	T34432537	T01	7/12/24
2	T34432538	T01G	7/12/24
3	T34432539	T02	7/12/24
4	T34432540	T02G	7/12/24
5	T34432541	T03	7/12/24
6	T34432542	T03G	7/12/24
7	T34432543	T04	7/12/24
8	T34432544	T05	7/12/24
9	T34432545	T06	7/12/24



This item has been digitally signed and sealed by Velez, Joaquin, PE on the date adjacent to the seal.  
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: Velez, Joaquin

My license renewal date for the state of Florida is February 28, 2025.



Joaquin Velez PE No.68182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

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

July 12, 2024

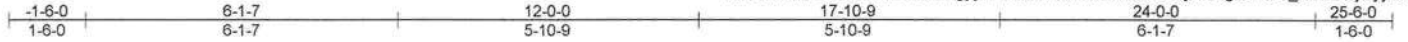
Velez, Joaquin

1 of 1

Job 4124614	Truss T01	Truss Type Common	Qty 11	Ply 1	GIEBEIG - BEADLE RES. T34432537
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Jun 13 2024 MiTek Industries, Inc. Fri Jul 12 10:12:00 2024 Page 1  
ID:JuvfNYL6PDE3snhORvKu7gyys?d-boskfsaXdbGkx3TQ4nydGKg5aY3M\_6lIV0GrjOyyr8z



Scale = 1:45.1

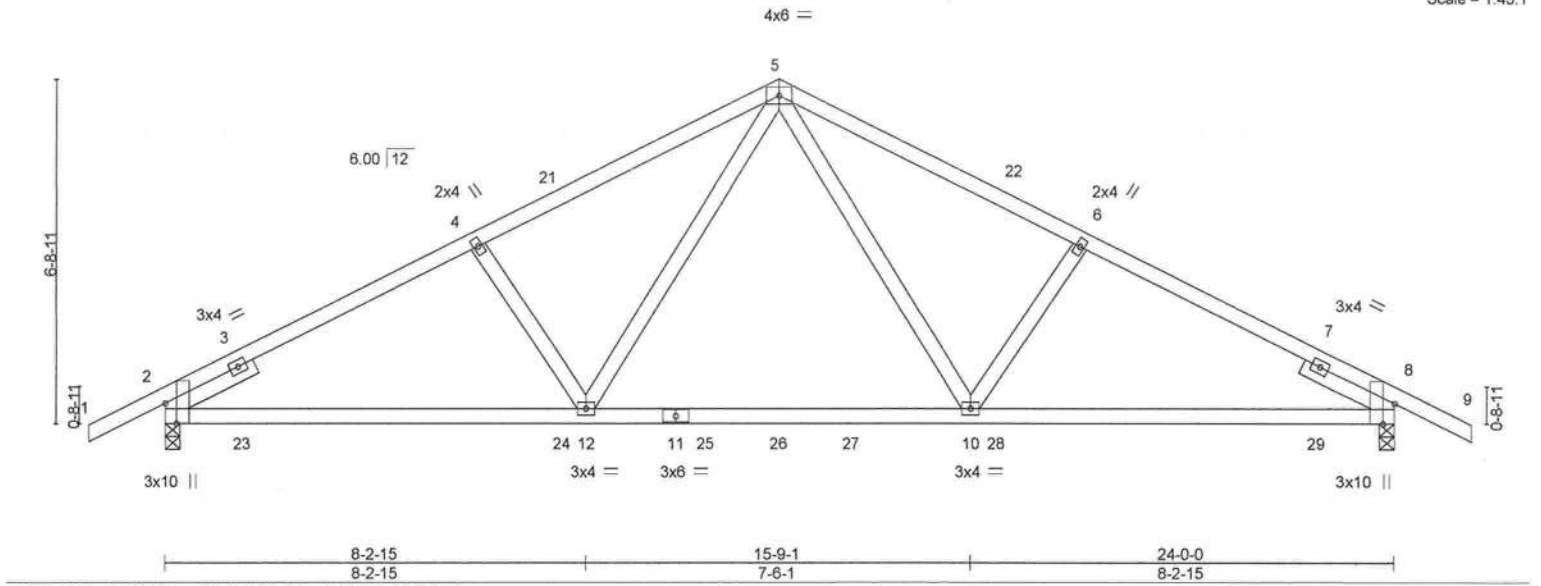


Plate Offsets (X,Y)-- [2:0-4-12,Edge], [8:0-4-12,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.45	Vert(LL)	-0.16	10-12	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.67	Vert(CT)	-0.24	10-12	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.48	Horz(CT)	0.05	8	n/a	n/a		
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 120 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8, Right 2x4 SP No.3 1-11-8

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-4-10 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-1-9 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 8=0-3-8  
Max Horz 2=145(LC 12)  
Max Uplift 2=439(LC 9), 8=439(LC 8)  
Max Grav 2=1035(LC 2), 8=1035(LC 2)

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

TOP CHORD 2-4=-1486/1095, 4-5=-1375/1091, 5-6=-1375/1091, 6-8=-1486/1095  
BOT CHORD 2-12=-855/1288, 10-12=-522/909, 8-10=-880/1288  
WEBS 5-10=-450/549, 6-10=-280/294, 5-12=-450/549, 4-12=-280/293

#### 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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 1-6-0 to 1-6-0, Zone1 1-6-0 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 25-6-0 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, 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=439, 8=439.

