



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

RE: 3824017 - JFC - NELSON RES.

MiTek, Inc.  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200

**Site Information:**

Customer Info: JOHN F CRAWFORD HOMES Project Name: Nelson Res. Model: Custom  
Lot/Block: N/A Subdivision: N/A  
Address: 772 NW Country Lake Dr, N/A  
City: Columbia Cty State: FL

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

Name: License #:  
Address:  
City: State:

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

Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7  
Wind Code: ASCE 7-22 Wind Speed: 130 mph  
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 24 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.

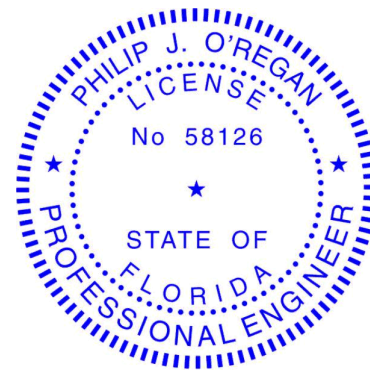
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T33322028	PB01	3/24/24	15	T33322042	T10	3/24/24
2	T33322029	PB01G	3/24/24	16	T33322043	T10G	3/24/24
3	T33322030	T01	3/24/24	17	T33322044	T11	3/24/24
4	T33322031	T01G	3/24/24	18	T33322045	T12	3/24/24
5	T33322032	T01GG	3/24/24	19	T33322046	T12G	3/24/24
6	T33322033	T02	3/24/24	20	T33322047	T13	3/24/24
7	T33322034	T03	3/24/24	21	T33322048	T13G	3/24/24
8	T33322035	T04	3/24/24	22	T33322049	T14	3/24/24
9	T33322036	T05	3/24/24	23	T33322050	T15	3/24/24
10	T33322037	T06	3/24/24	24	T33322051	T15G	3/24/24
11	T33322038	T07	3/24/24				
12	T33322039	T08	3/24/24				
13	T33322040	T08G	3/24/24				
14	T33322041	T09	3/24/24				



This item has been digitally signed and sealed by ORegan, Philip, PE on the date adjacent to the seal.  
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The truss drawing(s) referenced above have been prepared by  
MiTek USA, Inc. under my direct supervision based on the parameters  
provided by Builders FirstSource-Lake City, FL.

Truss Design Engineer's Name: ORegan, Philip  
My license renewal date for the state of Florida is February 28, 2025.



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

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

March 24,2024

Job 3824017	Truss PB01	Truss Type Piggyback	Qty 11	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322028
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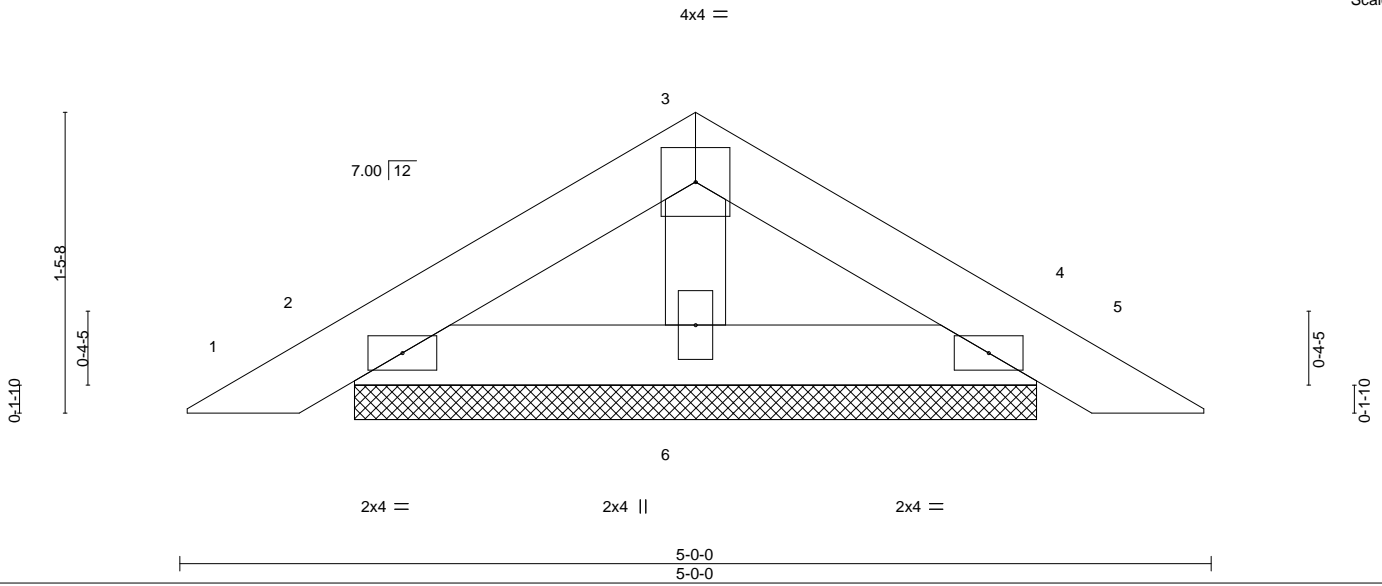
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:00:56 2024 Page 1

ID:Y2\_0zpqoAsGloDkUx1xpFJzu90w-vNmOeGWeenoeCpGw6135gS12wNtP5Jcdgu30ZyzYUOb

5-0-0  
5-0-0

Scale = 1:11.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.07	Vert(LL) 0.00	4	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.03	Vert(CT) 0.00	4	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00	4	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-P					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 5-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 2=3-3-11, 4=3-3-11, 6=3-3-11  
Max Horz 2=-41(LC 10)  
Max Uplift 2=-56(LC 12), 4=-61(LC 13), 6=-21(LC 12)  
Max Grav 2=97(LC 1), 4=97(LC 20), 6=110(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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 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 56 lb uplift at joint 2, 61 lb uplift at joint 4 and 21 lb uplift at joint 6.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

This item has been digitally signed and sealed by ORegan, Philip, 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.

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

March 24, 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)

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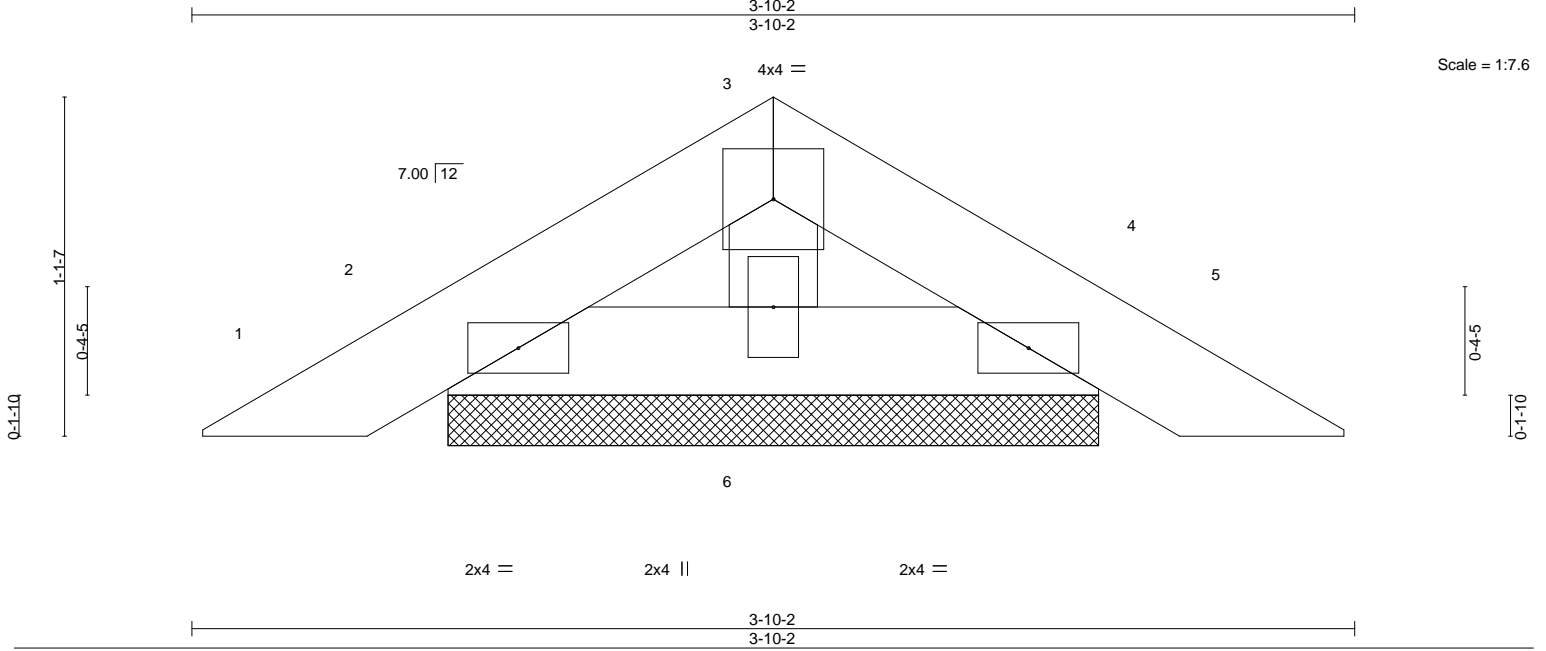
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	JFC - NELSON RES.	T33322029
3824017	PB01G	PIGGYBACK	2	1	Job Reference (optional)	

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

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ID:Y2\_0zpqoAsGloDkUx1xpFJzu90w-NZKmscXGP5wVqzr6glaKDfaE6nDuqm5nvYoZ5OzYUOa



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.04	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 0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-P						Weight: 10 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 3-10-2 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 2=2-1-13, 4=2-1-13, 6=2-1-13  
 Max Horz 2=-30(LC 10)  
 Max Uplift 2=-46(LC 12), 4=-50(LC 13), 6=-9(LC 12)  
 Max Grav 2=76(LC 1), 4=76(LC 20), 6=65(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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 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 46 lb uplift at joint 2, 50 lb uplift at joint 4 and 9 lb uplift at joint 6.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

This item has been digitally signed and sealed by ORegan, Philip, 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.

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

March 24,2024

**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)

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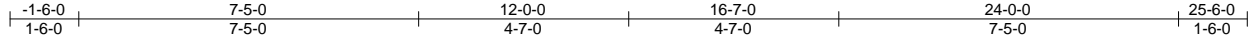
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job 3824017	Truss T01	Truss Type Common	Qty 3	Ply 1	JFC - NELSON RES. Job Reference (optional)	T3322030
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:00:57 2024 Page 1

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4x6 ||

Scale = 1:50.3

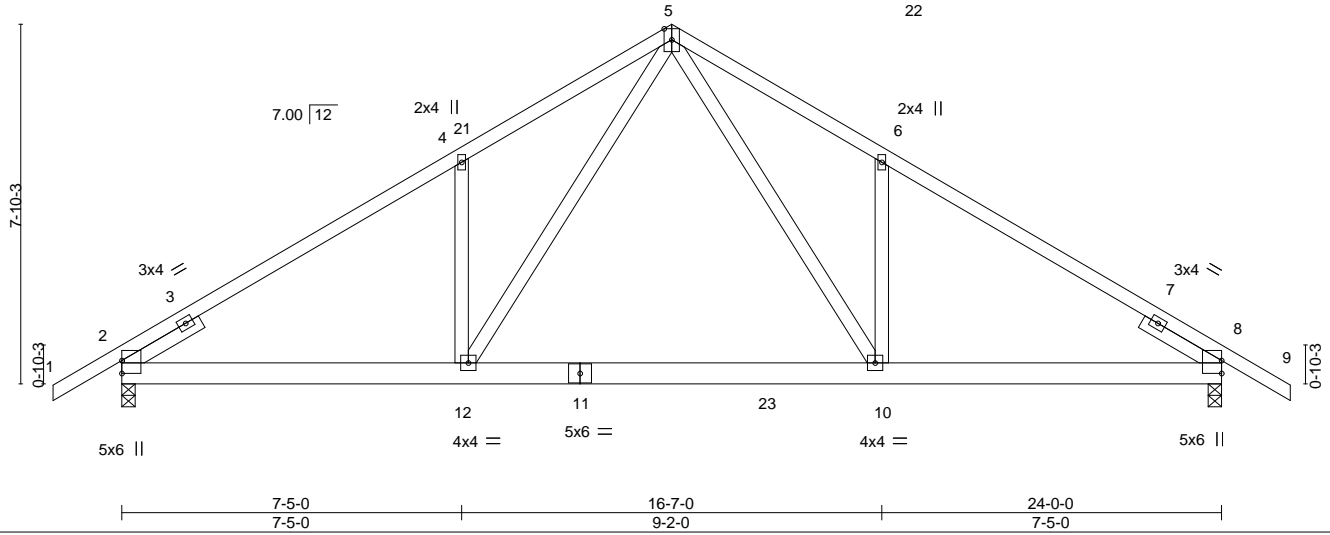


Plate Offsets (X,Y)-- [8:Edge,0-0-0], [8:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.81	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.91	Vert(LL) -0.20 10-12 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.79	Vert(CT) -0.39 10-12 >746 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.04 8 n/a n/a		
	Code FBC2023/TPI2014			Weight: 147 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 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 2-11-15 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 9-2-13 oc bracing.

