



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

RE: 3358903 - WIDERGREN RES.

MiTek USA, Inc.

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

**Site Information:**

Customer Info: TODD WIDERGREN Project Name: Widergren Res. Model: Custom  
Lot/Block: N/A Subdivision: N/A  
Address: 127 NW Treeline Glen, TBD  
City: Columbia Cty State: FL

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

Name: License #:  
Address: State:  
City:

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

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

This package includes 25 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	T30009372	T01	3/9/23	15	T30009386	V03	3/9/23
2	T30009373	T01G	3/9/23	16	T30009387	V04	3/9/23
3	T30009374	T02	3/9/23	17	T30009388	V05	3/9/23
4	T30009375	T03	3/9/23	18	T30009389	V06	3/9/23
5	T30009376	T03G	3/9/23	19	T30009390	V07	3/9/23
6	T30009377	T04	3/9/23	20	T30009391	V08	3/9/23
7	T30009378	T05	3/9/23	21	T30009392	V09	3/9/23
8	T30009379	T05G	3/9/23	22	T30009393	V10	3/9/23
9	T30009380	T06	3/9/23	23	T30009394	V11	3/9/23
10	T30009381	T06G	3/9/23	24	T30009395	V12	3/9/23
11	T30009382	T07	3/9/23	25	T30009396	V13	3/9/23
12	T30009383	T08G	3/9/23				
13	T30009384	V01	3/9/23				
14	T30009385	V02	3/9/23				



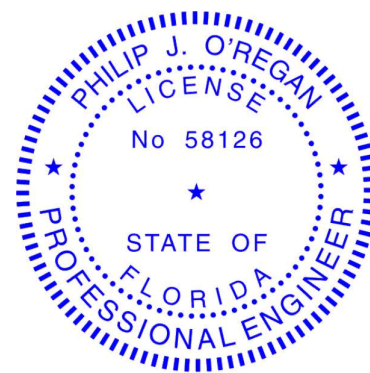
This item has been electronically signed and sealed by O'Regan, Philip, PE using a Digital Signature.

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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: O'Regan, 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 9, 2023

O'Regan, Philip

1 of 1

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009372
3358903	T01	Common	13	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:23 2023 Page 1  
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-772EJEktGGxt1qe6VVZCXWyJulu7MgAXqLDZHezcyAo

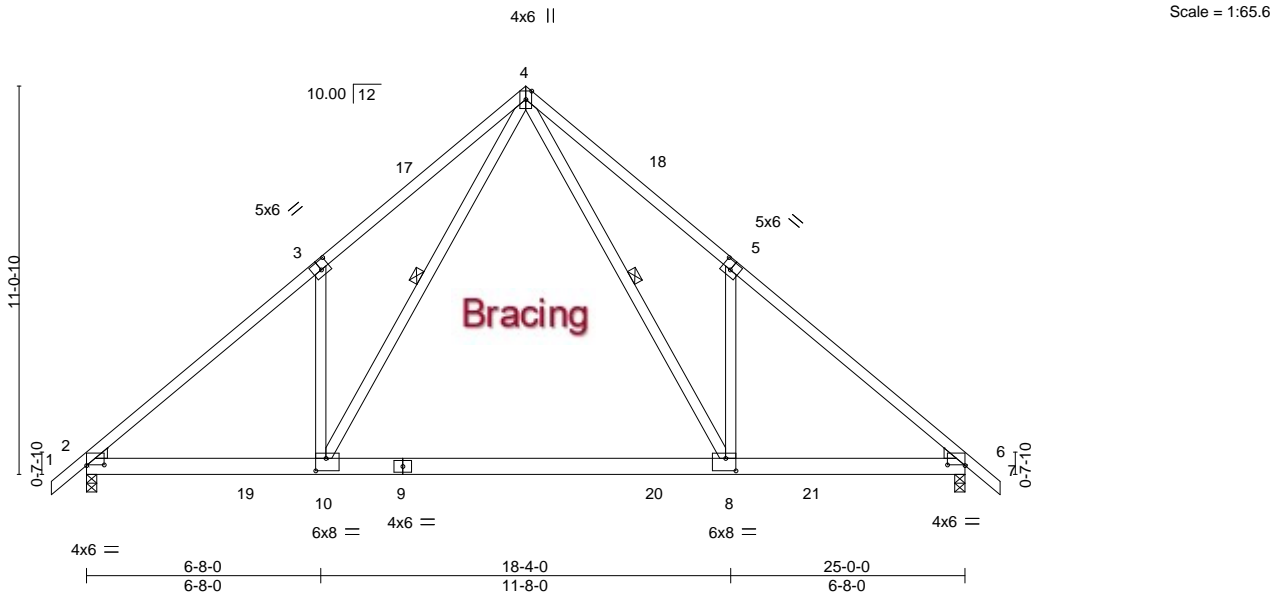


Plate Offsets (X,Y)-- [2:0-6-0,0-0-4], [3:0-3-0,0-3-0], [5:0-3-0,0-3-0], [6:0-6-0,0-0-4], [8:0-3-8,0-4-4], [10:0-3-8,0-4-4]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.60	in (loc)	l/defl	MT20	GRIP
TCDL	7.0	Lumber DOL	1.25	BC	0.46	Vert(LL)	-0.29 8-10 >999		244/190
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.47	Vert(CT)	-0.54 8-10 >552		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS		Horz(CT)	0.02 6 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 3-5-10 oc purlins.
BOT CHORD	2x6 SP M 26	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 4-8, 4-10
WEDGE			
Left: 2x4 SP No.3 , Right: 2x4 SP No.3			

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
Max Horz 2=248(LC 11)  
Max Uplift 2=286(LC 12), 6=286(LC 13)  
Max Grav 2=1498(LC 19), 6=1498(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2070/389, 3-4=-2110/615, 4-5=-2110/615, 5-6=-2071/389  
BOT CHORD 2-10=-324/1662, 8-10=-101/978, 6-8=-217/1543  
WEBS 4-8=-455/1413, 5-8=-365/326, 4-10=-455/1412, 3-10=-365/326

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 26-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=286, 6=286.
  - 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: 1-4=-54, 4-7=-54, 10-11=-20, 8-10=-80(F=-60), 8-14=-20

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

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

March 9,2023

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009373
3358903	T01G	Common Supported Gable	2	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Mar 8 14:51:25 2023
Page 1
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1-0-0
12-6-0
25-0-0
26-0-0