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Joaquin Velez PE No.68182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

July 12,2024

#### WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-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)

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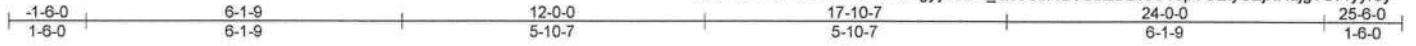
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job 4124614	Truss T01G	Truss Type GABLE	Qty 1	Ply 1	GIEBEIG - BEADLE RES. T34432538
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

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Scale = 1:44.7

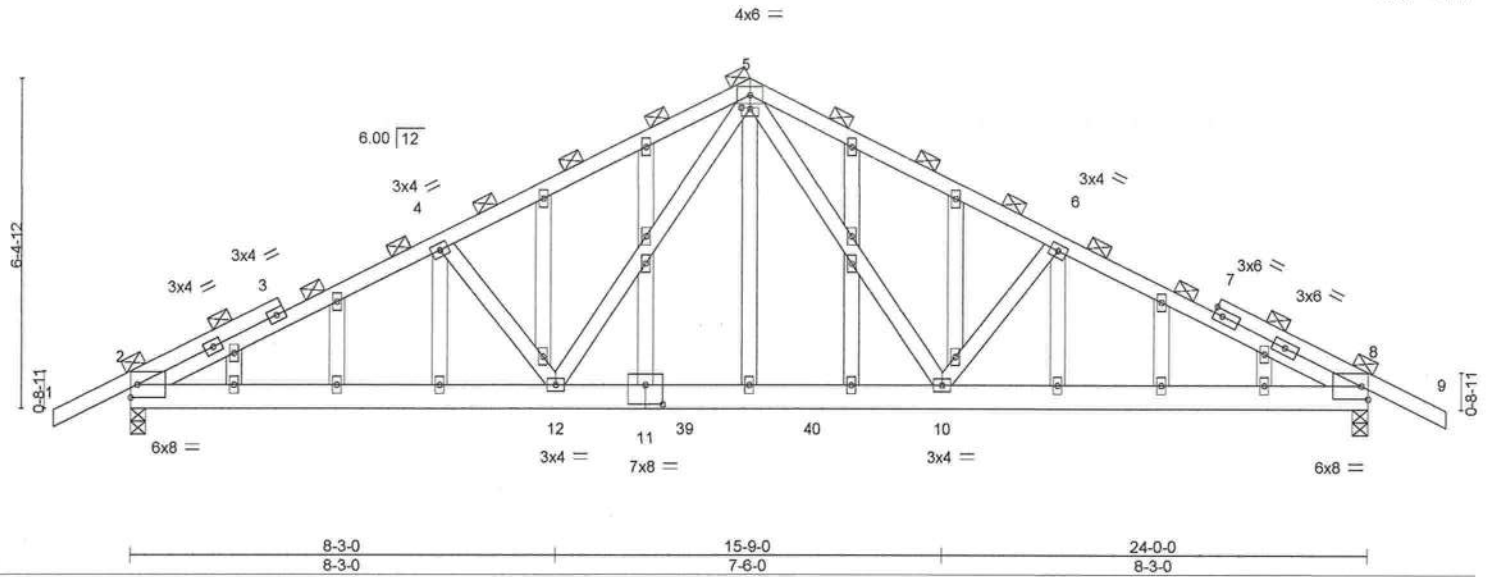


Plate Offsets (X,Y)-- [5:0-2-0,0-0-4], [11:0-4-0,0-4-8]

LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	2-0-0	TC 0.61		Vert(LL) 0.10	10-12		>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25		BC 0.35		Vert(CT) -0.14	10-12		>999	180		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.60		Horz(CT) 0.02	8		n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS								
										Weight: 187 lb	FT = 20%

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

**BRACING-**  
TOP CHORD 2-0-0 oc purlins (4-3-6 max.).  
BOT CHORD Rigid ceiling directly applied or 6-4-11 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
Max Horz 2=138(LC 12)  
Max Uplift 2=437(LC 9), 8=437(LC 8)  
Max Grav 2=1027(LC 2), 8=1027(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1610/1575, 4-5=-1468/1527, 5-6=-1468/1527, 6-8=-1610/1575  
BOT CHORD 2-12=-1283/1416, 10-12=-711/938, 8-10=-1291/1416  
WEBS 4-12=-329/419, 5-12=-628/608, 5-10=-628/608, 6-10=-329/419

#### 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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 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
- 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, 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=437, 8=437.
- 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 digitally signed and sealed by Velez, Joaquin, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Joaquin Velez PE No.68182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

July 12,2024

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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 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  
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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - BEADLE RES.	T34432539
4124614	T02	Roof Special	6	1		

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

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ID:JuvfNYL6PDE3snhORvKu7gyys7d-4\_Q6sCbAOvObZD2ceUTspYCBuYNVjU3ujg?OFrYyr8y

1-6-0	8-1-12	14-8-2	21-7-8	28-5-2	34-6-9	41-0-0	47-0-0	48-6-0
1-6-0	8-1-12	6-6-6	6-11-6	6-9-10	6-1-7	6-5-7	6-0-0	1-6-0