**REACTIONS.**

(size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-251(LC 10)  
 Max Uplift 2=-519(LC 12), 8=-519(LC 13)  
 Max Grav 2=1408(LC 19), 8=1408(LC 20)

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

TOP CHORD 2-4=-1994/708, 4-5=-2026/902, 5-6=-2026/902, 6-8=-1994/708  
 BOT CHORD 2-12=-608/1805, 10-12=-320/1204, 8-10=-472/1653  
 WEBS 4-12=-325/346, 5-12=-551/1147, 5-10=-551/1147, 6-10=-325/346

**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 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; 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.
- 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 519 lb uplift at joint 2 and 519 lb uplift at joint 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: 1-5=-54, 5-9=-54, 12-13=-20, 10-12=-80(F=-60), 10-17=-20

This item has been digitally signed and sealed by ORegan, Philip, 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.

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

March 24, 2024

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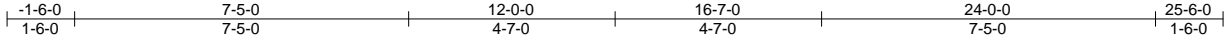
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job 3824017	Truss T01G	Truss Type GABLE	Qty 1	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322031
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

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## Bracing

Scale = 1:51.2

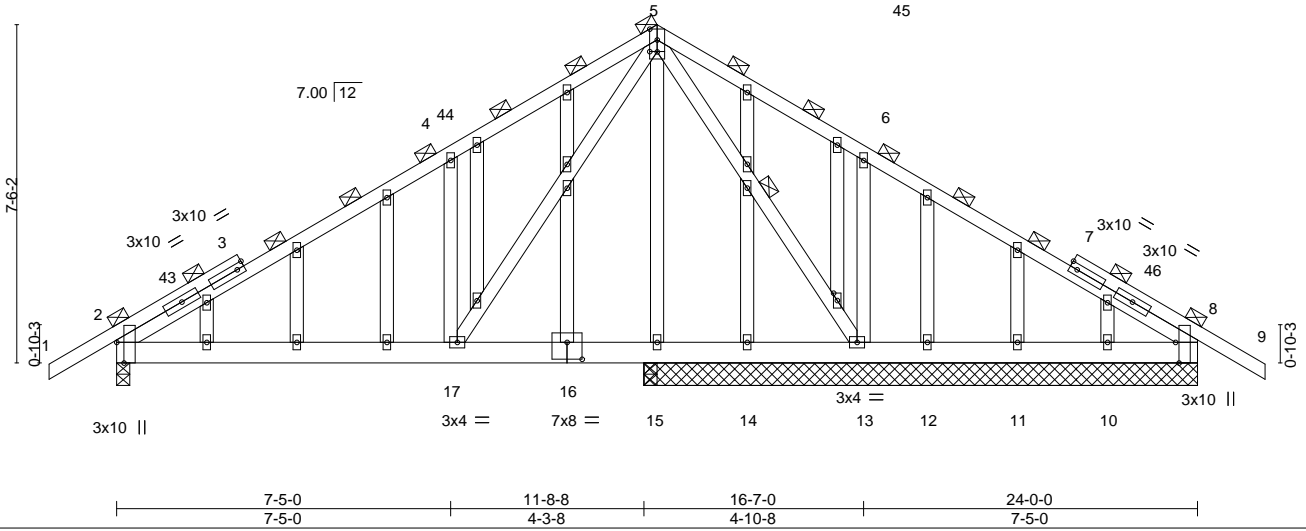


Plate Offsets (X,Y)-- [2:0-5-8,Edge], [5:0-2-0,0-0-1], [6:0-0-0,0-0-0], [8:0-5-8,Edge], [16:0-4-0,0-4-8], [29:0-0-1,0-0-0], [29:0-0-1,0-0-0], [30:0-1-15,0-1-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.58	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.29	Vert(LL) 0.06 17-37 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.59	Vert(CT) -0.08 17-37 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) -0.02 2 n/a n/a		
	Code FBC2023/TPI2014			Weight: 205 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 (6-0-0 max.).  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-13

### REACTIONS.

All bearings 12-3-8 except (jt=length) 2=0-3-8, 15=0-3-8, 15=0-3-8.  
 (lb) - Max Horz 2=240(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 12, 11 except 2=274(LC 12), 13=442(LC 13), 10=319(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 8, 14, 12, 11, 15, 15, 8 except 2=714(LC 19), 13=867(LC 1), 10=407(LC 20)

### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=699/247, 4-5=775/453, 6-8=182/273  
 BOT CHORD 2-17=227/708, 15-17=77/285, 14-15=77/285, 13-14=77/285, 12-13=221/284,  
 11-12=221/284, 10-11=221/284, 8-10=221/284  
 WEBS 4-17=417/372, 5-17=441/799, 5-13=662/296, 6-13=372/347

### 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; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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) 8, 12, 11, 8 except (jt=lb) 2=274, 13=442, 10=319.
- 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 O'Regan, Philip, 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.

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

March 24, 2024

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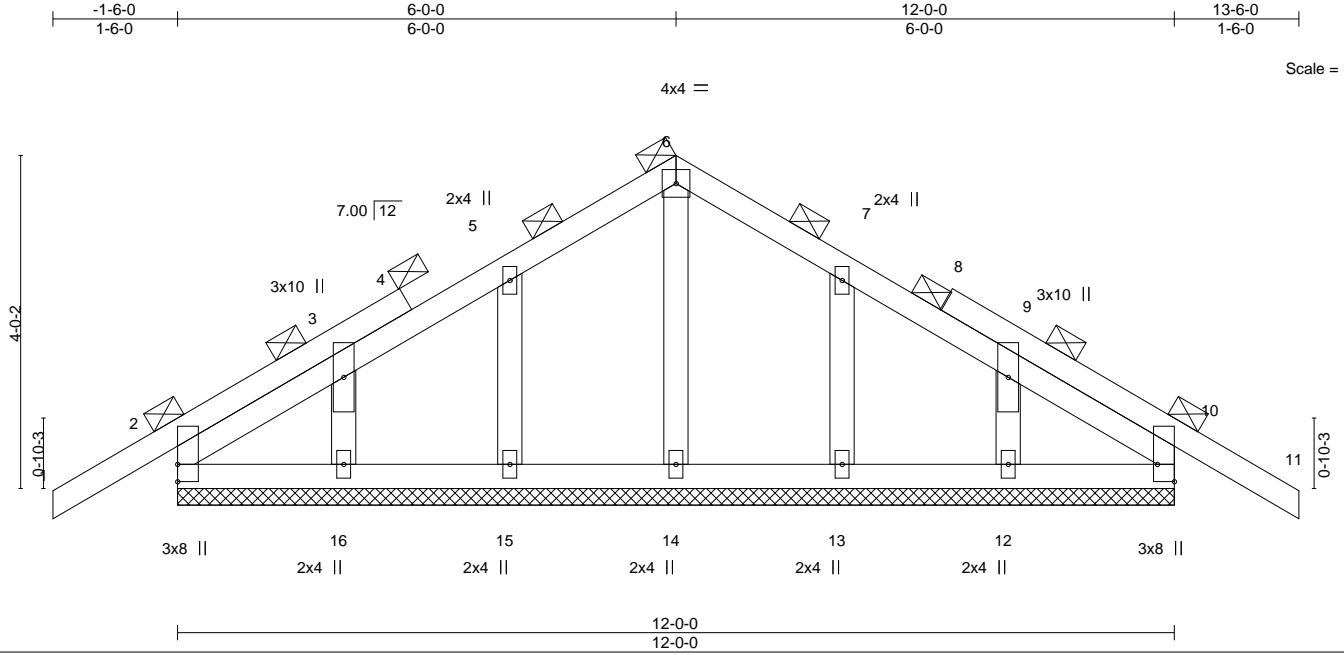
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job 3824017	Truss T01GG	Truss Type Common Supported Gable	Qty 1	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322032
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:00:59 2024 Page 1

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Scale = 1:27.7

Plate Offsets (X,Y)-- [10:Edge,0-2-7]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.18	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 0.06	Horz(CT) 0.00	10	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-S					Weight: 69 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 12-0-0.  
 (lb) - Max Horz 2=-129(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 12 except 15=-108(LC 12), 16=-106(LC 12), 13=-110(LC 13)  
 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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 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, 12 except (jt=lb) 15=108, 16=106, 13=110.
  - 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 ORegan, Philip, 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.

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

March 24, 2024

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 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job 3824017	Truss T02	Truss Type Common	Qty 5	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322033
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:00 2024 Page 1

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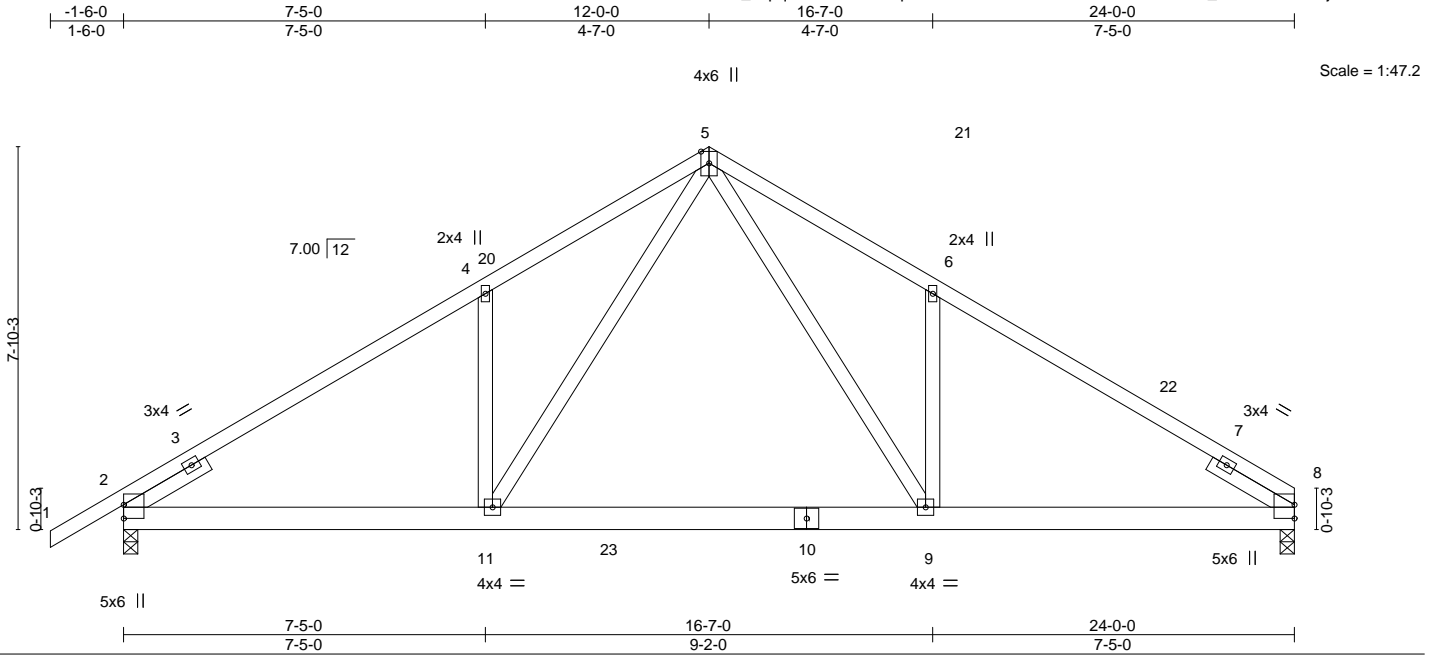


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [2:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.81	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.90	Vert(LL) -0.20 9-11 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.80	Vert(CT) -0.38 9-11 >751 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.04 8 n/a n/a		
	Code FBC2023/TPI2014			Weight: 144 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 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 2-11-15 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 9-1-3 oc bracing.