1-0-0
12-6-0
12-6-0
1-0-0

4x4 =
Scale = 1:67.4

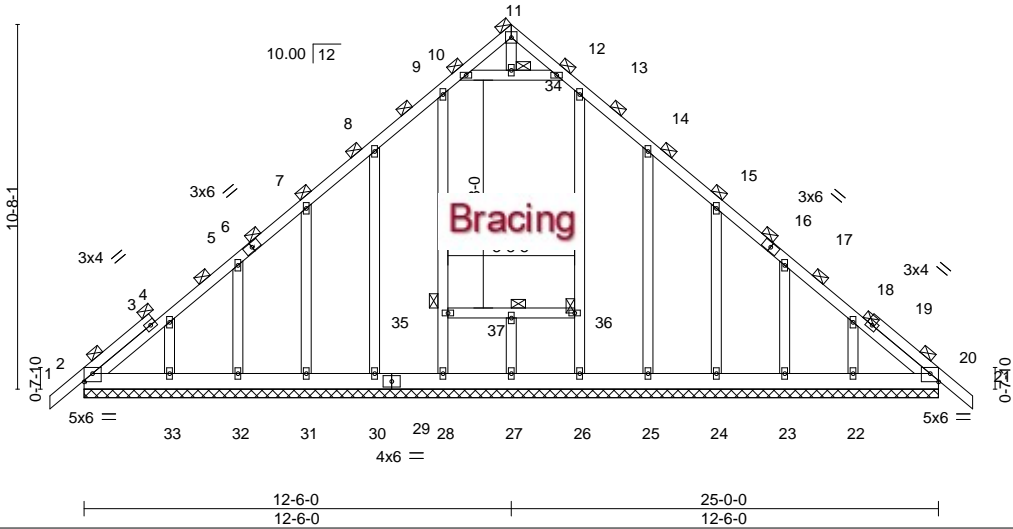


Plate Offsets (X,Y)--		[2:Edge,0-2-14], [20:Edge,0-2-14]							
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>		<b>PLATES</b>	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.07	Vert(LL)	-0.00	MT20	GRIP
TCDL	7.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	-0.00		244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S				Weight: 205 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	2-0-0 oc purlins (6-0-0 max.).
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.3	JOINTS	1 Brace at Jt(s): 11, 34, 35, 36, 37

**REACTIONS.** All bearings 25-0-0.  
 (lb) - Max Horz 2=-239(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 28, 30, 31, 32, 33, 25, 24, 23, 22, 20  
 Max Grav All reactions 250 lb or less at joint(s) 2, 28, 30, 31, 32, 33, 26, 25, 24, 23, 22, 27, 20

**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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 12-6-0, Corner(3R) 12-6-0 to 15-6-0, Exterior(2N) 15-6-0 to 26-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Vertical gable studs spaced at 2-0-0 oc and horizontal gable studs spaced at 6-11-8 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, 28, 30, 31, 32, 33, 25, 24, 23, 22, 20.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

March 9,2023

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009374
3358903	T02	Common	19	1	Job Reference (optional)	

Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:26 2023 Page 1  
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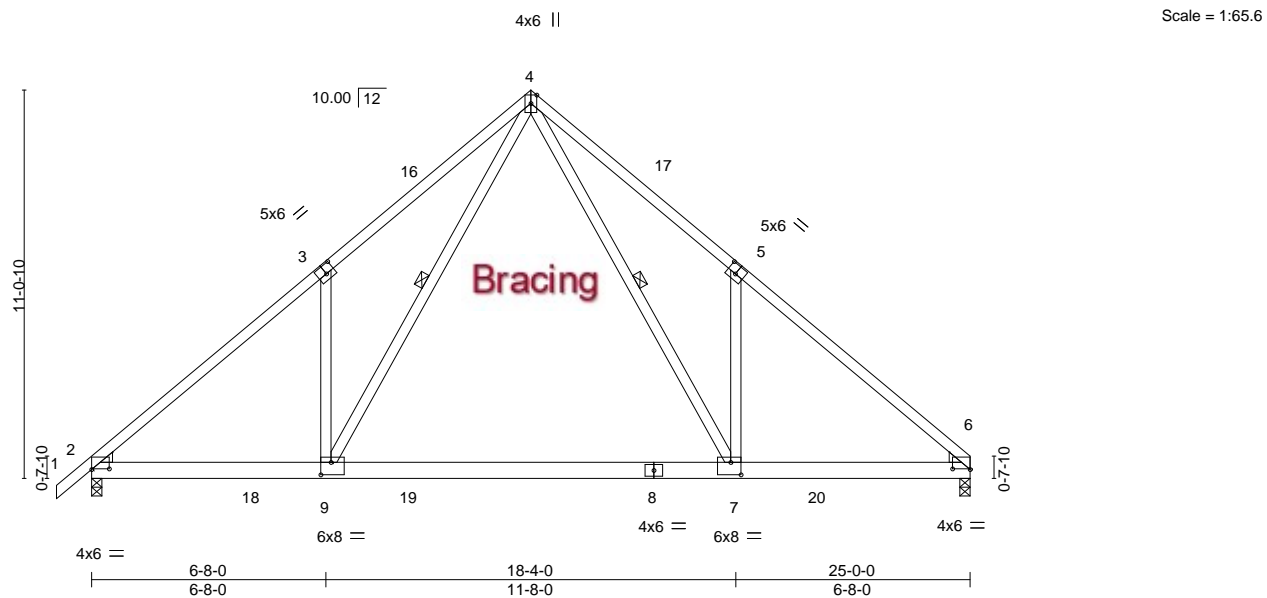


Plate Offsets (X,Y)--		[2:0-6-0,0-0-4], [3:0-3-0,0-3-0], [5:0-3-0,0-3-0], [6:0-6-0,0-0-4], [7:0-3-8,0-4-4], [9:0-3-8,0-4-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.60
TCDL 7.0	Lumber DOL	1.25	BC 0.46
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.47
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.29 7-9 >999 240
			Vert(CT) -0.54 7-9 >553 180
			Horz(CT) 0.02 6 n/a n/a
			PLATES GRIP
			MT20 244/190
			Weight: 162 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-5-9 oc purlins.
BOT CHORD 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-7, 4-9
WEDGE	
Left: 2x4 SP No.3 , Right: 2x4 SP No.3	

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
Max Horz 2=242(LC 11)  
Max Uplift 2=-287(LC 12), 6=-265(LC 13)  
Max Grav 2=1498(LC 19), 6=1447(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2072/389, 3-4=-2111/615, 4-5=-2115/619, 5-6=-2073/390  
BOT CHORD 2-9=-336/1654, 7-9=-113/969, 6-7=-230/1536  
WEBS 4-7=-459/1418, 5-7=-366/326, 4-9=-455/1412, 3-9=-365/326

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 25-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=287, 6=265.
  - 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: 1-4=-54, 4-6=-54, 9-10=-20, 7-9=-80(F=-60), 7-13=-20

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

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

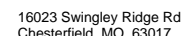
March 9,2023

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

Builders FirstSource (Lake City, FL) Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:28 2023 Page 1  
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 1-0-0 5-9-5 11-8-7 16-3-0 20-9-9 26-8-11 32-6-0  
 1-0-0 5-9-5 5-11-2 4-6-9 4-6-9 5-11-2 5-9-5





Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009376
3358903	T03G	Common Supported Gable	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Mar 8 14:51:30 2023
Page 1
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1-0-0