Scale = 1:86.2

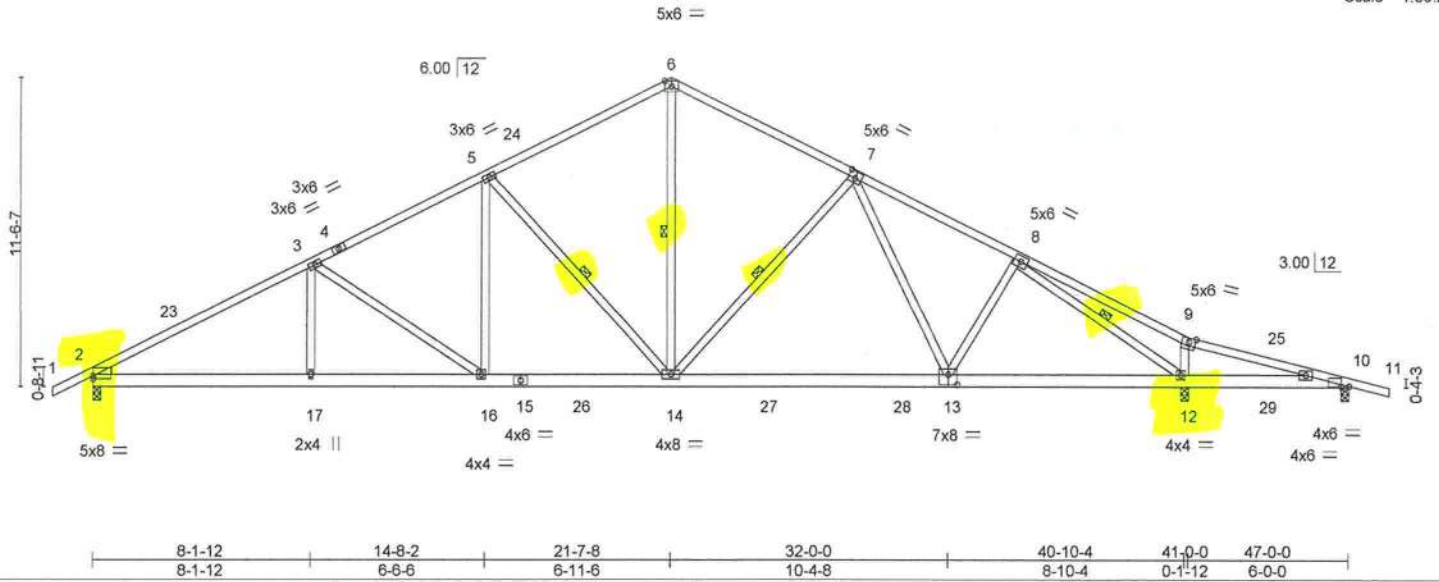


Plate Offsets (X,Y)-- [2:0-0-0,0-1-6], [7:0-3-0,0-3-0], [10:0-3-6,0-0-3], [13:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CS.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.83	Vert(LL)	-0.23 13-14	>999	240	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.81	Vert(CT)	-0.39 13-14	>999	180		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.80	Horz(CT)	0.09 10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS						
	Code FBC2023/TPI2014						Weight: 299 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 5-14, 6-14, 7-14, 8-12

**REACTIONS.** (size) 2=0-3-8, 12=0-3-8, 10=0-3-8  
Max Horz 2=252(LC 16)  
Max Uplift 2=-642(LC 12), 12=-706(LC 13), 10=-254(LC 9)  
Max Grav 2=1725(LC 2), 12=2001(LC 2), 10=272(LC 26)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2879/1054, 3-5=-2406/968, 5-6=-1833/848, 6-7=-1832/834, 7-8=-2253/860  
BOT CHORD 2-17=-977/2505, 16-17=-977/2505, 14-16=-693/2100, 13-14=-520/1866, 12-13=-541/1874  
WEBS 3-16=-499/342, 5-16=-156/532, 5-14=-790/499, 6-14=-465/1289, 7-14=-480/403,  
7-13=-83/293, 8-13=-7/269, 8-12=-2396/821, 9-12=-291/255

#### 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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 1-6-0 to 3-2-6, Zone1 3-2-6 to 21-7-8, Zone2 21-7-8 to 28-6-9, Zone1 28-6-9 to 48-6-0 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 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=642, 12=706, 10=254.

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Joaquin Velez PE No.68182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

July 12,2024

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**MiTek®**

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

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - BEADLE RES.	T34432540
4124614	T02G	GABLE	1	1	Job Reference (optional)	

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

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ID:JuvfNYL6PDE3snhORvKu7gyys?d-0NYsHucQwWeJoWC?ivvKuzlewmBTBWwBB\_UVKjyyr8w

1-6-0	21-7-8	41-0-0	47-0-0	48-6-0
1-6-0	21-7-8	19-4-8	6-0-0	1-6-0

Scale = 1:85.6

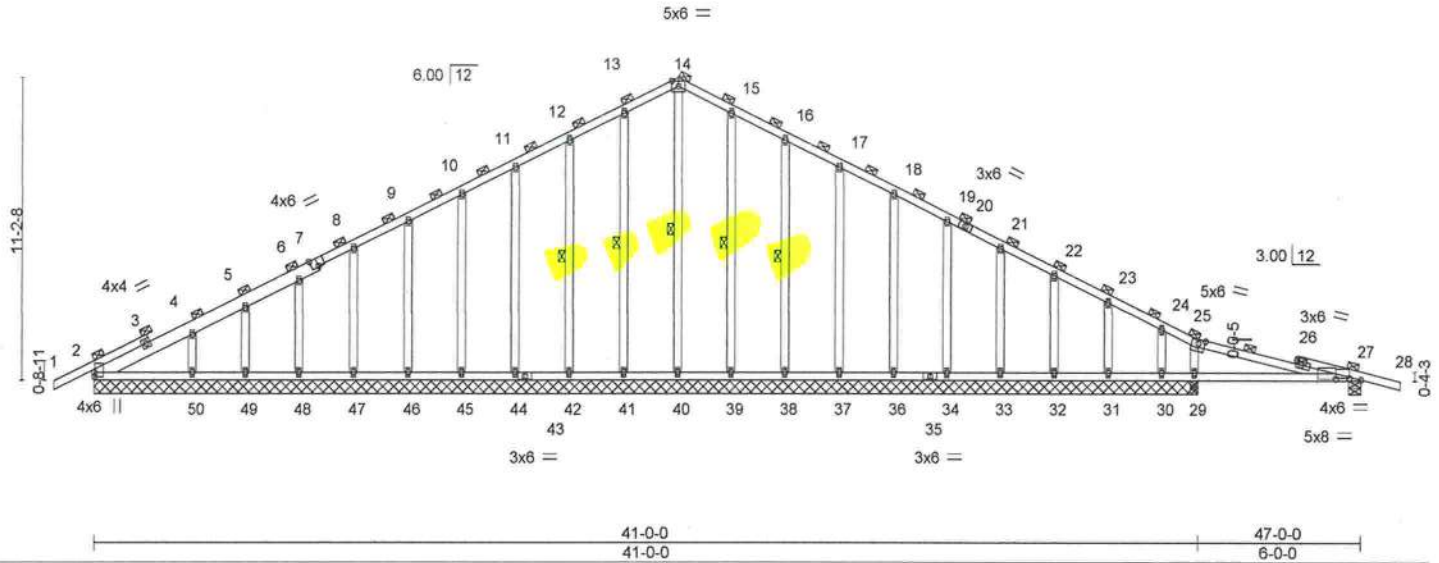


Plate Offsets (X,Y)-- [2:0-2-0,0-0-2], [7:0-3-0,Edge], [25:0-3-0,0-1-10], [27:0-5-4,0-0-13], [27:0-11-4,0-0-7]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.38	Vert(LL)	0.05 27-29	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.26	Vert(CT)	-0.06 27-29	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.20	Horz(CT)	0.02 27	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-S						
							Weight: 334 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 \*Except\*  
2-7: 2x6 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.  
WEBS 1 Row at midpt 14-40, 13-41, 12-42, 15-39, 16-38