**REACTIONS.**

(size) 8=0-3-8, 2=0-3-8  
 Max Horz 2=242(LC 9)  
 Max Uplift 8=-466(LC 13), 2=-520(LC 12)  
 Max Grav 8=1327(LC 20), 2=1409(LC 19)

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

TOP CHORD 2-4=-1996/709, 4-5=-2028/903, 5-6=-2039/911, 6-8=-2006/726  
 BOT CHORD 2-11=-627/1793, 9-11=-339/1192, 8-9=-503/1646  
 WEBS 4-11=-325/346, 5-11=-550/1146, 5-9=-559/1160, 6-9=-328/348

**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 1-6-0, Zone1 1-6-0 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 24-0-0 zone; end vertical 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 100 lb uplift at joint(s) except (jt=lb) 8=466, 2=520.
- 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: 1-5=-54, 5-8=-54, 11-16=-20, 9-11=-80(F=-60), 9-12=-20

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

March 24, 2024

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Job 3824017	Truss T03	Truss Type Half Hip	Qty 1	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322034
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:00 2024 Page 1

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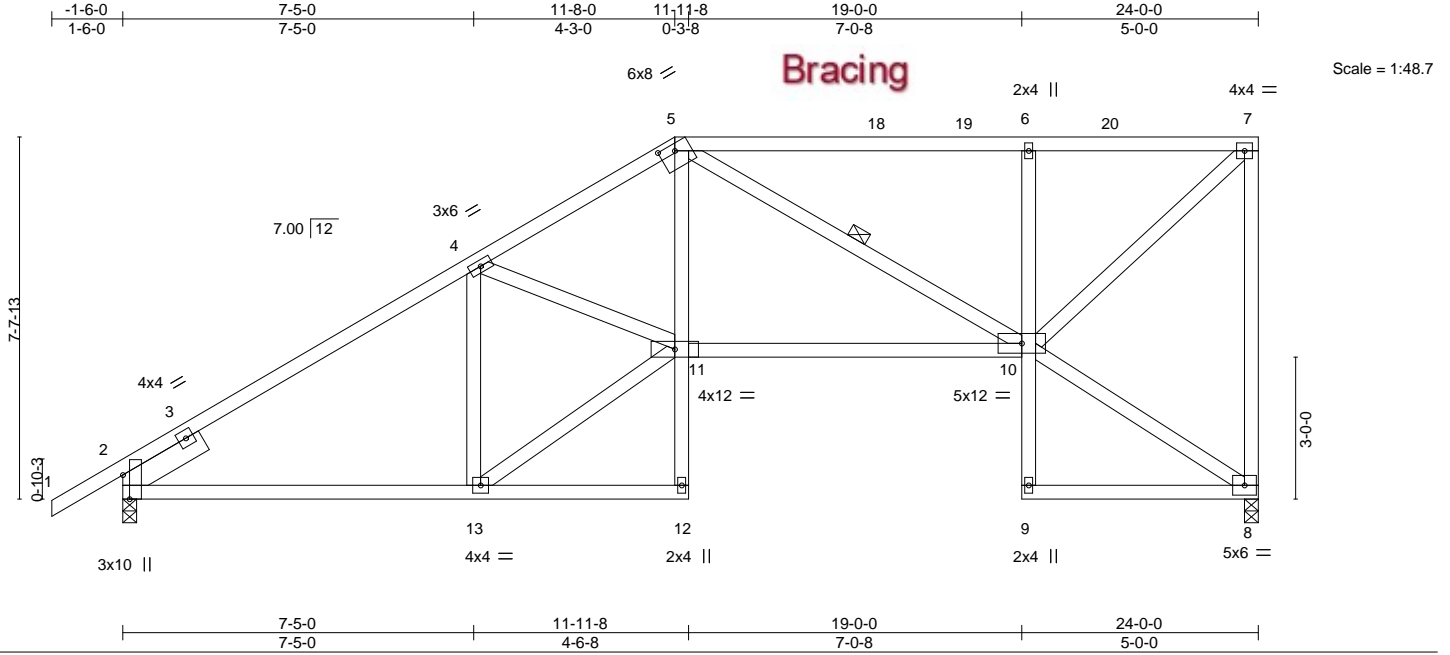


Plate Offsets (X,Y)--	[2:0-6-2,Edge], [5:0-4-0,0-1-11]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.97	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.63	Vert(LL) -0.12 10-11 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.44	Vert(CT) -0.25 10-11 >999 180		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS	Horz(CT) 0.10 8 n/a n/a		
				Weight: 163 lb	FT = 20%

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

REACTIONS.
(size) 8=0-3-8, 2=0-3-8
Max Horz 2=377(LC 12)
Max Uplift 8=-392(LC 9), 2=-402(LC 12)
Max Grav 8=880(LC 1), 2=966(LC 1)


FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1192/467, 4-5=-1490/762, 5-6=-837/394, 6-7=-809/379, 7-8=-832/402
BOT CHORD 2-13=-614/957, 5-11=-369/696, 10-11=-722/1278, 6-10=-390/303
WEBS 4-13=-558/440, 4-11=-171/293, 5-10=-533/378, 7-10=-518/1098, 11-13=-741/1166

- NOTES-**
- 1) 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 1-6-0, Zone1 1-6-0 to 11-8-0, Zone2 11-8-0 to 15-10-15, Zone1 15-10-15 to 23-10-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=392, 2=402.

This item has been digitally signed and sealed by ORegan, Philip, 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.

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

March 24, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	 <p>16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200 / MiTek-US.com</p>
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Job	Truss	Truss Type	Qty	Ply	JFC - NELSON RES.	T33322035
3824017	T04	Half Hip	1	1		

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:01 2024 Page 1  
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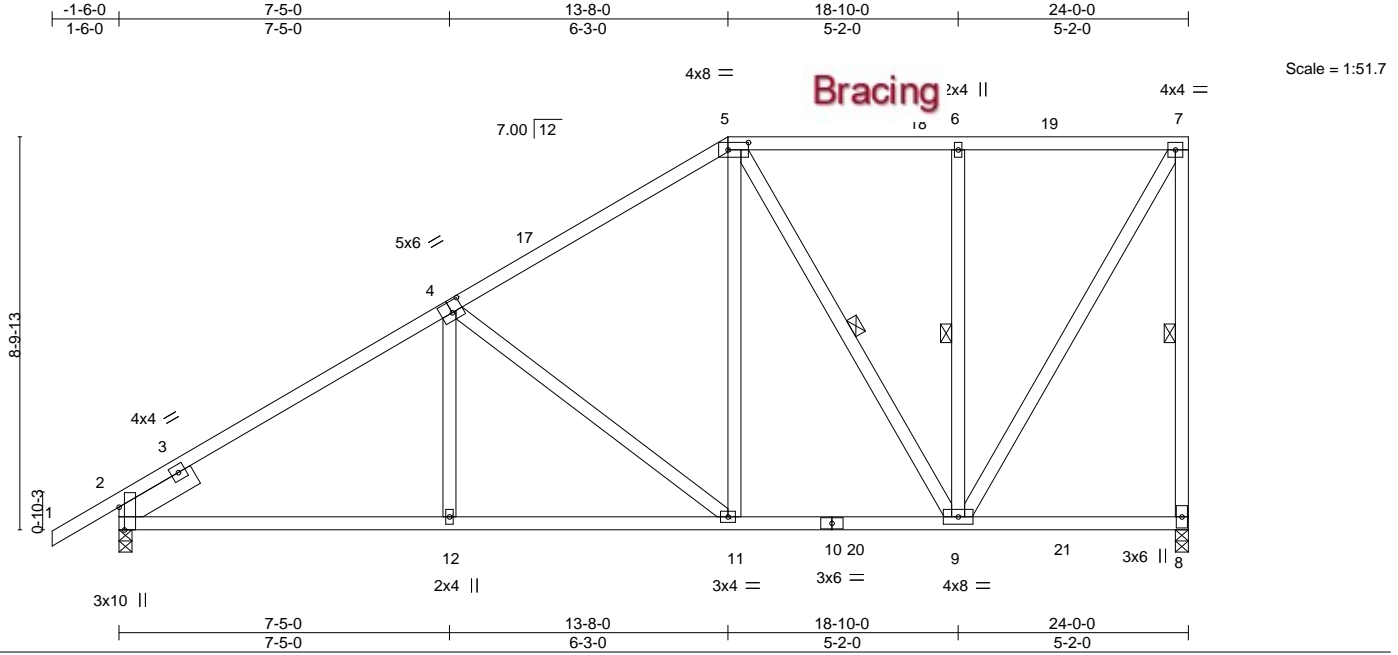


Plate Offsets (X,Y)-- [2:0-6-2,Edge], [4:0-3-0,0-3-0], [5:0-5-8,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.45	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.57	Vert(LL) -0.07 11-12 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.81	Vert(CT) -0.13 11-12 >999 180		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS	Horz(CT) 0.03 8 n/a n/a	Weight: 165 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-14 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 7-0-10 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 7-8, 5-9, 6-9
SLIDER Left 2x6 SP No.2 1-11-8	

**REACTIONS.** (size) 8=0-3-8, 2=0-3-8  
 Max Horz 2=435(LC 12)  
 Max Uplift 8=400(LC 12), 2=388(LC 12)  
 Max Grav 8=1004(LC 2), 2=1093(LC 19)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1327/447, 4-5=-868/341, 5-6=-481/222, 6-7=-481/222, 7-8=-900/412  
 BOT CHORD 2-12=-661/1169, 11-12=-661/1170, 9-11=-365/692  
 WEBS 4-12=0/266, 4-11=-620/375, 5-11=-186/600, 5-9=-496/276, 6-9=-310/255, 7-9=-436/937

- NOTES-**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=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 13-8-0, Zone2 13-8-0 to 17-10-15, Zone1 17-10-15 to 23-10-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=400, 2=388.

This item has been digitally signed and sealed by ORegan, Philip, 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.