16-3-0
16-3-0

32-6-0
32-6-0

16-3-0
16-3-0

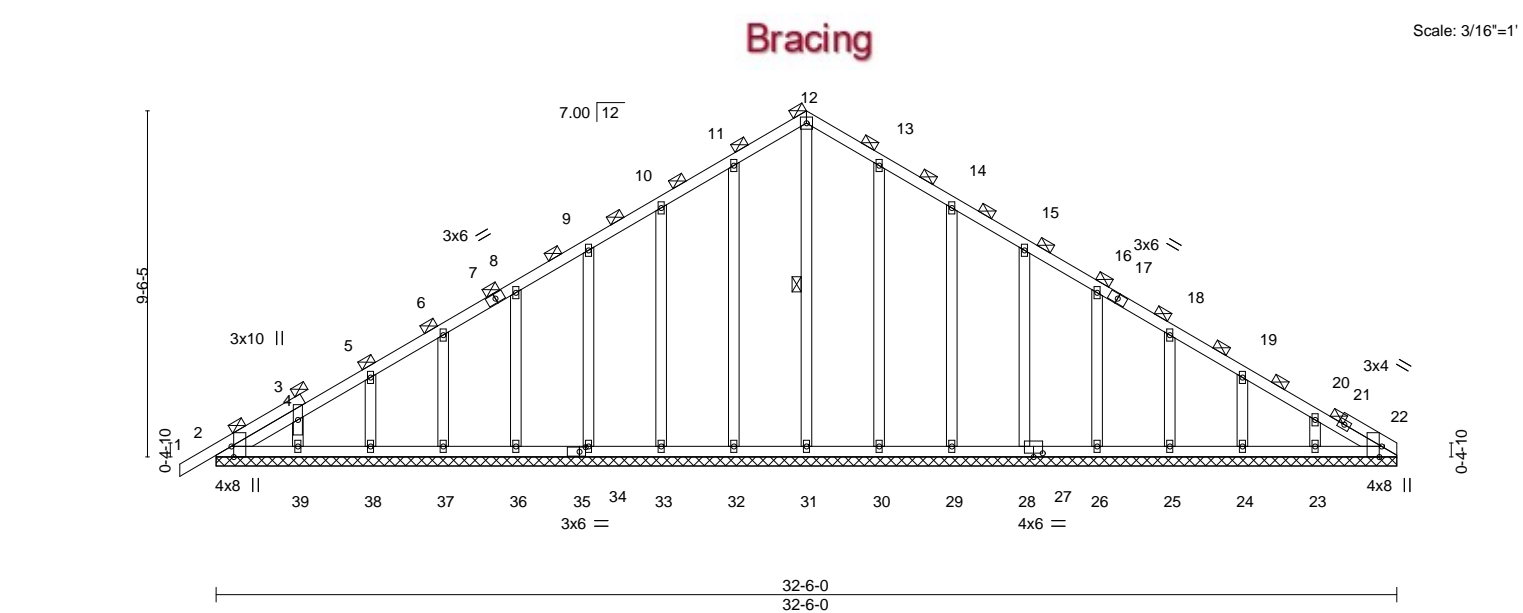


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [22:0-3-8,Edge], [28:0-3-0,0-1-4], [35:0-2-0,0-1-8]						
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>
TCLL	20.0	Plate Grip DOL	1.25	TC 0.06	in (loc) l/defl L/d	MT20
TCDL	7.0	Lumber DOL	1.25	BC 0.04	Vert(LL) -0.00 1 n/r 120	GRIP
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.15	Vert(CT) -0.00 1 n/r 120	244/190
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S	Horz(CT) 0.01 22 n/a n/a	
						Weight: 215 lb FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>
TOP CHORD	2x4 SP No.2	TOP CHORD
BOT CHORD	2x4 SP No.2	2-0-0 oc purlins (6-0-0 max.).
OTHERS	2x4 SP No.3	BOT CHORD
		Rigid ceiling directly applied or 10-0-0 oc bracing.
		WEBS
		1 Row at midpt 12-31

**REACTIONS.** All bearings 32-6-0.  
 (lb) - Max Horz 2=210(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 32, 33, 34, 36, 37, 38, 39, 30, 29, 28, 26, 25, 24, 23  
 Max Grav All reactions 250 lb or less at joint(s) 2, 31, 32, 33, 34, 36, 37, 38, 39, 30, 29, 28, 26, 25, 24, 23, 22

**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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 2-3-0, Exterior(2N) 2-3-0 to 16-3-0, Corner(3R) 16-3-0 to 19-6-0, Exterior(2N) 19-6-0 to 32-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable 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, 32, 33, 34, 36, 37, 38, 39, 30, 29, 28, 26, 25, 24, 23.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

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

March 9,2023

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009377
3358903	T04	Common	6	1		

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

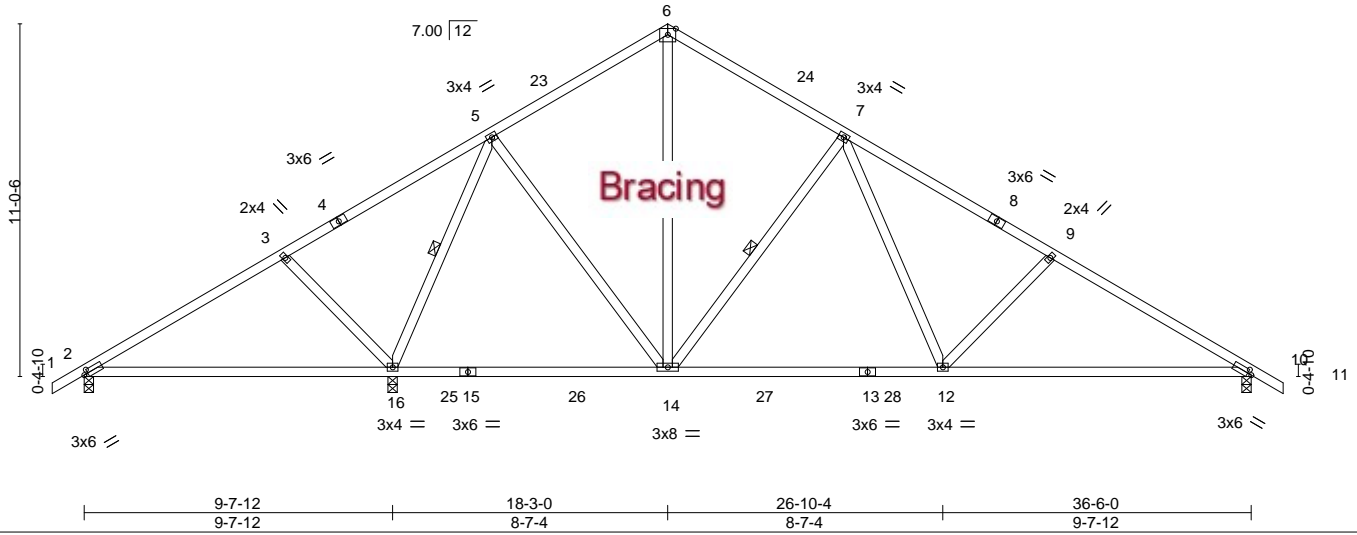
8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:32 2023 Page 1

ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-Ms5eCJrW914bcDqqXuDJPPpu7wrGzkRsuFuX6cncyAf

1-0-0 6-3-7 12-9-0 18-3-0 23-9-0 30-2-9 36-6-0 37-6-0  
1-0-0 6-3-7 6-5-9 5-6-0 5-6-0 6-5-9 6-3-7 1-0-0

5x6 =

Scale = 1:72.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.50	Vert(LL)	0.37 16-19 >315 240	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.90	Vert(CT)	0.31 16-19 >375 180				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.03 10 n/a n/a				
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							
								Weight: 201 lb		FT = 20%	

#### LUMBER-

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

#### REACTIONS.

(size) 2=0-3-8, 16=0-3-8, 10=0-3-8  
Max Horz 2=247(LC 11)  
Max Uplift 2=-78(LC 9), 16=-348(LC 12), 10=-234(LC 13)  
Max Grav 2=319(LC 23), 16=1818(LC 19), 10=1158(LC 20)

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

TOP CHORD 3-5=-81/471, 5-6=-732/249, 6-7=-709/236, 7-9=-1480/326, 9-10=-1677/347  
BOT CHORD 2-16=-252/192, 14-16=-85/299, 12-14=-45/907, 10-12=-211/1406  
WEBS 6-14=-143/439, 7-14=-729/284, 7-12=-116/690, 9-12=-362/216, 5-14=-43/616, 5-16=-1332/255, 3-16=-364/223

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-7-13, Interior(1) 2-7-13 to 18-3-0, Exterior(2R) 18-3-0 to 21-10-13, Interior(1) 21-10-13 to 37-6-0 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.
- 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) 2 except (jt=lb) 16=348, 10=234.