**REACTIONS.** All bearings 41-0-0 except (jt=length) 27=0-5-8.  
(lb) - Max Horz 2=242(LC 16)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 41, 44, 45, 46, 47, 49, 39, 37,  
36, 34, 33, 32, 30 except 27=260(LC 9), 42=100(LC 12), 48=104(LC 12),  
50=144(LC 12), 38=102(LC 13), 31=104(LC 13), 29=292(LC 9)  
Max Grav All reactions 250 lb or less at joint(s) 2, 41, 42, 44, 45, 46, 47, 48, 49,  
50, 39, 38, 37, 36, 34, 33, 32, 31, 30 except 27=296(LC 1), 40=251(LC 22),  
29=391(LC 1), 29=391(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=315/133, 10-11=71/305, 11-12=92/392, 12-13=114/485, 13-14=134/563,  
14-15=134/563, 15-16=114/485, 16-17=92/392, 17-18=71/305, 25-27=261/76  
BOT CHORD 2-50=88/347, 49-50=88/347, 48-49=88/347, 47-48=88/347, 46-47=88/347,  
45-46=88/347, 44-45=88/347, 42-44=88/347, 41-42=88/347, 40-41=88/347,  
39-40=88/347, 38-39=88/347, 37-38=88/347, 36-37=88/347, 34-36=88/347,  
33-34=88/347, 32-33=88/347, 31-32=88/347, 30-31=88/347, 29-30=88/347,  
27-29=73/316  
WEBS 14-40=340/49, 4-50=162/270, 25-29=231/276

- 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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 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.
  - 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) 2, 41, 44, 45, 46, 47, 49, 39, 37, 36, 34, 33, 32, 30 except (jt=lb) 27=260, 42=100, 48=104, 50=144, 38=102, 31=104, 29=292.

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date indicated here. 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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Date:

July 12,2024

**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	Truss	Truss Type	Qty	Ply	GIEBEIG - BEADLE RES.	T34432540
4124614	T02G	GABLE	1	1	Job Reference (optional)	

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Fri Jul 12 10:12:03 2024 Page 2  
ID:JuvfNYL6PDE3snhORvKu7gyys?d-0NYsHucQwWeJoWC?lvVKuzlewmBTBWwBB\_UVKjyyr8w

**NOTES-**  
10) 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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18023 Swinley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - BEADLE RES.	T34432541
4124614	T03	Roof Special	13	1	Job Reference (optional)	

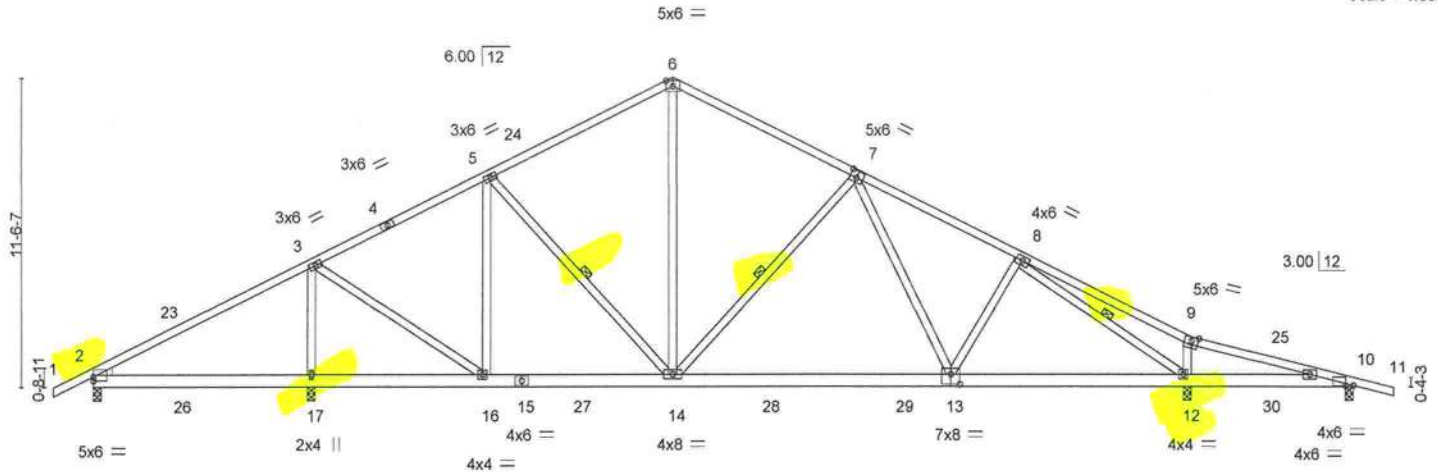
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Jun 13 2024 MiTek Industries, Inc. Fri Jul 12 10:12:03 2024 Page 1

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1-6-0	8-1-12	14-8-2	21-7-8	28-5-2	34-6-9	41-0-0	47-0-0	48-6-0
1-6-0	8-1-12	6-6-6	6-11-6	6-9-10	6-1-6	6-5-7	6-0-0	1-6-0

Scale = 1.86.2



	8-1-12	14-8-2	21-7-8	32-0-0	40-10-4	41-0-0	47-0-0
	8-1-12	6-6-6	6-11-6	10-4-8	8-10-4	0-1'-12	6-0-0
Plate Offsets (X,Y)--	[2:0-0-0,0-1-14], [7:0-3-0,0-3-0], [10:0-3-6,0-0-3], [13:0-4-0,0-4-8]						

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 0.54	Vert(LL)	-0.15 13-14	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.54	Vert(CT)	-0.25 13-14	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.04 10	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 299 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-2-5 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 5-14, 7-14, 8-12