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

March 24, 2024

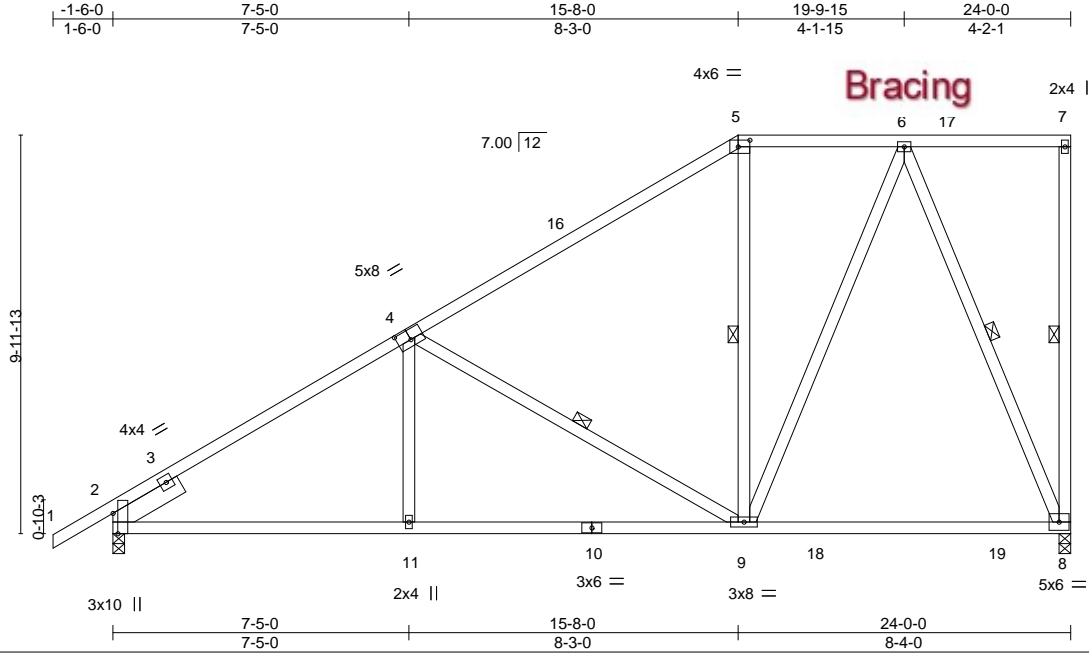
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	 <p>16023 Swingley Ridge Rd.        Chesterfield, MO 63017        314.434.1200 / MiTek-US.com</p>
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Job	Truss	Truss Type	Qty	Ply	JFC - NELSON RES.	T33322036
3824017	T05	Half Hip	1	1		

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

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:01 2024 Page 1

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Scale = 1:57.7

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.73	Vert(LL) -0.23	8-9	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.83	Vert(CT) -0.34	8-9	>847	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.73	Horz(CT) 0.03	8	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS					Weight: 161 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x6 SP No.2 1-11-8

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

**REACTIONS.** (size) 8=0-3-8, 2=0-3-8  
Max Horz 2=493(LC 12)  
Max Uplift 8=439(LC 12), 2=370(LC 12)  
Max Grav 8=997(LC 2), 2=1112(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1302/425, 4-5=-765/251, 5-6=-597/308  
BOT CHORD 2-11=-709/1238, 9-11=-709/1239, 8-9=-176/328  
WEBS 4-11=0/292, 4-9=-741/460, 6-9=-345/754, 6-8=-833/459

- NOTES-**
- 1) 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 1-6-0, Zone1 1-6-0 to 15-8-0, Zone2 15-8-0 to 19-9-15, Zone1 19-9-15 to 23-10-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCdL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=439, 2=370.

This item has been digitally signed and sealed by ORegan, Philip, 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.

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

March 24,2024

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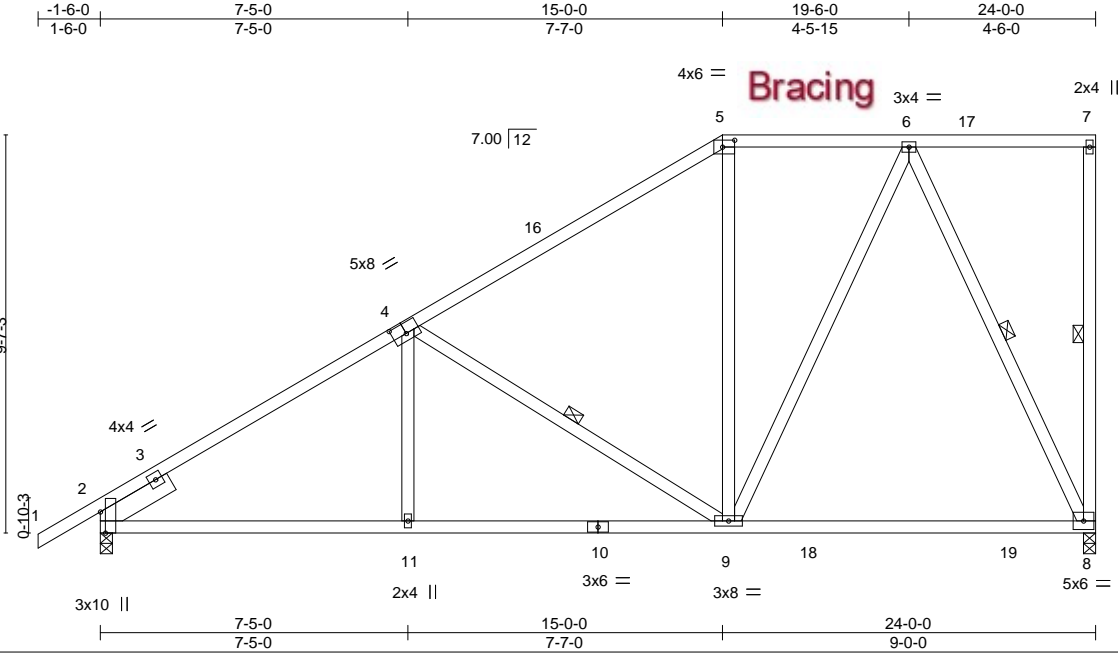
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
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Job	Truss	Truss Type	Qty	Ply	JFC - NELSON RES.	T33322037
3824017	T06	Half Hip	1	1		

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

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:02 2024 Page 1

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Scale = 1:55.6

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

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.61	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.91	Vert(LL) -0.32 8-9 >904 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.64	Vert(CT) -0.48 8-9 >596 180		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS	Horz(CT) 0.03 8 n/a n/a		
				Weight: 159 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x6 SP No.2 1-11-8

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

**REACTIONS.** (size) 8=0-3-8, 2=0-3-8  
Max Horz 2=474(LC 12)  
Max Uplift 8=-426(LC 12), 2=-376(LC 12)  
Max Grav 8=999(LC 2), 2=1106(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1295/436, 4-5=-811/279, 5-6=-636/326  
BOT CHORD 2-11=-697/1215, 9-11=-696/1220, 8-9=-193/363  
WEBS 4-11=0/267, 4-9=-687/432, 6-9=-314/712, 6-8=-829/456

- NOTES-**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=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 15-0-0, Zone2 15-0-0 to 19-6-0, Zone1 19-6-0 to 23-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=426, 2=376.

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

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

March 24, 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)

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314.434.1200 / MiTek-US.com

Job 3824017	Truss T07	Truss Type Half Hip	Qty 1	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322038
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:03 2024 Page 1

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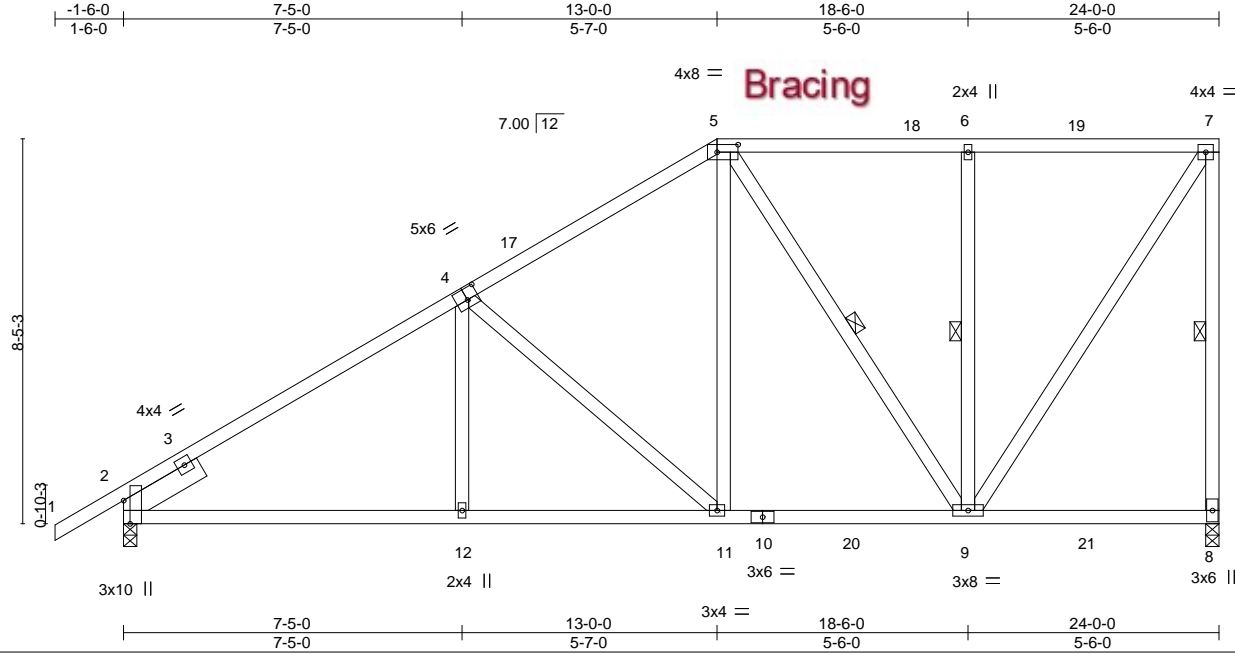


Plate Offsets (X,Y)-- [2:0-6-2,Edge], [4:0-3-0,0-3-0], [5:0-5-8,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.42	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.56	Vert(LL) 0.07 12-15 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.78	Vert(CT) -0.10 12-15 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 8 n/a n/a		
	Code FBC2023/TPI2014			Weight: 162 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x6 SP No.2 1-11-8

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-7-13 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 7-1-3 oc bracing.  
 WEBS 1 Row at midpt 7-8, 5-9, 6-9

**REACTIONS.**

(size) 8=0-3-8, 2=0-3-8  
 Max Horz 2=416(LC 12)  
 Max Uplift 8=387(LC 12), 2=393(LC 12)  
 Max Grav 8=1005(LC 2), 2=1084(LC 19)

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

TOP CHORD 2-4=-1305/453, 4-5=-907/370, 5-6=-532/240, 6-7=-532/240, 7-8=-896/400  
 BOT CHORD 2-12=-644/1143, 11-12=-644/1141, 9-11=-380/732  
 WEBS 4-12=0/251, 4-11=-577/352, 5-11=-190/589, 5-9=-445/252, 6-9=-344/270, 7-9=-435/956

**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 1-6-0, Zone1 1-6-0 to 13-0-0, Zone2 13-0-0 to 17-2-15, Zone1 17-2-15 to 23-10-4 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) 8=387, 2=393.

This item has been digitally signed and sealed by ORegan, Philip, 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.

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

March 24, 2024

**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 3824017	Truss T08	Truss Type Common	Qty 6	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322039
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:03 2024 Page 1

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4x6 ||

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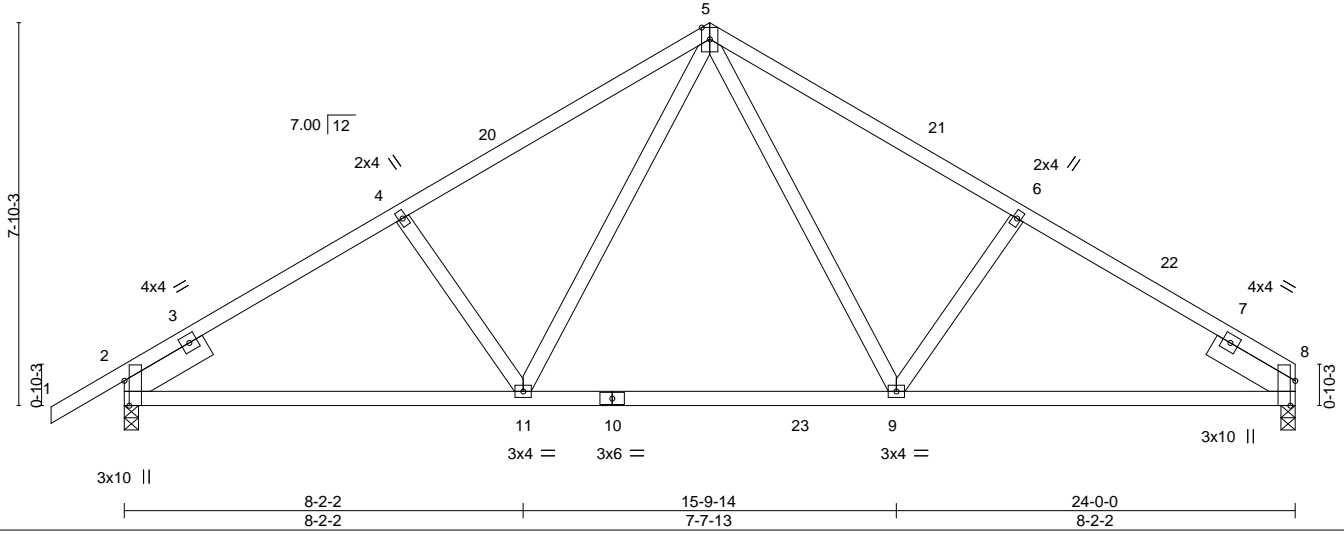


Plate Offsets (X,Y)-- [2:0-6-2,Edge], [8:0-6-2,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.66	Vert(LL) -0.18 9-11 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.33	Vert(CT) -0.27 9-11 >999 180		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS	Horz(CT) 0.05 8 n/a n/a		
				Weight: 126 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x6 SP No.2 1-11-8, Right 2x6 SP No.2 1-11-8

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-4-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 8-7-1 oc bracing.