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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 9,2023

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

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

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009378
3358903	T05	Common	9	1		

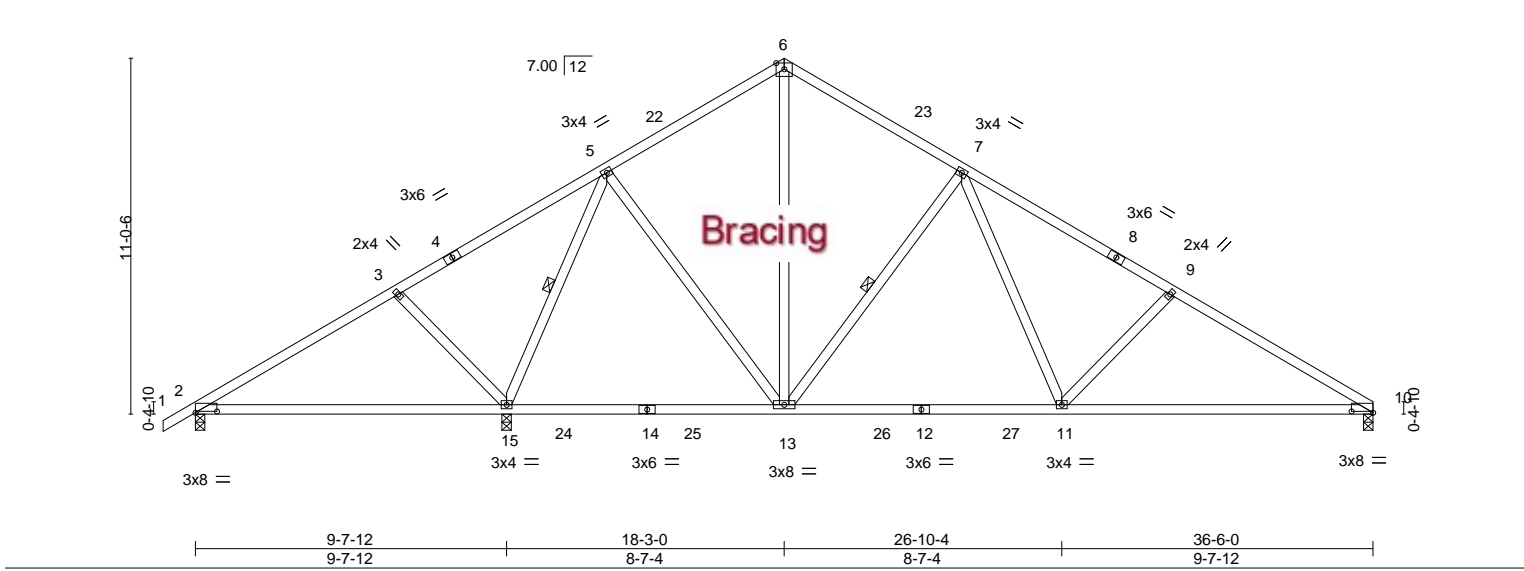
Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Mar 8 14:51:33 2023
Page 1
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-q2f0Qfs8vLCSENP15bkYxdM3tKBnBg?7ve5e3zcyAe

-1-0-0  
1-0-0
6-3-7  
6-3-7
12-9-0  
6-5-9
18-3-0  
5-6-0
23-9-0  
5-6-0
30-2-9  
6-5-9
36-6-0  
6-3-7

5x6 =

Scale = 1:71.4



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.50	Vert(LL)	0.37	15-18	>315	240	MT20	244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.91	Vert(CT)	0.31	15-18	>375	180			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.03	10	n/a	n/a			
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 199 lb	FT = 20%	

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

<b>REACTIONS.</b>		(size)	2=0-3-8, 15=0-3-8, 10=0-3-8
		Max Horz	2=243(LC 11)
		Max Uplift	2=-77(LC 9), 15=-351(LC 12), 10=-211(LC 13)
		Max Grav	2=319(LC 23), 15=1816(LC 19), 10=1107(LC 20)

<b>FORCES.</b>		(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	3-5=-85/467, 5-6=-733/246, 6-7=-709/232, 7-9=-1484/326, 9-10=-1681/348	
BOT CHORD	13-15=-89/290, 11-13=-62/902, 10-11=-229/1415	
WEBS	3-15=-364/223, 5-15=-1330/258, 5-13=-47/617, 6-13=-140/439, 7-13=-731/285, 7-11=-118/695, 9-11=-366/218	

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-7-13, Interior(1) 2-7-13 to 18-3-0, Exterior(2R) 18-3-0 to 21-10-13, Interior(1) 21-10-13 to 36-6-0 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.
  - 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) 2 except (jt=lb) 15=351, 10=211.

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

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

March 9,2023



Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009379
3358903	T05G	GABLE	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:35 2023 Page 1  
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-mQnmrLtORySAUGZPC0m002ROu7stA19laD7BixzcyAc

1-0-0
6-3-7
12-9-0
18-3-0
23-9-0
30-2-9
36-6-0
1-0-0
6-3-7
6-5-9
5-6-0
5-6-0
6-5-9
6-3-7