**REACTIONS.** All bearings 0-3-8.  
(lb) - Max Horz 2=252(LC 16)  
Max Uplift All uplift 100 lb or less at joint(s) except 2=227(LC 9), 17=579(LC 12), 12=611(LC 13), 10=260(LC 9)  
Max Grav All reactions 250 lb or less at joint(s) except 2=399(LC 25), 17=1747(LC 2), 12=1596(LC 2), 10=302(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-232/311, 3-5=-1088/592, 5-6=-1176/665, 6-7=-1177/648, 7-8=-1723/710  
BOT CHORD 14-16=-301/949, 13-14=-373/1338, 12-13=-428/1465  
WEBS 3-17=-1393/568, 3-16=-238/1110, 5-16=-447/192, 6-14=-300/701, 7-14=-547/423, 7-13=-114/397, 8-12=-1677/608, 9-12=-316/264

#### 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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-6-0 to 3-2-6, Zone1 3-2-6 to 21-7-8, Zone2 21-7-8 to 28-6-9, Zone1 28-6-9 to 48-6-0 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 227 lb uplift at joint 2, 579 lb uplift at joint 17, 611 lb uplift at joint 12 and 260 lb uplift at joint 10.

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Joaquin Velez PE No.68182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017

Date:

July 12,2024

#### WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK 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®**

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Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBIG - BEADLE RES.	T34432542
4124614	T03G	GABLE	1	1	Job Reference (optional)	

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

8.730 s Jun 13 2024 MiTek Industries, Inc. Fri Jul 12 10:12:05 2024 Page 1

ID:JuvfNYL6PDE3snhORvKu7gyys?d-yifdiZegS8u11qMOIKYozONwmZo3fOoUelzcOcyrr8u

1-6-0	21-7-8	41-0-0	47-0-0	48-6-0
1-6-0	21-7-8	19-4-8	6-0-0	1-6-0

Scale = 1:84.2

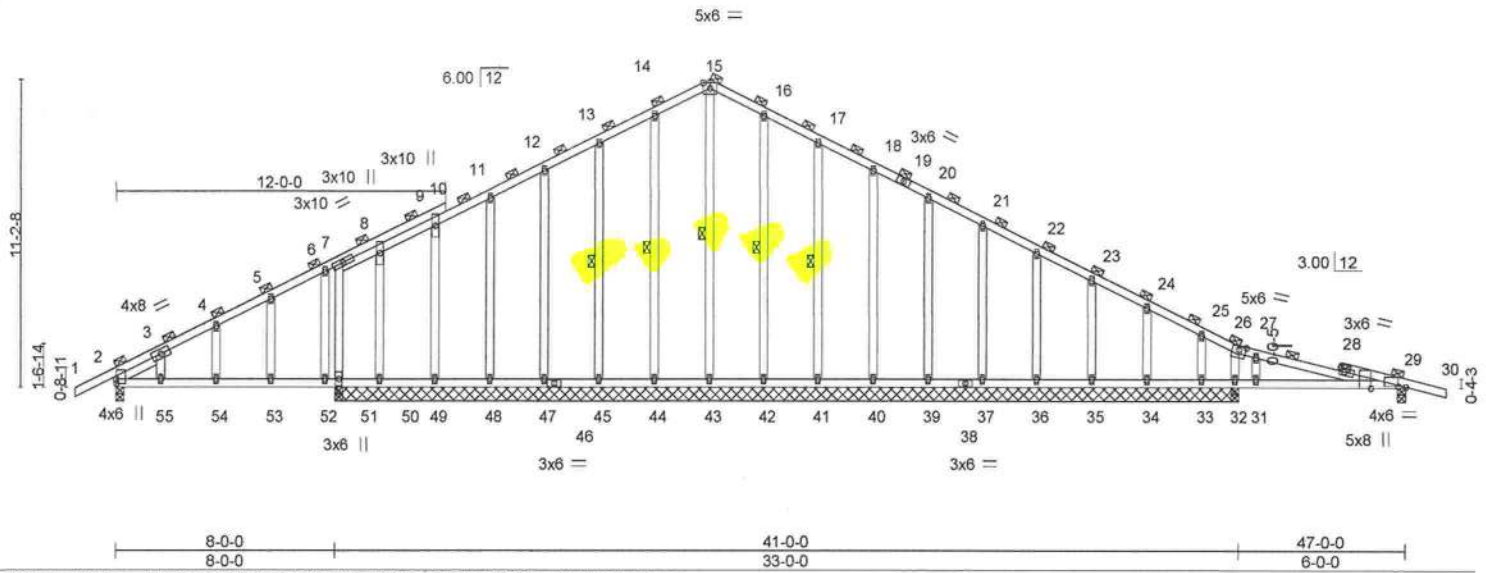


Plate Offsets (X, Y) -- [2:0-2-0,0-0-3], [26:0-3-0,0-1-10], [29:0-3-4,0-0-5], [29:0-0-9,Edge]

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 0.61	Vert(LL)	0.27	54	>368	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.57	Vert(CT)	0.23	54	>428	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.37	Horz(CT)	0.02	29	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S						Weight: 343 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 \*Except\*  
1-10: 2x4 SP No.1  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-8-7

**BRACING-**  
TOP CHORD 2-0-0 oc purlins (6-0-0 max.).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 15-43, 14-44, 13-45, 16-42, 17-41

**REACTIONS.** All bearings 33-0-0 except (jt=length) 2=0-3-8, 29=0-3-8.  
(lb) - Max Horz 2=242(LC 16)  
Max Uplift All uplift 100 lb or less at joint(s) 43, 44, 47, 48, 42, 40, 39, 37, 36, 35 except 2=179(LC 8), 45=103(LC 12), 49=120(LC 12), 50=248(LC 1), 41=104(LC 13), 34=114(LC 13), 33=101(LC 1), 32=392(LC 9), 51=536(LC 12), 29=276(LC 9)  
Max Grav All reactions 250 lb or less at joint(s) 44, 45, 47, 48, 49, 50, 42, 41, 40, 39, 37, 36, 35, 34, 33 except 2=412(LC 25), 43=282(LC 13), 32=521(LC 1), 32=521(LC 1), 51=744(LC 1), 51=744(LC 1), 29=318(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-302/154, 7-8=-246/515, 8-9=-191/471, 9-11=-174/546, 11-12=-195/645, 12-13=-201/730, 13-14=-225/826, 14-15=-242/897, 15-16=-242/897, 16-17=-225/826, 17-18=-202/730, 18-20=-181/643, 20-21=-181/555, 21-22=-181/467, 22-23=-180/378, 23-24=-182/292  
WEBS 15-43=-620/137, 7-51=-434/745