**REACTIONS.**

(size) 8=0-3-8, 2=0-3-8  
 Max Horz 2=242(LC 9)  
 Max Uplift 8=-334(LC 13), 2=-388(LC 12)  
 Max Grav 8=1037(LC 20), 2=1119(LC 19)

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

TOP CHORD 2-4=-1407/487, 4-5=-1295/500, 5-6=-1304/515, 6-8=-1416/502  
 BOT CHORD 2-11=-472/1316, 9-11=-195/880, 8-9=-342/1160  
 WEBS 5-9=-240/613, 6-9=-301/313, 5-11=-233/603, 4-11=-293/308

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=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 24-0-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 8=334, 2=388.

This item has been digitally signed and sealed by ORegan, Philip, 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.

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

March 24, 2024

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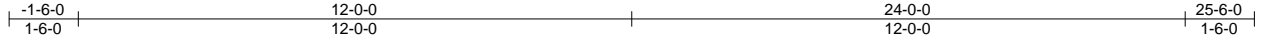
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job 3824017	Truss T08G	Truss Type Common Supported Gable	Qty 1	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322040
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:04 2024 Page 1

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4x4 =

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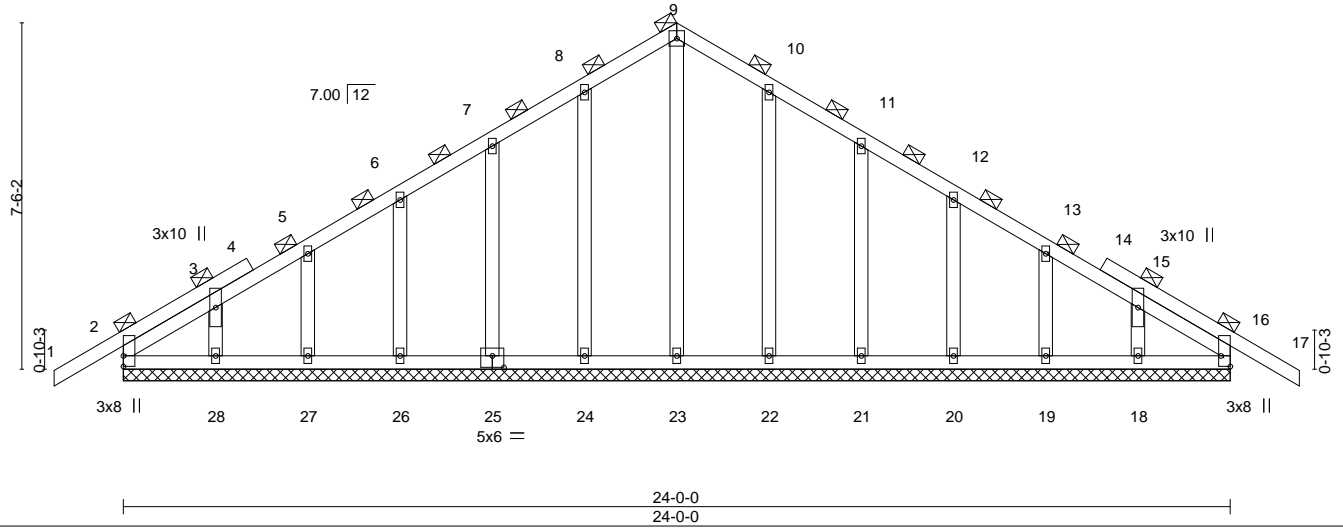


Plate Offsets (X,Y)-- [16:Edge,0-2-7], [25:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.13	Vert(LL) -0.01	17	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.03	Vert(CT) -0.01	17	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) 0.01	16	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-S					Weight: 154 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 24-0-0.  
(lb) - Max Horz 2=-240(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 27, 19 except 24=-106(LC 12), 25=-106(LC 12), 26=-106(LC 12), 28=-129(LC 12), 22=-103(LC 13), 21=-107(LC 13), 20=-105(LC 13), 18=-117(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 16, 23, 24, 25, 26, 27, 28, 22, 21, 20, 19, 18

**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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 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, 16, 27, 19 except (jt=lb) 24=106, 25=106, 26=106, 28=129, 22=103, 21=107, 20=105, 18=117.
  - 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 ORegan, Philip, 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.

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

March 24, 2024

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Job 3824017	Truss T09	Truss Type Roof Special	Qty 5	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322041
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:05 2024 Page 1

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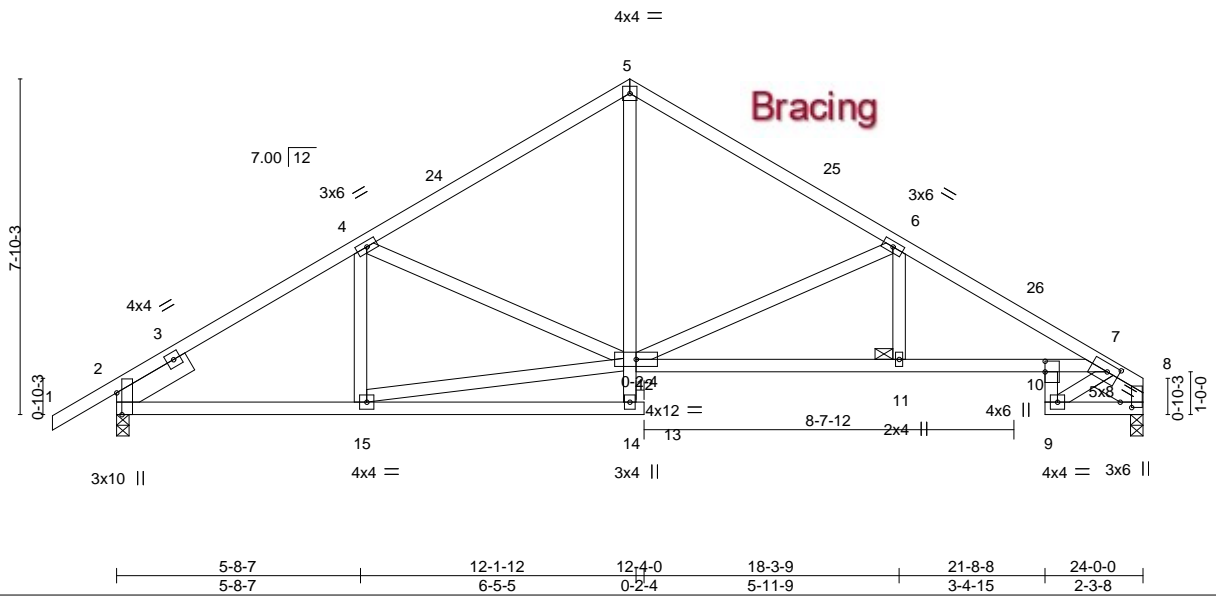


Plate Offsets (X,Y)--	[2:0-6-2,Edge], [7:0-3-4,0-2-4], [8:0-1-8,0-3-3], [10:0-3-0,0-0-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.49	Vert(LL) 0.14 10-11 >999 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.99	Vert(CT) -0.23 10-11 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.68	Horz(CT) 0.09 8 n/a n/a		
BCDL 10.0	Code FBC2023/TP12014	Matrix-MS		Weight: 142 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-10-6 oc purlins.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3	8-8-11 oc bracing: 2-15.
SLIDER Left 2x6 SP No.2 1-11-8, Right 2x6 SP No.2 1-2-0	8-7-0 oc bracing: 10-11
	9-1-0 oc bracing: 11-12
	10-0-0 oc bracing: 12-14
	JOINTS 1 Brace at Jt(s): 11
REACTIONS. (size) 8=0-3-8, 2=0-3-8	
Max Horz 2=242(LC 9)	
Max Uplift 8=-333(LC 13), 2=-387(LC 12)	
Max Grav 8=889(LC 1), 2=975(LC 1)	

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1249/469, 4-5=-1046/439, 5-6=-1057/450, 6-7=-1727/637, 7-8=-490/167
BOT CHORD 2-15=-458/1085, 5-12=-229/645, 11-12=-468/1480, 10-11=-468/1480, 7-10=-411/1326, 9-10=-208/558, 8-9=-274/697
WEBS 4-12=-283/263, 6-12=-759/439, 6-11=-30/367, 12-15=-444/988, 7-9=-710/279

- 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 24-0-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) 8=333, 2=387.

This item has been digitally signed and sealed by ORegan, Philip, 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.

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

March 24, 2024

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Job 3824017	Truss T10	Truss Type Common	Qty 8	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322042
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:06 2024 Page 1

ID:Y2\_0zpqoAsGloDkUx1xpFJzu90w-clMAIgeVHs3DPL1rh8FR4ZSf9P6mRjy6zSUXvNzYUOR

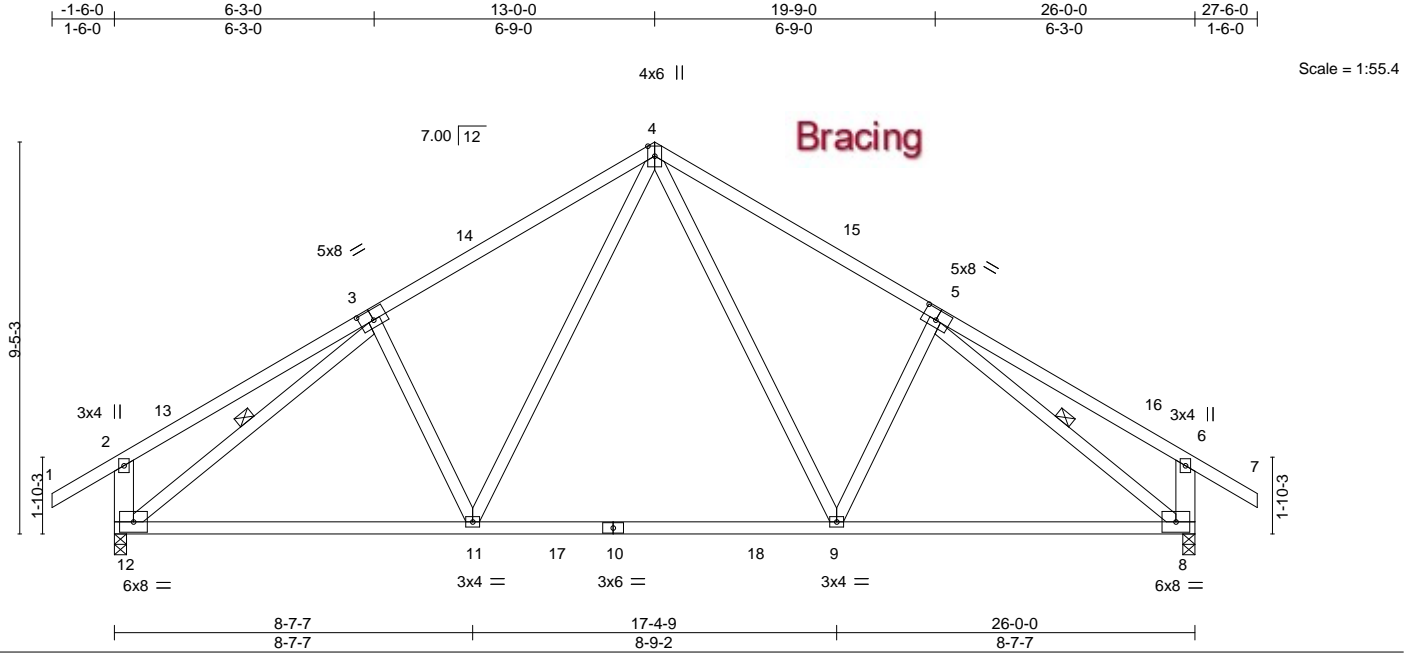


Plate Offsets (X,Y)-- [3:0-4-0,0-3-0], [5:0-4-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.47	Vert(LL) -0.22	9-11	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.79	Vert(CT) -0.31	9-11	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.48	Horz(CT) 0.04	8	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS					Weight: 163 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-8-1 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 9-7-12 oc bracing.  
 WEBS 1 Row at midpt 3-12, 5-8