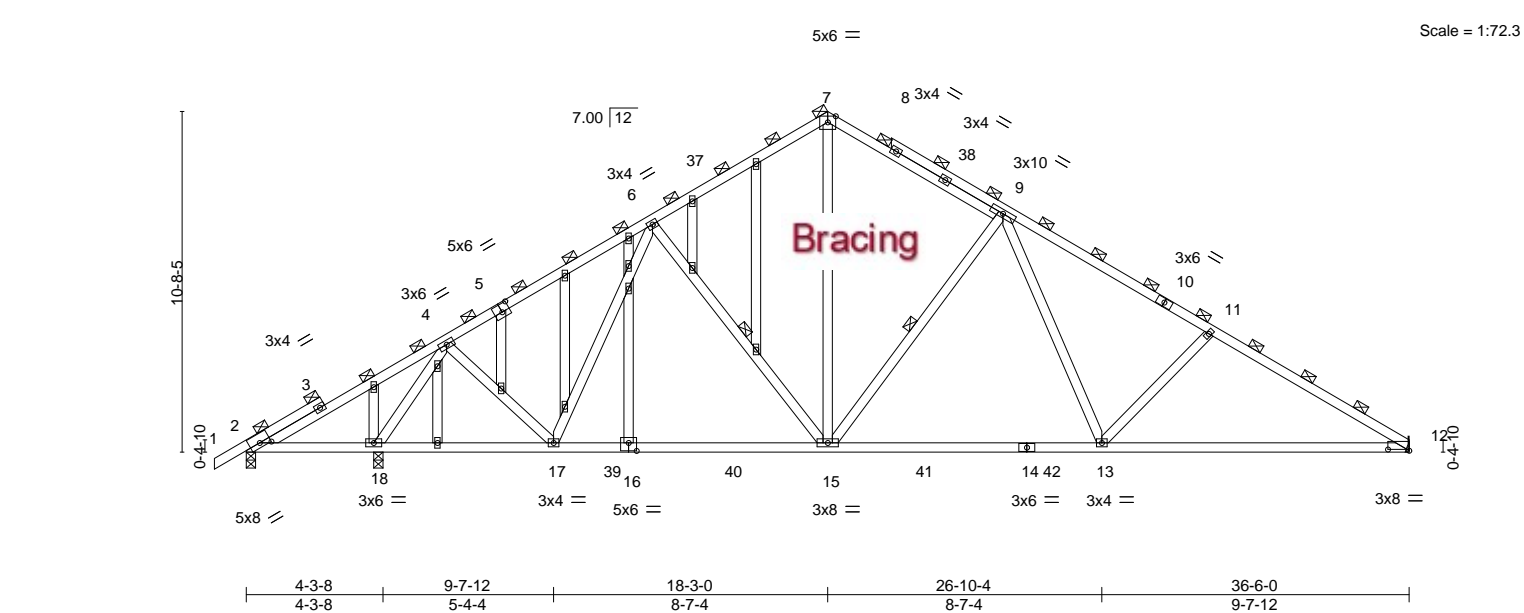


Plate Offsets (X,Y)-- [2:0-4-1,0-1-12], [5:0-3-0,0-3-0], [12:0-8-0,0-0-7], [16:0-3-0,0-3-0]						
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>
TCLL	20.0	Plate Grip DOL	1.25	TC 0.53	in (loc) l/defl L/d	GRIP
TCDL	7.0	Lumber DOL	1.25	BC 0.97	Vert(LL) -0.19 15-17 >999 240	MT20 244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.72	Vert(CT) -0.39 13-36 >999 180	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS	Horz(CT) 0.05 12 n/a n/a	
						Weight: 251 lb FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	2-0-0 oc purlins (3-5-9 max.).
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt                      9-15, 6-15
OTHERS	2x4 SP No.3		

**REACTIONS.** (size) 2=0-3-8, 12=Mechanical, 18=0-3-8  
Max Horz 2=236(LC 11)  
Max Uplift 2=-238(LC 19), 12=-249(LC 13), 18=-404(LC 12)  
Max Grav 2=62(LC 12), 12=1361(LC 20), 18=2033(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-277/1006, 4-6=-1201/233, 6-7=-1271/318, 7-9=-1210/300, 9-11=-1979/400, 11-12=-2174/420  
BOT CHORD 2-18=-798/257, 17-18=-127/554, 15-17=-166/1169, 13-15=-122/1353, 12-13=-291/1838  
WEBS 7-15=-204/923, 9-15=-675/272, 9-13=-116/682, 11-13=-357/215, 6-17=-310/93, 4-17=-41/760, 4-18=-2229/478

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-7-13, Interior(1) 2-7-13 to 18-3-0, Exterior(2R) 18-3-0 to 21-10-13, Interior(1) 21-10-13 to 36-6-0 zone; 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=238, 12=249, 18=404.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

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

March 9,2023

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009380
3358903	T06	Common	2	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Mar 8 14:51:37 2023
Page 1
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-jpvXF0vfzZltj\_joKRpU6TXhxdReztb2XclnqzcyAa

1-0-0
7-9-1
15-3-0
22-8-15
30-6-0
31-6-0
1-0-0

1-0-0
7-9-1
7-5-15
7-5-15
7-9-1
1-0-0

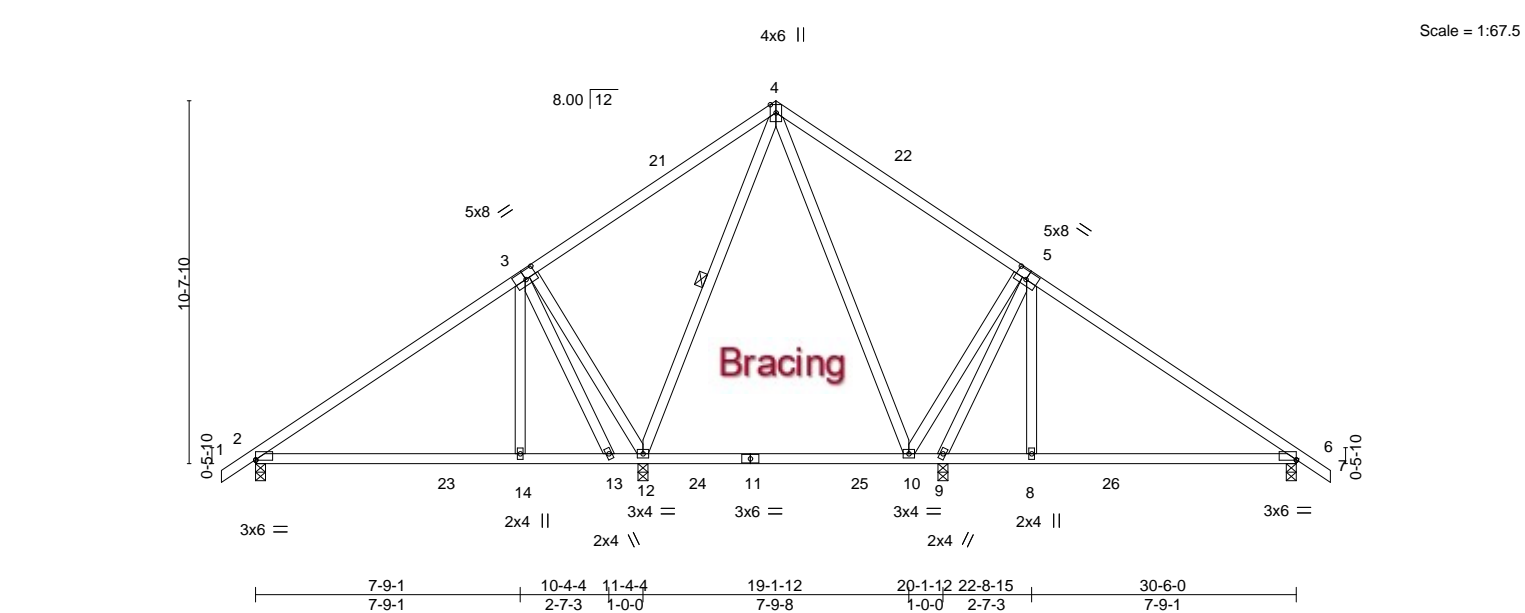


Plate Offsets (X,Y)--										[2:0-0-0,0-0-3], [3:0-4-0,0-3-0], [5:0-4-0,0-3-0], [6:Edge,0-0-3]											
<b>LOADING</b> (psf)		<b>SPACING-</b>				2-0-0		<b>CSI.</b>		<b>DEFL.</b>		in (loc)		l/defl		L/d		<b>PLATES</b>		<b>GRIP</b>	
TCLL	20.0	Plate Grip DOL				1.25		TC	0.67	Vert(LL)	0.17	8-20	>738	240				MT20	244/190		
TCDL	7.0	Lumber DOL				1.25		BC	0.58	Vert(CT)	-0.22	8-20	>570	180							
BCLL	0.0 *	Rep Stress Incr				YES		WB	0.58	Horz(CT)	0.01	2	n/a	n/a							
BCDL	10.0	Code FBC2020/TPI2014						Matrix-MS										Weight: 186 lb	FT = 20%		



Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009382
3358903	T07	MONOPITCH GIRDER	1	2	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Mar 8 14:51:40 2023
Page 1
ID:Ys8zIwKNmTR0LjtaCjYR7AyUufK-7Oafu2xXGU4SaSRN?ZMBj59JF8cRrHD1kVqyO9zcyAX

4-0-0

4-0-0

4-0-0

3-6-0

8-0-0

11-6-0

8-1-10

0

2x4 ||

4

4x8 //

3

8.00 |12

3x8 //

2

Bracing

Uplift

1

11

7

12

6

13

5

Uplift

3x6 =

4-0-0

4-0-0

8-0-0

4-0-0

11-6-0

3-6-0

Scale = 1:45.9

Plate Offsets (X,Y)-- [6:0-3-8,0-4-8]											
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>				<b>PLATES</b>	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.24	in	(loc)	I/defl	L/d	MT20	GRIP
TCDL	7.0	Lumber DOL	1.25	BC	0.82	Vert(LL)	-0.05	6-7	>999		244/190
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.80	Vert(CT)	-0.09	6-7	>999		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS		Horz(CT)	0.02	5	n/a		
										Weight: 170 lb FT = 20%	

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-5-15 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-5

**REACTIONS.** (size) 1=0-3-8, 5=0-3-8  
Max Horz 1=261(LC 8)  
Max Uplift 1=610(LC 8), 5=1119(LC 8)  
Max Grav 1=3426(LC 2), 5=5112(LC 2)

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

TOP CHORD 1-2=-4951/864, 2-3=-2368/380

BOT CHORD 1-7=-927/4106, 6-7=-927/4106, 5-6=-432/1933

WEBS 2-7=-502/2742, 2-6=-2632/599, 3-6=-810/4198, 3-5=-3642/814

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=610, 5=1119.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1308 lb down and 264 lb up at 2-0-12, 1308 lb down and 264 lb up at 4-0-12, 1308 lb down and 264 lb up at 6-0-12, 1308 lb down and 264 lb up at 8-0-12, and 1308 lb down and 264 lb up at 10-0-12, and 1271 lb down and 262 lb up at 11-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-54, 5-8=-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 9,2023

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009382
3358903	T07	MONOPITCH GIRDER	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022
MiTek Industries, Inc.
Wed Mar 8 14:51:41 2023
Page 2
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-ba815Oy91oCJCb0ZZGtQGJhU?YygakTAz9aWwbzcyAW

LOAD CASE(S)
Standard
Concentrated Loads (lb)
Vert: 7=-1182(B) 6=-1182(B) 5=-1143(B) 11=-1182(B) 12=-1182(B) 13=-1182(B)



Builders FirstSource (Lake City, FL) Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:42 2023 Page 1  
 ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-3niQJkzno6KAplb6\_OfpWEcPyQUJMuKBPj3S1zcyAV  
 1-0-0 5-3-0 10-6-0 11-6-0  
 1-0-0 5-3-0 5-3-0 1-0-0

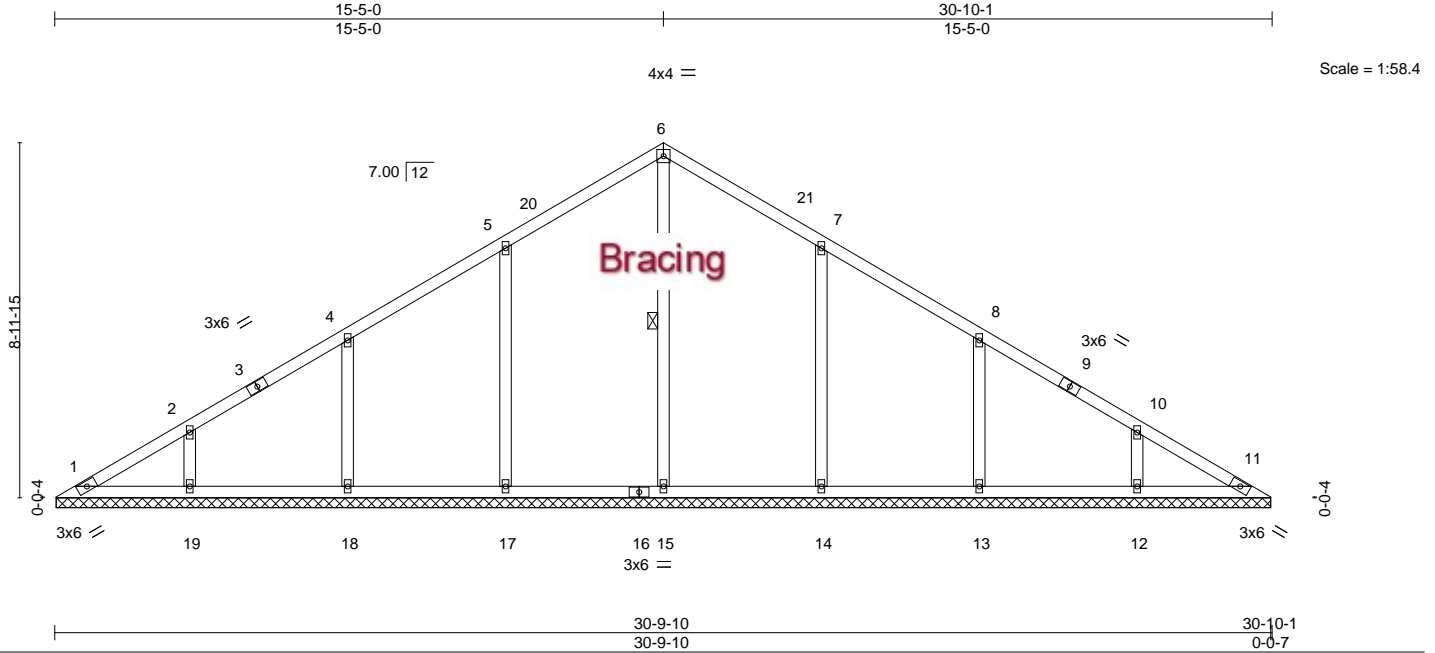


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009384
3358903	V01	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:43 2023 Page 1  
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-XzGoW4\_PZPS1RvAyghwuLknrkLnL2oZTQS3c\_UzcyAU



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.17	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.19	Horz(CT)	0.01	11	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S					Weight: 143 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 6-15

#### REACTIONS.

All bearings 30-9-3.  
(lb) - Max Horz 1=191(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 11 except 17=137(LC 12), 18=126(LC 12), 19=122(LC 12), 14=137(LC 13), 13=126(LC 13), 12=122(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 11 except 15=376(LC 22), 17=446(LC 19), 18=396(LC 19), 19=346(LC 19), 14=445(LC 20), 13=397(LC 20), 12=346(LC 20)

**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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-5-0, Interior(1) 3-5-0 to 15-5-0, Exterior(2R) 15-5-0 to 18-5-15, Interior(1) 18-5-15 to 30-3-9 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11 except (jt=lb) 17=137, 18=126, 19=122, 14=137, 13=126, 12=122.