- 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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 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
  - 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) 43, 44, 47, 48, 42, 40, 39, 37, 36, 35 except (jt=lb) 2=179, 45=103, 49=120, 50=248, 41=104, 34=114, 33=101, 32=392, 51=536, 29=276.
  - 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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Joaquin Velez PE No.68182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017

Date:

July 12, 2024

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

Job 4124614	Truss T04	Truss Type Roof Special	Qty 5	Ply 1	GIEBEIG - BEADLE RES. Job Reference (optional)	T34432543
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Jun 13 2024 MiTek Industries, Inc. Fri Jul 12 10:12:05 2024 Page 1

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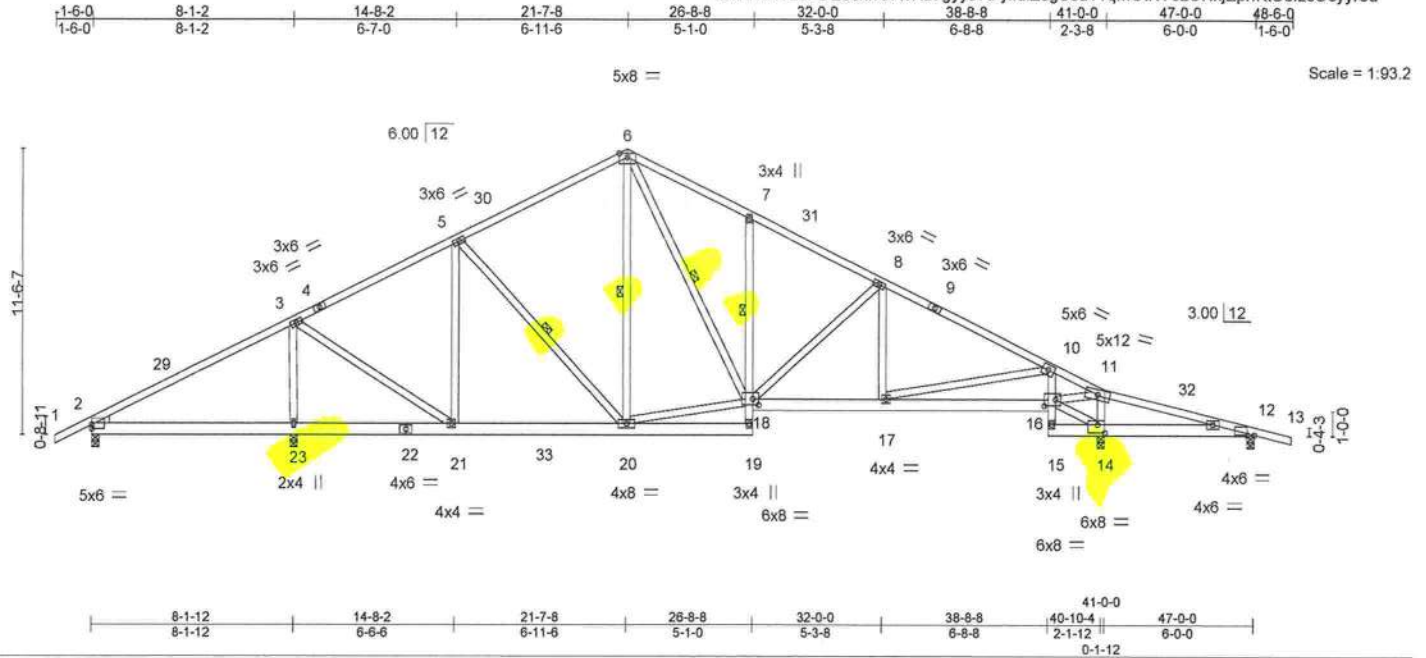


Plate Offsets (X,Y)-- [2:0-0-0,0-1-14], [12:0-3-6,0-0-1], [14:0-3-8,0-4-0], [16:0-5-8,0-3-0], [18:0-2-12,0-3-0]

LOADING (psf)	SPACING-		CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25		TC 0.55		Vert(LL)	-0.08 17-18	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25		BC 0.46		Vert(CT)	-0.14 17-18	>999	180		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.62		Horz(CT)	0.05 14	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS						Weight: 325 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD 2x4 SP No.2		TOP CHORD	Structural wood sheathing directly applied or 4-1-3 oc purlins.
BOT CHORD 2x6 SP No.2 *Except*		BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
7-19,10-15: 2x4 SP No.3			1 Row at midpt 7-18
WEBS 2x4 SP No.3		WEBS	1 Row at midpt 5-20, 6-20, 6-18
WEDGE			
Left: 2x4 SP No.3			

**REACTIONS.** All bearings 0-3-8.  
(lb) - Max Horz 2=252(LC 16)  
Max Uplift All uplift 100 lb or less at joint(s) except 2=-175(LC 12), 12=-195(LC 9),  
23=-576(LC 12), 14=-705(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 12 except 2=389(LC 25), 23=1678(LC 2), 14=1836(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-5=-1018/522, 5-6=-1053/615, 6-7=-1427/824, 7-8=-1442/670, 8-10=-1735/667,  
10-11=-791/275, 11-12=-318/899  
BOT CHORD 21-23=-156/254, 20-21=-286/909, 7-18=-280/310, 17-18=-403/1491, 16-17=-226/851,  
10-16=-758/393, 12-14=-832/368  
WEBS 3-23=-1335/568, 3-21=-301/1042, 5-21=-420/225, 18-20=-133/842, 6-18=-452/821,  
8-18=-359/254, 10-17=-182/687, 14-16=-1017/482, 11-16=-547/1641, 11-14=-951/384

#### 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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-6-0 to 3-2-6, Zone1 3-2-6 to 21-7-8, Zone2 21-7-8 to 28-3-4, Zone1 28-3-4 to 48-6-0 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 175 lb uplift at joint 2, 195 lb uplift at joint 12, 576 lb uplift at joint 23 and 705 lb uplift at joint 14.