**REACTIONS.**

(size) 12=0-3-8, 8=0-3-8  
 Max Horz 12=-347(LC 10)  
 Max Uplift 12=-411(LC 12), 8=-411(LC 13)  
 Max Grav 12=1191(LC 19), 8=1191(LC 20)

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

TOP CHORD 3-4=-1216/505, 4-5=-1216/505, 2-12=-343/258, 6-8=-342/258  
 BOT CHORD 11-12=-370/1185, 9-11=-133/868, 8-9=-267/994  
 WEBS 4-9=-243/564, 5-9=-173/304, 4-11=-243/564, 3-11=-173/304, 3-12=-1168/336, 5-8=-1168/336

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=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 13-0-0, Zone2 13-0-0 to 17-2-15, Zone1 17-2-15 to 27-6-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 12=411, 8=411.

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

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

March 24, 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)

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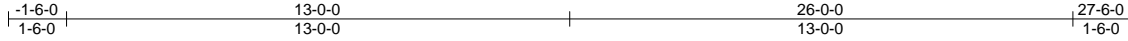
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job 3824017	Truss T10G	Truss Type GABLE	Qty 1	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322043
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:07 2024 Page 1

ID:Y2\_0zpqoAsGloDkUx1xpFJzu90w-4VwYy0fY2AB41Vc1Fmgdm?uBpdUAGpFC6D5SpzYUOQ



Scale = 1:59.5

## Bracing

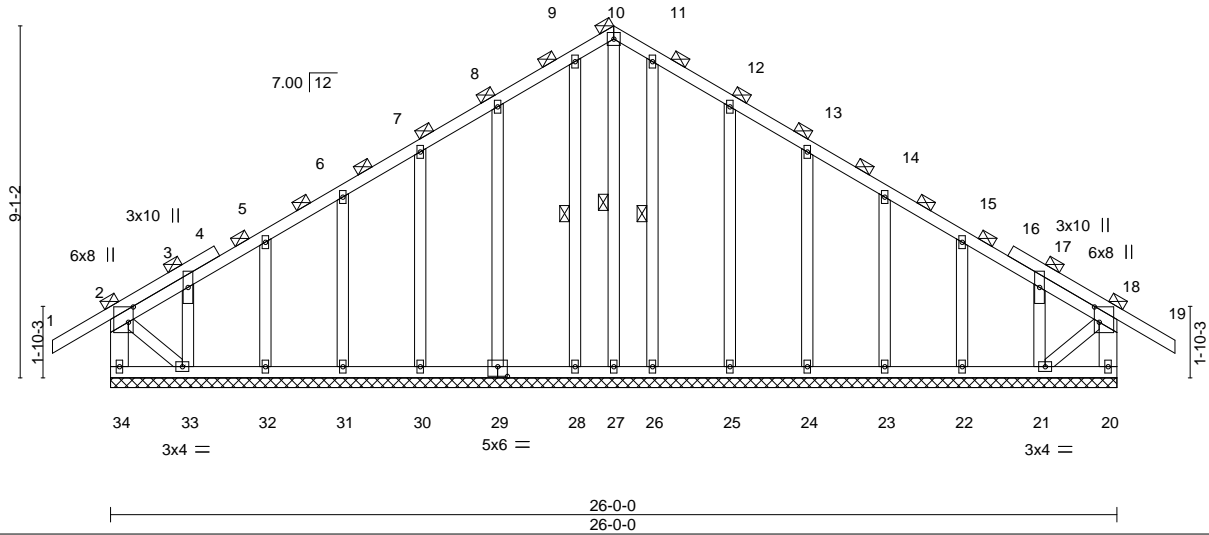


Plate Offsets (X,Y)-- [2:0-4-12,0-1-8], [18:0-4-12,0-1-8], [29:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.20	Vert(LL) -0.01	19	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.06	Vert(CT) -0.01	19	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT) 0.01	20	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-S					Weight: 212 lb	FT = 20%

### LUMBER-

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x6 SP No.2 \*Except\*  
 2-33,18-21: 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 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 10-27, 11-26, 9-28

### REACTIONS.

All bearings 26-0-0.  
 (lb) - Max Horz 34=329(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 20, 27, 22, 26, 32, 28 except  
 34=-191(LC 8), 21=-215(LC 13), 23=-106(LC 13), 24=-102(LC 13), 25=-117(LC 13),  
 33=-243(LC 12), 31=-107(LC 12), 30=-102(LC 12), 29=-116(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 20, 27, 21, 22, 23, 24, 25, 26,  
 32, 31, 30, 29, 28 except 34=287(LC 20), 33=266(LC 10)

### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-34=-268/192, 9-10=-154/268, 10-11=-154/268  
 BOT CHORD 33-34=-300/288  
 WEBS 2-33=-236/268

### 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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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) 20, 27, 22, 26, 32, 28 except (jt=lb) 34=191, 21=215, 23=106, 24=102, 25=117, 33=243, 31=107, 30=102, 29=116.
- 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 O'Regan, Philip, 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.

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

March 24, 2024

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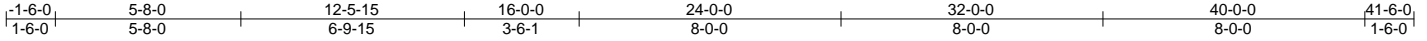
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job 3824017	Truss T11	Truss Type Roof Special	Qty 3	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322044
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:07 2024 Page 1

ID:Y2\_0zpqoAsGloDkUx1xpFJzu90w-4VwYy0fY2AB41Vc1Frmgdm?k8pQfA9dFC6D5SpzYUOQ



Scale = 1:70.4

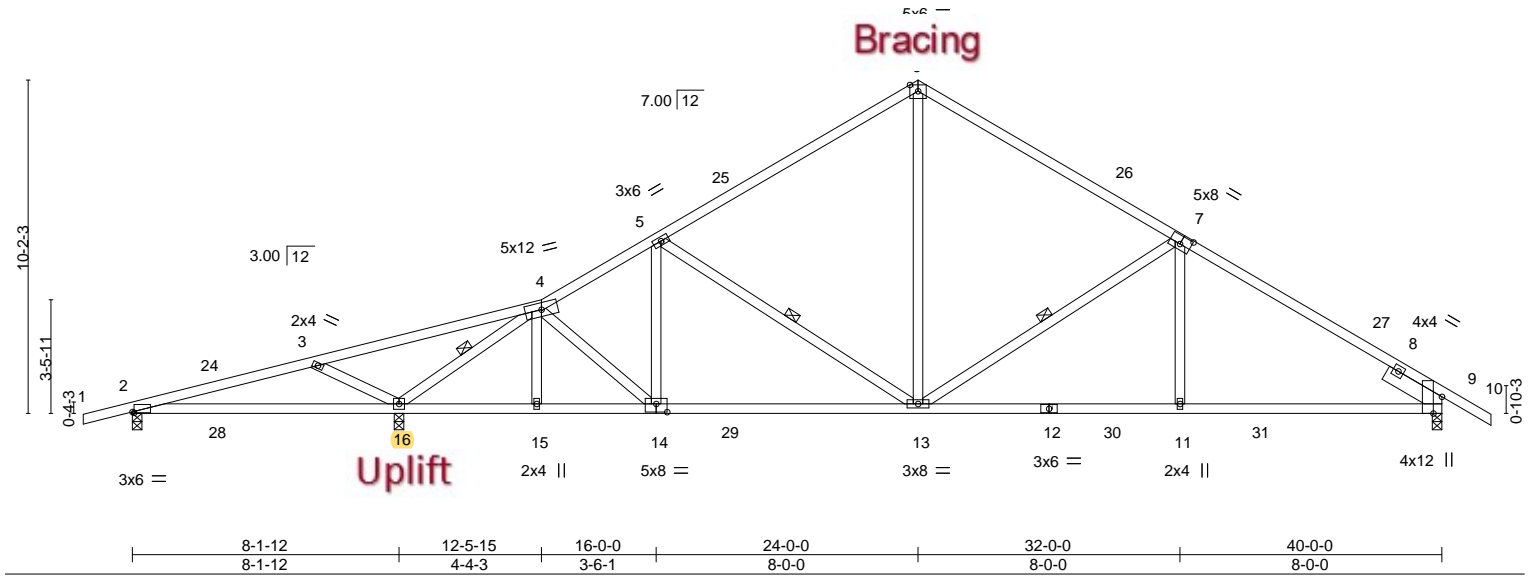


Plate Offsets (X,Y)-- [2:0-10,0-0-5], [7:0-4-0,0-3-0], [9:0-6-2,Edge], [14:0-4-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.84	Vert(LL) 0.12 16-19 >835 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.88	Vert(CT) -0.30 11-13 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.52	Horz(CT) 0.08 9 n/a n/a		
BCDL 10.0	Code FBC2023/TP12014	Matrix-MS		Weight: 215 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-0-2 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-16, 5-13, 7-13
SLIDER Right 2x6 SP No.2 1-11-8	

**REACTIONS.** (size) 2=0-3-8, 16=0-3-8, 9=0-3-8  
 Max Horz 2=335(LC 11)  
 Max Uplift 2=-327(LC 8), 16=-727(LC 12), 9=-492(LC 13)  
 Max Grav 2=213(LC 25), 16=1903(LC 2), 9=1435(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-126/680, 3-4=-461/912, 4-5=-1551/599, 5-6=-1323/593, 6-7=-1271/605, 7-9=-1919/696  
 BOT CHORD 2-16=-567/192, 15-16=-391/1175, 14-15=-392/1172, 13-14=-455/1481, 11-13=-434/1561, 9-11=-435/1557  
 WEBS 3-16=-617/490, 4-16=-2327/918, 4-14=-132/417, 5-13=-444/318, 6-13=-271/862, 7-13=-771/442, 7-11=0/368

- 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 2-6-0, Zone1 2-6-0 to 24-0-0, Zone2 24-0-0 to 29-7-14, Zone1 29-7-14 to 41-6-0 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 100 lb uplift at joint(s) except (jt=lb) 2=327, 16=727, 9=492.