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

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

March 9,2023

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

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



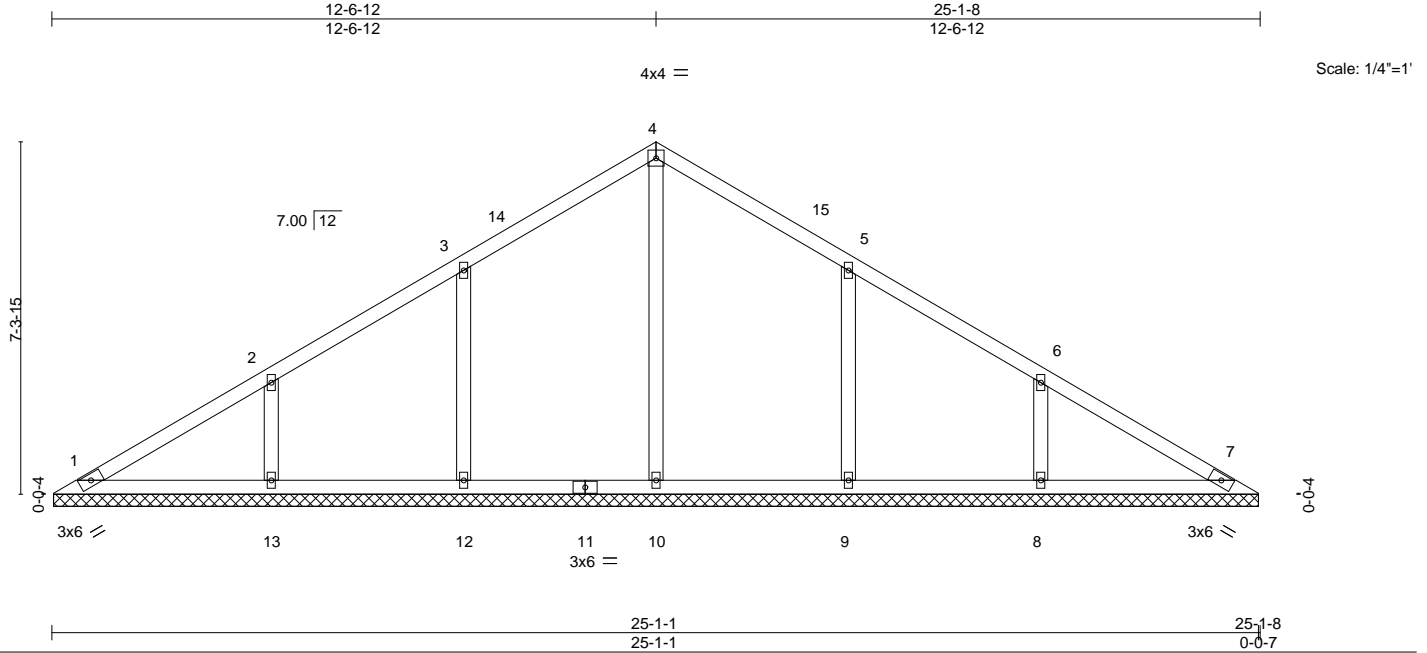
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009385
3358903	V02	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:45 2023 Page 1

ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-UMNYxm?g51ilgDKKo6yMQ9sB99TeWiSnumYj3MzcyAS



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.18	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S					Weight: 108 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

All bearings 25-0-10.  
(lb) - Max Horz 1=154(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-134(LC 12), 13=-142(LC 12), 9=-133(LC 13), 8=-142(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=372(LC 22), 12=398(LC 19), 13=409(LC 19), 9=398(LC 20), 8=409(LC 20)

**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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 12-6-12, Exterior(2R) 12-6-12 to 15-6-12, Interior(1) 15-6-12 to 24-7-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 12=134, 13=142, 9=133, 8=142.

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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 9,2023

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

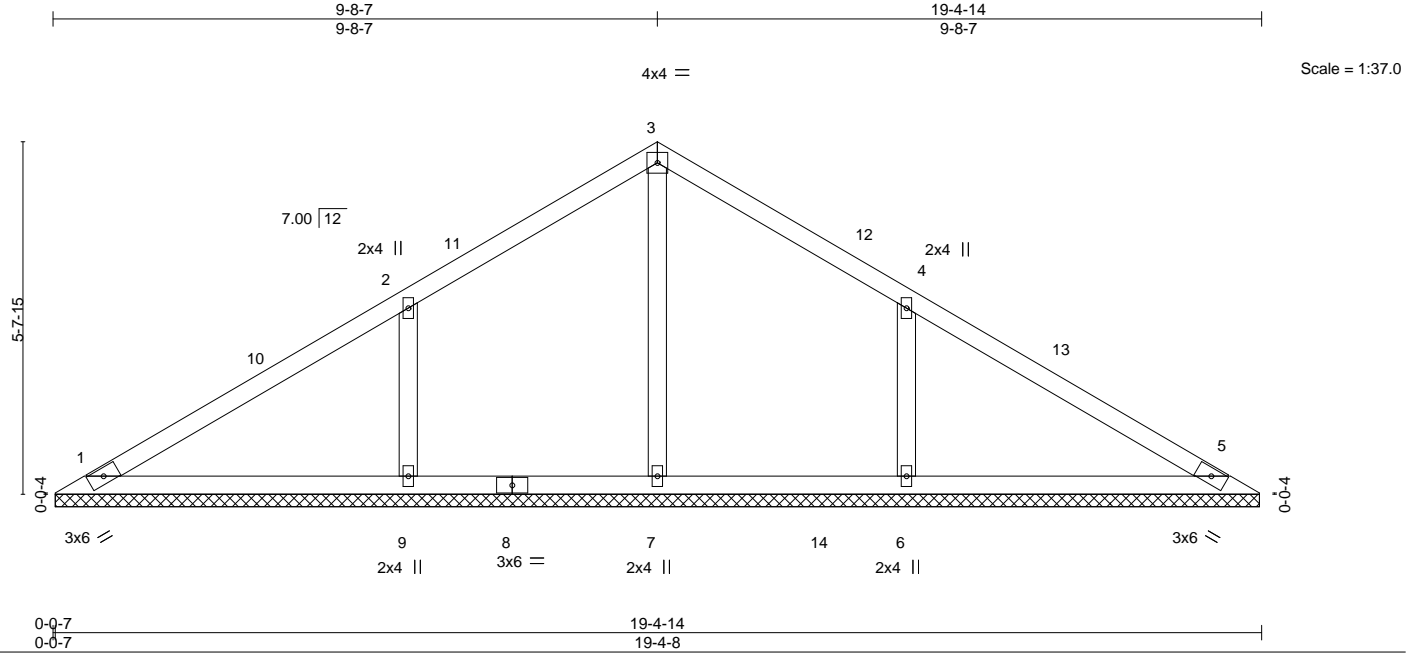


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009386
3358903	V03	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:46 2023 Page 1  
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-yYxw850lsKqcINvWLqTbzMPKzZoKFA?v6QHhbpzcyAR



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.29	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.21	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S					Weight: 76 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

All bearings 19-4-1.  
(lb) - Max Horz 1=118(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=182(LC 12), 6=182(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=291(LC 22), 9=523(LC 19), 6=526(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-9=315/205, 4-6=315/205

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 9-8-7, Exterior(2R) 9-8-7 to 12-8-7, Interior(1) 12-8-7 to 18-10-7 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=182, 6=182.