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Joaquin Velez PE No.68182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

July 12,2024

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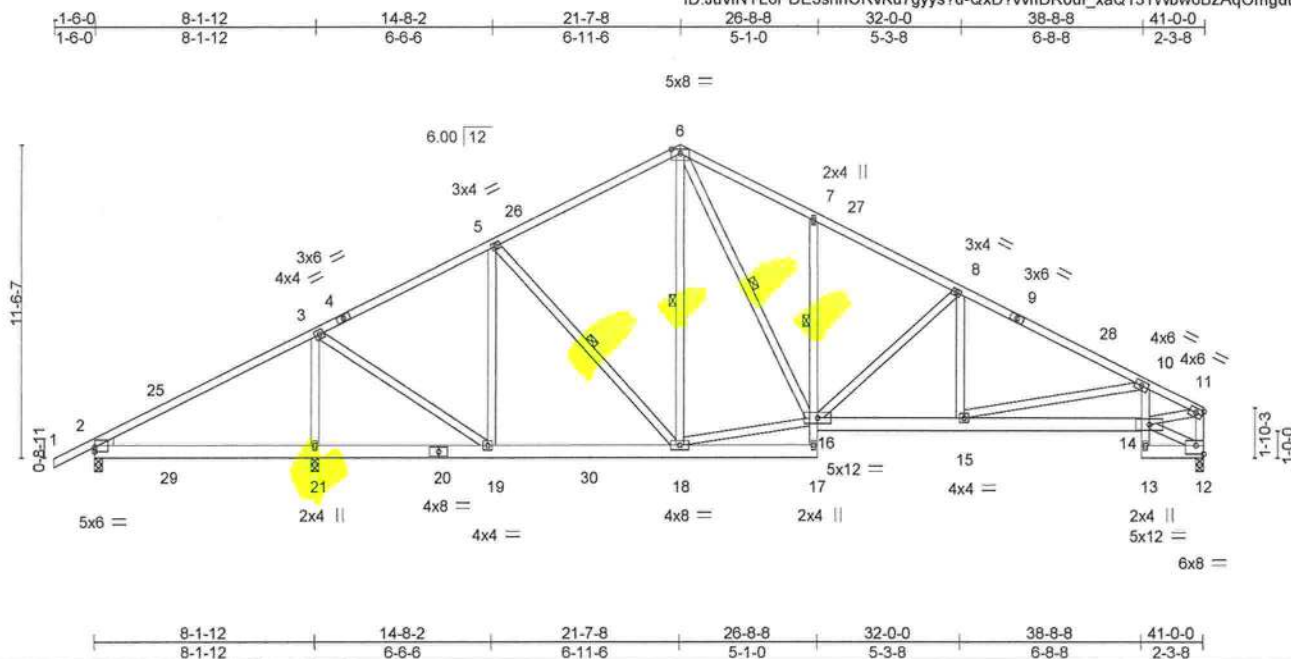
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job 4124614	Truss T05	Truss Type Roof Special	Qty 4	Ply 1	GIEBEIG - BEADLE RES. T34432544
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Jun 13 2024 MiTek Industries, Inc. Fri Jul 12 10:12:06 2024 Page 1

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Scale = 1:85.1

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

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.57	Vert(LL) -0.09	15-16	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.41	Vert(CT) -0.16	15-16	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.65	Horz(CT) 0.08	12	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS					Weight: 300 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2 \*Except\*  
7-17,10-13: 2x4 SP No.3  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-9-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
1 Row at midpt 7-16  
WEBS 1 Row at midpt 5-18, 6-18, 6-16

**REACTIONS.** (size) 2=0-3-8, 21=0-3-8, 12=0-3-8  
Max Horz 2=266(LC 16)  
Max Uplift 2=-197(LC 9), 21=-597(LC 12), 12=-477(LC 13)  
Max Grav 2=376(LC 25), 21=1762(LC 2), 12=1282(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-5=-1038/537, 5-6=-1107/621, 6-7=-1544/835, 7-8=-1560/727, 8-10=-1993/799,  
10-11=-1904/812, 11-12=-1210/525  
BOT CHORD 2-21=-272/191, 19-21=-272/191, 18-19=-305/894, 7-16=-278/274, 15-16=-601/1722,  
14-15=-839/1823, 10-14=-255/183  
WEBS 3-21=-1414/584, 3-19=-281/1109, 5-19=-462/216, 16-18=-201/853, 6-16=-527/946,  
8-16=-519/325, 8-15=-1/283, 11-14=-748/1712

- 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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-6-0 to 2-7-3, Zone1 2-7-3 to 21-7-8, Zone2 21-7-8 to 27-5-2, Zone1 27-5-2 to 40-10-4 zone; end vertical right exposed; porch left 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 2, 597 lb uplift at joint 21 and 477 lb uplift at joint 12.