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

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

March 24, 2024

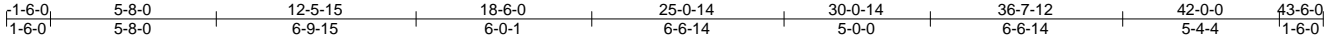
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TP1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	<p>16023 Swingley Ridge Rd.          Chesterfield, MO 63017          314.434.1200 / MiTek-US.com</p>
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Job 3824017	Truss T12	Truss Type Piggyback Base	Qty 2	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322045
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

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Scale = 1:78.7

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

Bracing

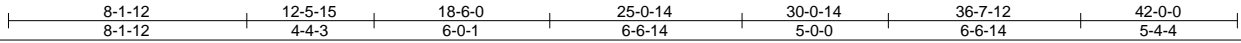
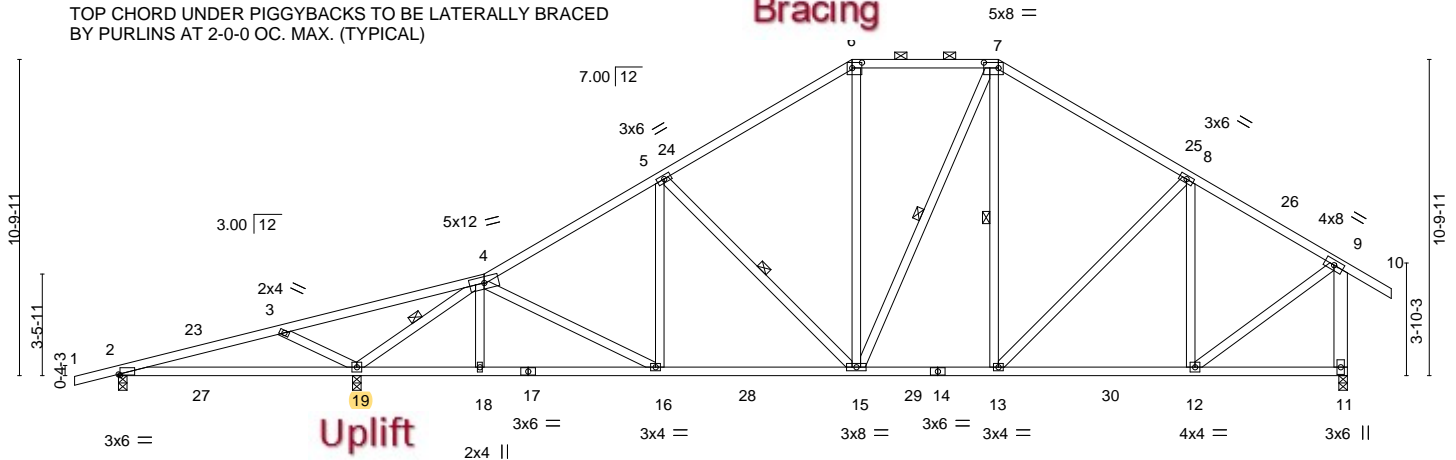


Plate Offsets (X,Y)-- [2:0-0-10,0-0-5], [6:0-4-0,0-2-4], [7:0-6-0,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.65	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.62	Vert(LL) 0.12 19-22 >811 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.54	Vert(CT) -0.20 15-16 >999 180		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS	Horz(CT) 0.05 11 n/a n/a		
				Weight: 272 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 9-11: 2x6 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-2-5 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-6 max.): 6-7.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 4-19, 5-15, 7-15, 7-13

**REACTIONS.** (size) 2=0-3-8, 19=0-3-8, 11=0-3-8  
 Max Horz 2=428(LC 11)  
 Max Uplift 2=-319(LC 8), 19=-749(LC 12), 11=-465(LC 13)  
 Max Grav 2=223(LC 25), 19=1938(LC 2), 11=1435(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-128/536, 3-4=-447/765, 4-5=-1670/787, 5-6=-1310/782, 6-7=-1065/733,  
 7-8=-1225/740, 8-9=-1127/593, 9-11=-1366/774  
 BOT CHORD 2-19=-437/76, 18-19=-468/1388, 16-18=-472/1381, 15-16=-572/1548, 13-15=-317/1013,  
 12-13=-350/924  
 WEBS 3-19=-604/500, 4-19=-2429/960, 5-16=0/272, 5-15=-590/347, 6-15=-131/455,  
 7-15=-167/290, 7-13=-87/282, 8-12=-442/280, 9-12=-415/1123

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=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 2-8-6, Zone1 2-8-6 to 25-0-14, Zone3 25-0-14 to 30-0-14, Zone2 30-0-14 to 36-0-2, Zone1 36-0-2 to 43-6-0 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.
  - 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=319, 19=749, 11=465.
  - 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 O'Regan, Philip, 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.

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

March 24, 2024

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**MiTek®**

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





Job 3824017	Truss T13G	Truss Type GABLE	Qty 1	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322048
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:12 2024 Page 1

ID:Y2\_0zpqoAsGloDkUx1xpFJzu90w-RSKR?kjsipM7GU\_2OMrKpieTqBnrP9\_LNxs71zYUOL

1-6-0	5-8-0	8-3-8	12-5-15	15-5-15	19-9-12	25-7-13	29-5-15	31-4-0	36-7-12	42-0-0	43-6-0
1-6-0	5-8-0	2-7-8	4-2-7	3-0-0	4-3-13	5-10-1	3-10-2	1-10-1	5-3-12	5-4-4	1-6-0

Scale = 1:83.0

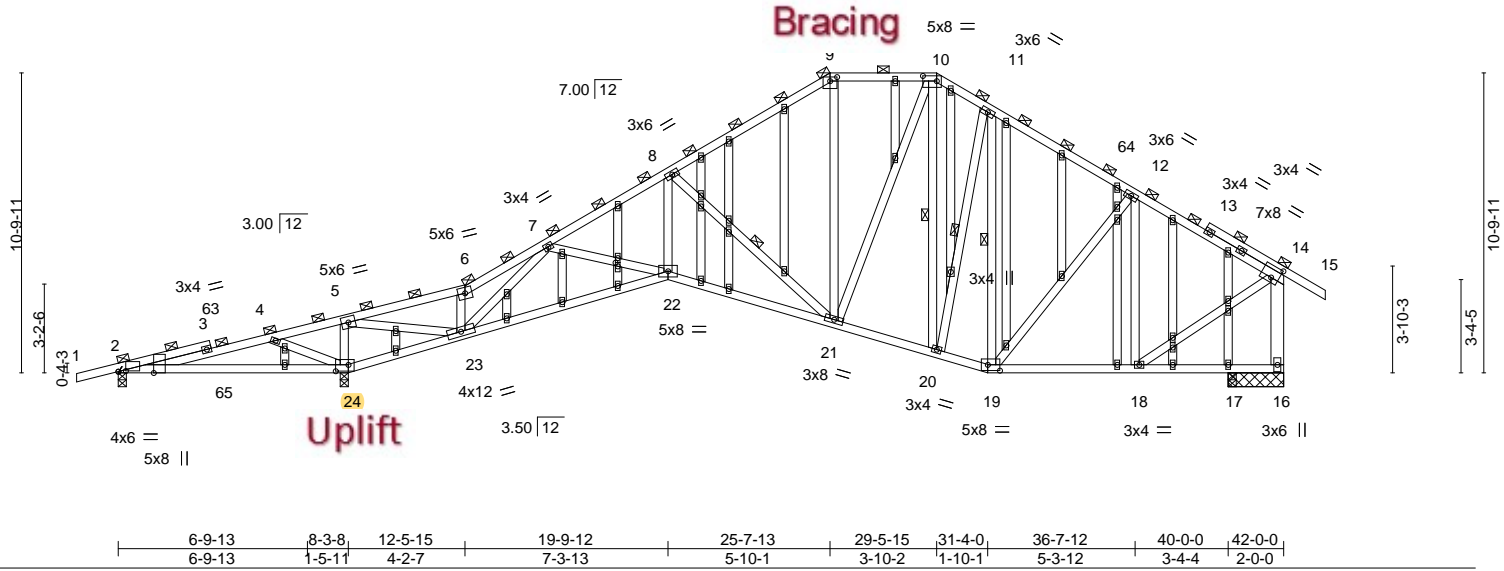


Plate Offsets (X,Y)--	[2:0-3-4,0-0-5], [2:0-0-9,Edge], [9:0-3-0,0-1-12], [10:0-6-0,0-2-4], [14:0-3-4,0-5-0], [19:0-5-4,0-2-8], [24:0-5-8,0-2-12], [57:0-1-10,0-1-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.67	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.69	Vert(LL) 0.17 22 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.63	Vert(CT) -0.36 22-23 >999 180		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS	Horz(CT) 0.15 16 n/a n/a		
				Weight: 387 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD 2-0-0 oc purlins (3-8-5 max.), except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 4-1-11 oc bracing.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 8-21, 10-20, 11-20, 11-19
5-23: 2x4 SP No.2, 14-16: 2x6 SP No.2	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 0-3-8 except (jt=length) 16=2-0-0.  
 (lb) - Max Horz 2=422(LC 11)  
**Max Uplift** All uplift 100 lb or less at joint(s) 17 except 2=354(LC 8), 16=444(LC 13), 24=855(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 17, 17 except 16=1092(LC 1), 24=2032(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=668/1600, 4-5=933/1807, 5-6=983/373, 6-7=-1152/504, 7-8=-2292/1075, 8-9=-1212/741, 9-10=-977/694, 10-11=-1002/775, 11-12=-1028/680, 12-14=-919/540, 14-16=-1152/735  
 BOT CHORD 2-24=-1416/488, 23-24=-1929/922, 22-23=-822/1889, 21-22=-932/2060, 20-21=-310/872, 19-20=-329/855, 18-19=-332/747  
 WEBS 4-24=-354/389, 5-24=-1264/593, 5-23=-1166/2790, 6-23=-504/280, 7-23=-1112/639, 8-22=-420/1174, 8-21=-1391/702, 9-21=-140/344, 10-21=-205/479, 10-20=-238/294, 11-20=-252/239, 12-18=-442/247, 14-18=-350/895

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=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 2-8-6, Zone1 2-8-6 to 25-7-13, Zone3 25-7-13 to 29-5-15, Zone2 29-5-15 to 35-5-3, Zone1 35-5-3 to 43-6-0 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
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 2=354, 16=444, 24=855.
  - 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 O'Regan, Philip, 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.

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

March 24, 2024

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

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Job	Truss	Truss Type	Qty	Ply	JFC - NELSON RES.	T33322049
3824017	T14	Piggyback Base	3	1		

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:13 2024 Page 1

ID:Y2\_0zpqoAsGloDkUx1xpFJzu90w-veHpD4klD0xDIQ3Bb6t4t1FqoEzrarO7a1gPFTzYUOK  
 1-6-0 | 5-8-0 | 8-3-8 | 12-5-15 | 15-5-15 | 19-9-12 | 25-0-14 | 30-0-14 | 31-7-8 | 1-6-10  
 1-6-0 | 5-8-0 | 2-7-8 | 4-2-7 | 3-0-0 | 4-3-13 | 5-3-2 | 5-0-0 | 1-6-10

Scale = 1:71.0

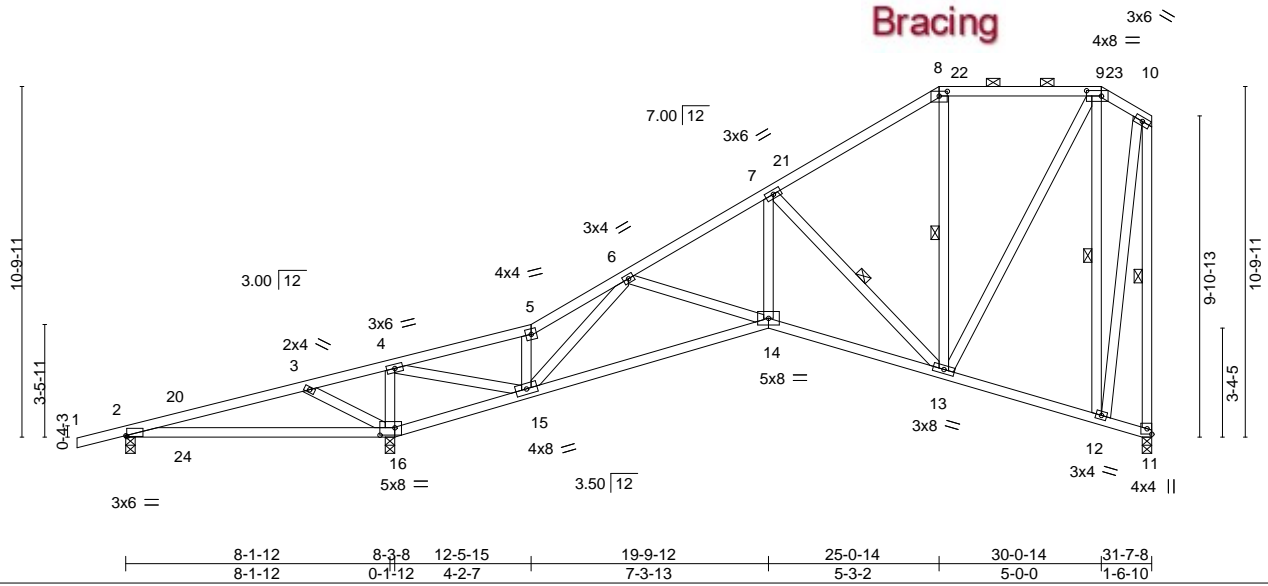


Plate Offsets (X,Y)--	[2:0-0-6,0-0-5], [8:0-3-0,0-1-12], [9:0-5-8,0-2-0], [16:0-5-8,0-2-12]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.64	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.57	Vert(LL) 0.17 16-19 >587 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.69	Vert(CT) -0.27 14-15 >999 180		
BCDL 10.0	Code FBC2023/TP12014	Matrix-MS	Horz(CT) 0.08 11 n/a n/a		
				Weight: 217 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-2-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-9.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 5-6-9 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 7-13, 8-13, 9-12, 10-11

**REACTIONS.** (size) 2=0-3-8, 16=0-3-8, 11=0-3-8  
 Max Horz 2=513(LC 12)  
 Max Uplift 2=-312(LC 8), 16=-698(LC 12), 11=-328(LC 12)  
 Max Grav 2=132(LC 25), 16=1516(LC 1), 11=764(LC 1)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-542/779, 3-4=-737/998, 4-5=-640/45, 5-6=-753/145, 6-7=-1199/524, 7-8=-534/267, 8-9=-394/305, 10-11=-742/474  
 BOT CHORD 2-16=-682/62, 15-16=-1076/356, 14-15=-709/1076, 13-14=-654/1067  
 WEBS 3-16=-431/345, 4-16=-902/495, 4-15=-759/1648, 5-15=-393/201, 6-15=-570/407, 7-14=-359/712, 7-13=-931/601, 9-13=-365/599, 9-12=-647/451, 10-12=-396/670

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=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 1-7-15, Zone1 1-7-15 to 25-0-14, Zone2 25-0-14 to 29-6-8, Zone1 29-6-8 to 30-0-14, Zone3 30-0-14 to 31-5-12 zone; 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.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TP1 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=312, 16=698, 11=328.
  - 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 ORegan, Philip, 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.

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

March 24, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TP1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	 <p>16023 Swingley Ridge Rd.        Chesterfield, MO 63017        314.434.1200 / MiTek-US.com</p>
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Job	Truss	Truss Type	Qty	Ply	JFC - NELSON RES.	T33322050
3824017	T15	MONO TRUSS	6	1		

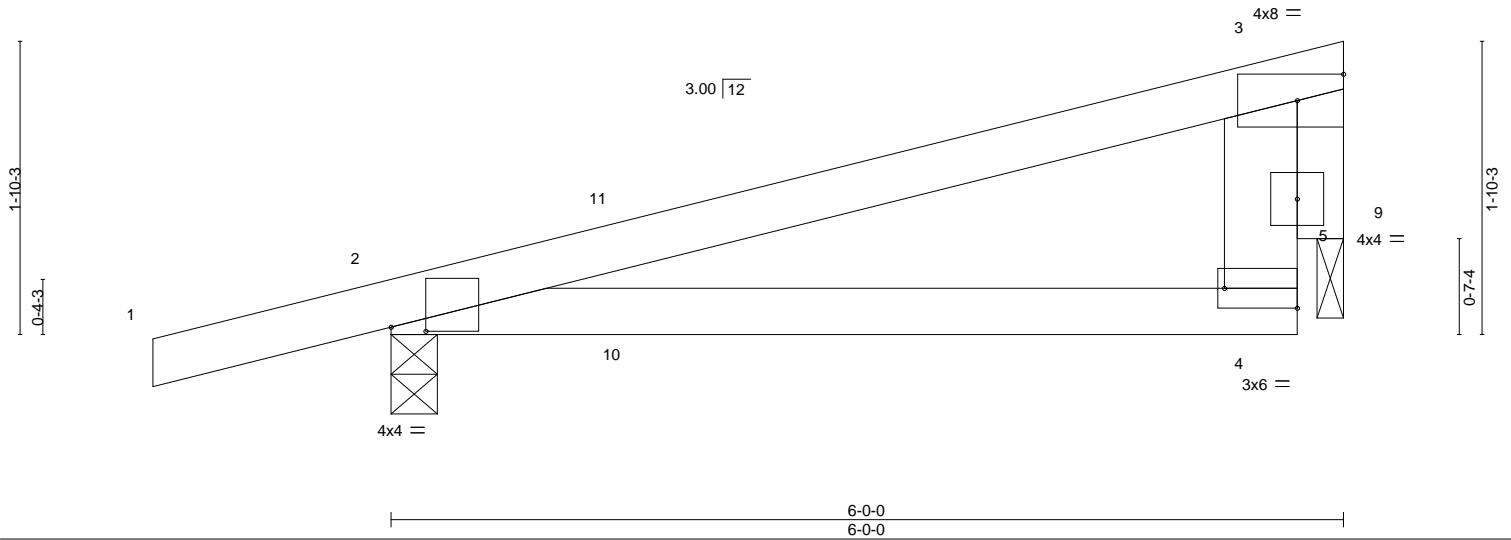
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:14 2024 Page 1

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Scale = 1:14.5



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.37	in	(loc)	l/defl	L/d	MT20	244/190		
TCDL	7.0	Lumber DOL	1.25	BC	0.25	Vert(LL)	0.04	4-8	>999	Weight: 24 lb FT = 20%			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Vert(CT)	0.04	4-8	>999				
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MR		Horz(CT)	-0.00	9	n/a				

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 9-7-10 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 9=0-2-0  
 Max Horz 2=93(LC 8)  
 Max Uplift 2=-264(LC 8), 9=-147(LC 8)  
 Max Grav 2=309(LC 1), 9=177(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-237/292  
 BOT CHORD 2-4=-338/215

- NOTES-**
- 1) 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 1-6-0, Zone1 1-6-0 to 5-5-12 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=264, 9=147.

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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:

March 24,2024

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Job 3824017	Truss T15G	Truss Type GABLE	Qty 2	Ply 1	JFC - NELSON RES. Job Reference (optional)	T33322051
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Feb 22 2024 MiTek Industries, Inc. Fri Mar 22 05:01:14 2024 Page 1

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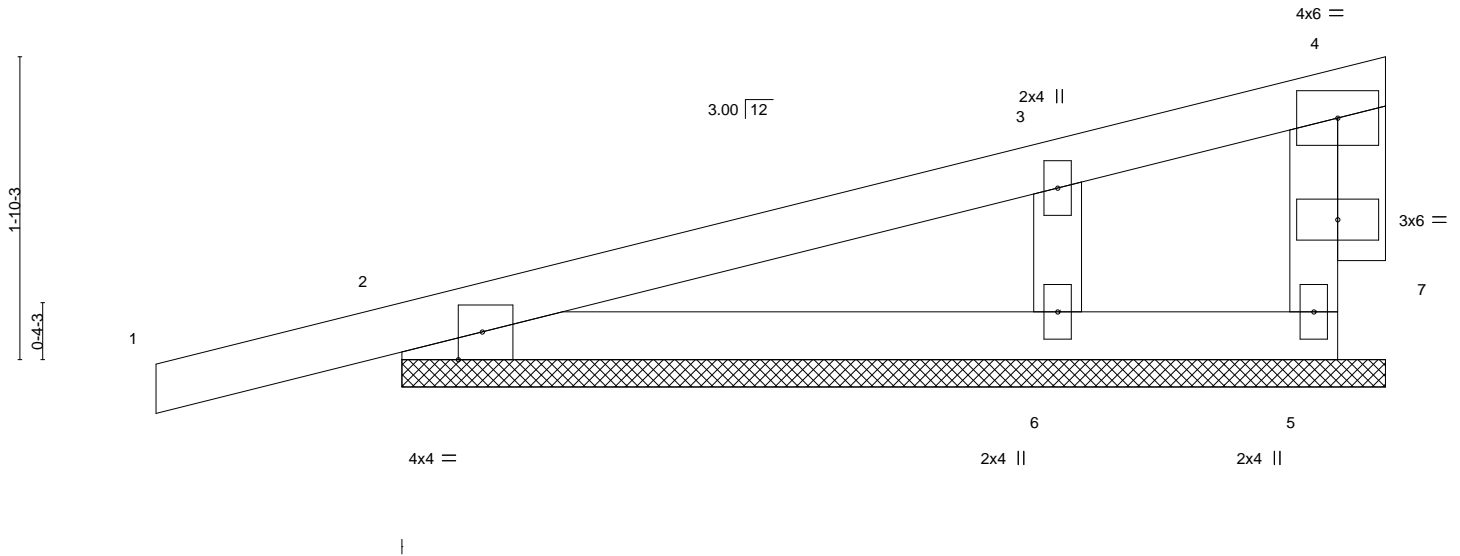


Plate Offsets (X,Y)--	[2:0-1-12,Edge]
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LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.30	Vert(LL) 0.00	1	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.13	Vert(CT) 0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-P					Weight: 24 lb	FT = 20%

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

**REACTIONS.** (size) 5=6-0-0, 2=6-0-0, 6=6-0-0  
 Max Horz 2=95(LC 8)  
 Max Uplift 5=14(LC 8), 2=153(LC 8), 6=137(LC 12)  
 Max Grav 5=8(LC 1), 2=221(LC 1), 6=272(LC 1)


**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-6=205/519

- NOTES-**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=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
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=153, 6=137.

This item has been digitally signed and sealed by ORegan, Philip, 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.

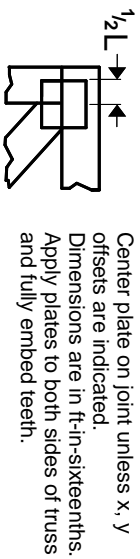
Philip J. O'Regan PE No.58126  
 MiTek Inc. DBA MiTek USA FL Cert 6634  
 16023 Swingley Ridge Rd. Chesterfield, MO 63017  
 Date:

March 24, 2024

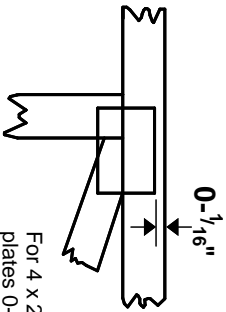
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	 <p>16023 Swingley Ridge Rd.        Chesterfield, MO 63017        314.434.1200 / MiTek-US.com</p>
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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- 1/16" from outside edge of truss.



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

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

## PLATE SIZE

4 X 4

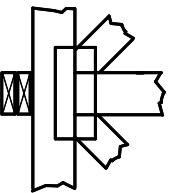
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING

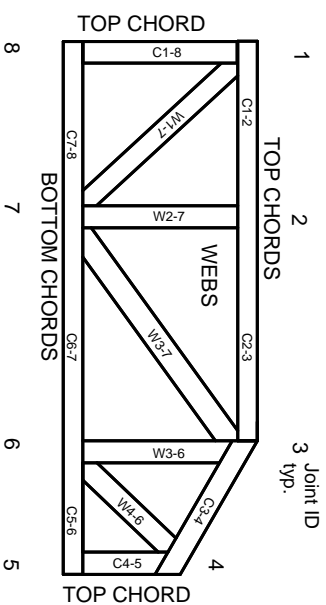


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TFP1: 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-1-1988, 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/TFP 1 section 6.3. These truss designs rely on Lumber values established by others.

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# General Safety Notes

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

1. Additional stability/bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative 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/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 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/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

# MITek®

MITtek Engineering Reference Sheet: Mill-7473 rev. 1/2/2023