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Joaquin Velez PE No.68182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

July 12,2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK 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.tpinet.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 4124614	Truss T06	Truss Type Common	Qty 2	Ply 1	GIEBEIG - BEADLE RES.	T34432545
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Jun 13 2024 MiTek Industries, Inc. Fri Jul 12 10:12:07 2024 Page 1

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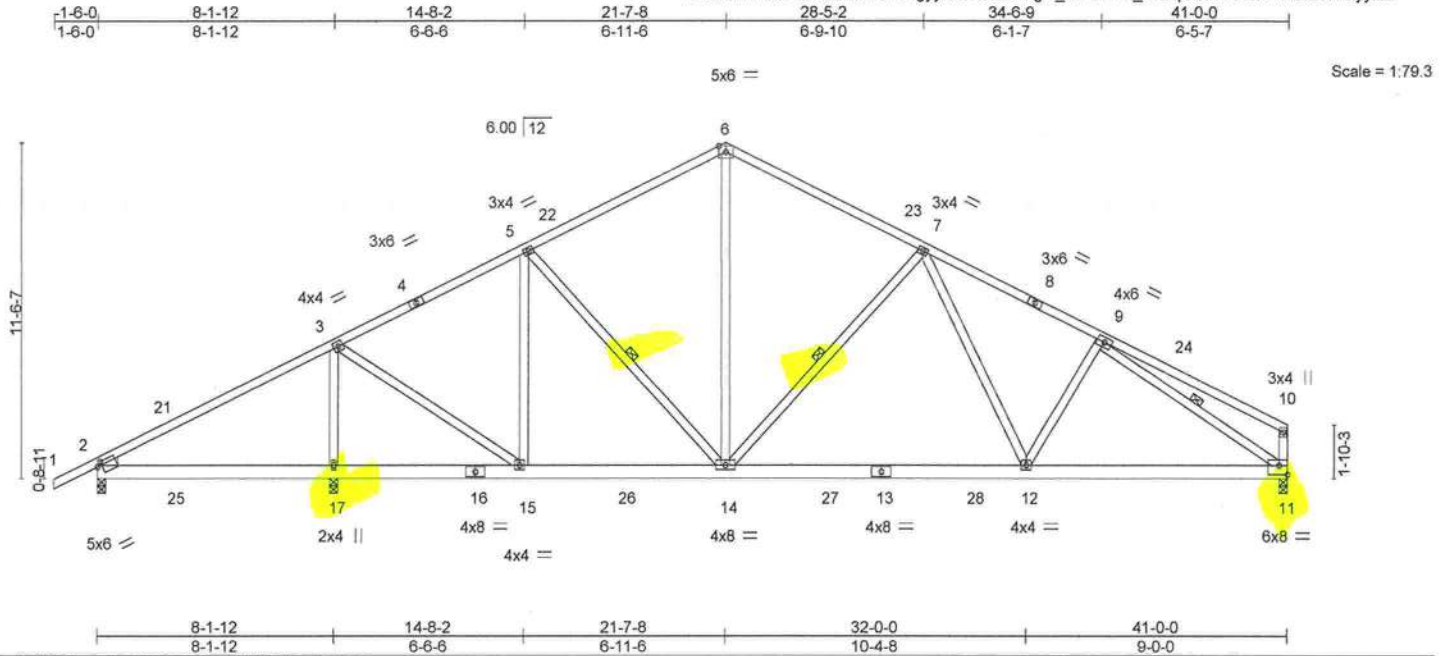


Plate Offsets (X,Y)-- [2:0-2-0,0-1-8], [11:Edge,0-3-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.54	Vert(LL)	-0.15	12-14	>999	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.54	Vert(CT)	-0.24	12-14	>999		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.68	Horz(CT)	0.03	11	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS						
	Code FBC2023/TPI2014						Weight: 274 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 5-14, 7-14, 9-11

**REACTIONS.** (size) 2=0-3-8, 17=0-3-8, 11=0-3-8  
Max Horz 2=266(LC 16)  
Max Uplift 2=-201(LC 9), 17=-583(LC 12), 11=-481(LC 13)  
Max Grav 2=398(LC 25), 17=1753(LC 2), 11=1334(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-230/262, 3-5=-1090/551, 5-6=-1180/625, 6-7=-1179/621, 7-9=-1747/740  
BOT CHORD 2-17=-250/164, 15-17=-250/164, 14-15=-322/937, 12-14=-431/1344, 11-12=-557/1483  
WEBS 3-17=-1400/572, 3-15=-264/1095, 5-15=-448/197, 6-14=-288/707, 7-14=-560/428, 7-12=-125/421, 9-11=-1702/566

#### 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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-6-0 to 2-7-3, Zone1 2-7-3 to 21-7-8, Zone2 21-7-8 to 27-5-2, Zone1 27-5-2 to 40-10-4 zone; end vertical right exposed; porch left 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 201 lb uplift at joint 2, 583 lb uplift at joint 17 and 481 lb uplift at joint 11.

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Joaquin Velez PE No.68182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

July 12, 2024

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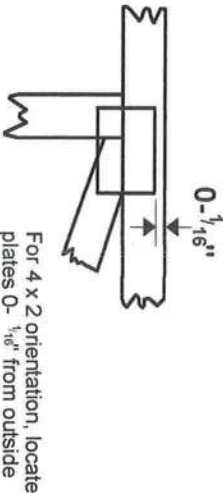
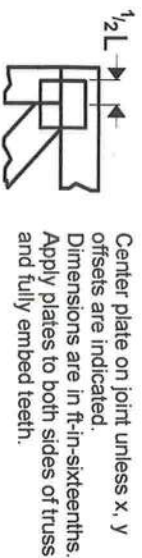
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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## Symbols

### PLATE LOCATION AND ORIENTATION



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

### PLATE SIZE

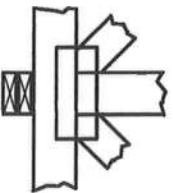
4 X 4

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

### LATERAL BRACING LOCATION



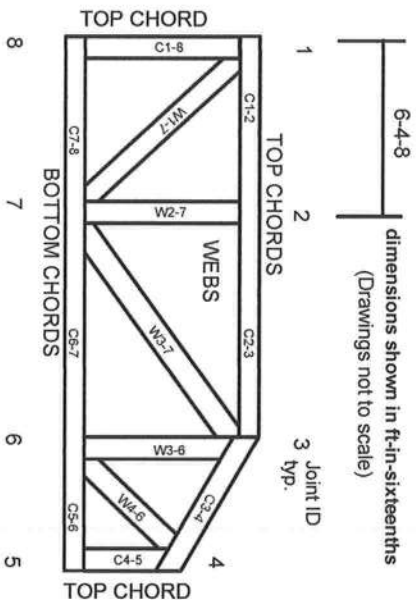
### BEARING



### 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®

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.