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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 9,2023

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



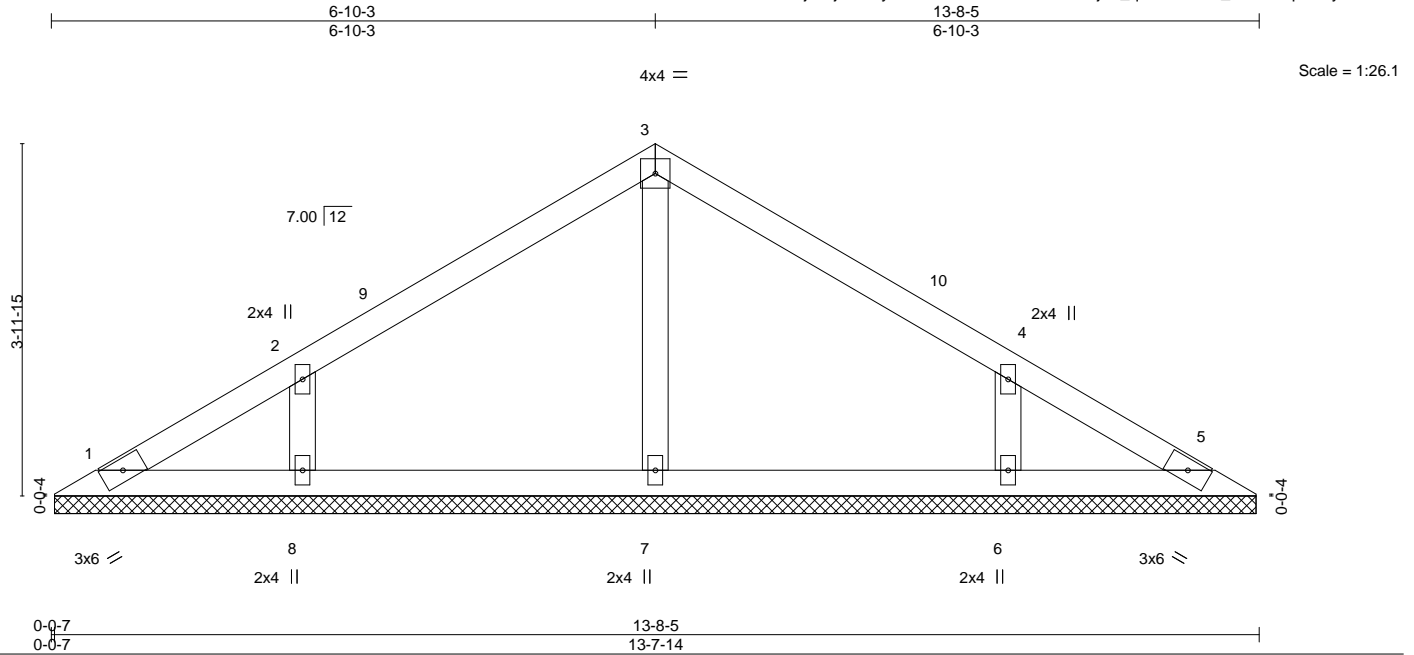
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009387
3358903	V04	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:47 2023 Page 1

ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-QkVJMR1wceztWwUjvX\_qWaxXxzA1\_ee3L41q7FzcyAQ



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S					Weight: 50 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

All bearings 13-7-8.  
(lb) - Max Horz 1=81(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7 except 8=126(LC 12), 6=126(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=256(LC 1), 8=290(LC 19), 6=290(LC 20)

**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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 6-10-3, Exterior(2R) 6-10-3 to 9-10-3, Interior(1) 9-10-3 to 13-1-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7 except (jt=lb) 8=126, 6=126.

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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 9,2023

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



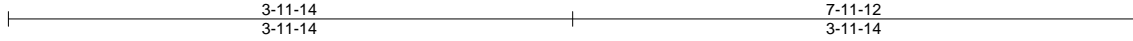
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



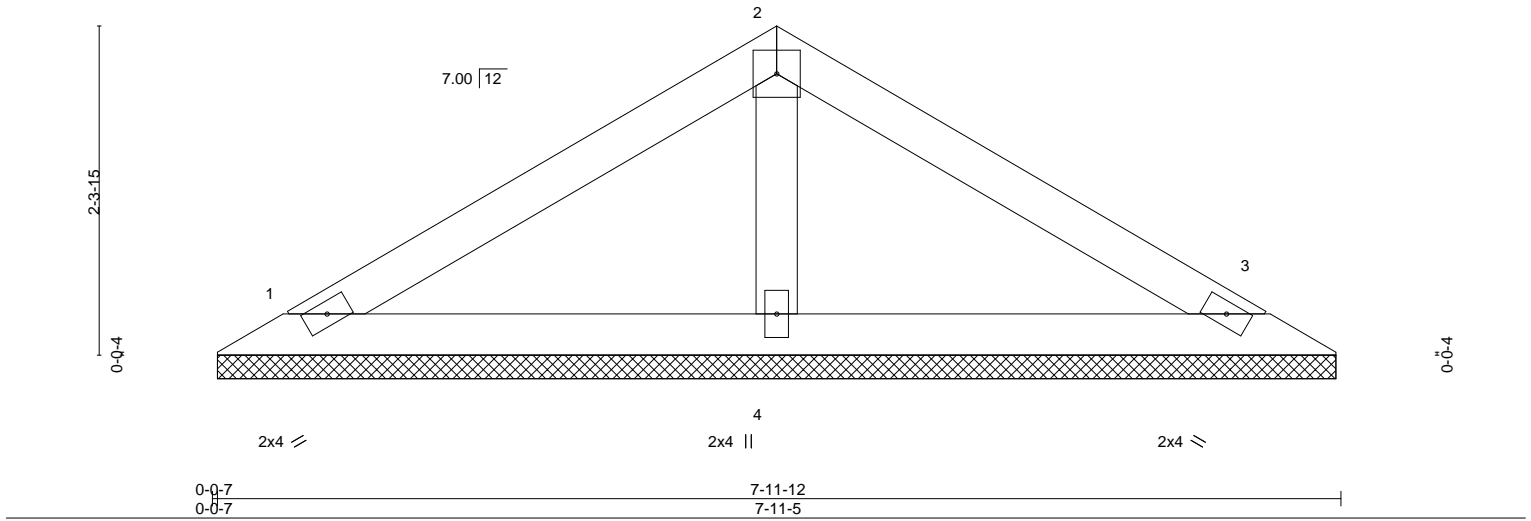
Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009388
3358903	V05	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:48 2023 Page 1  
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-ux3hZn2YNy5KXg3vTFV32nUirMWJj5ACakmNghzcyAP



Scale = 1:16.3



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)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S					Weight: 26 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 1=7-10-14, 3=7-10-14, 4=7-10-14  
Max Horz 1=-44(LC 8)  
Max Uplift 1=-33(LC 12), 3=-39(LC 13), 4=-38(LC 12)  
Max Grav 1=120(LC 1), 3=120(LC 1), 4=270(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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 3-11-14, Exterior(2R) 3-11-14 to 6-11-14, Interior(1) 6-11-14 to 7-5-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.

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

March 9,2023

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

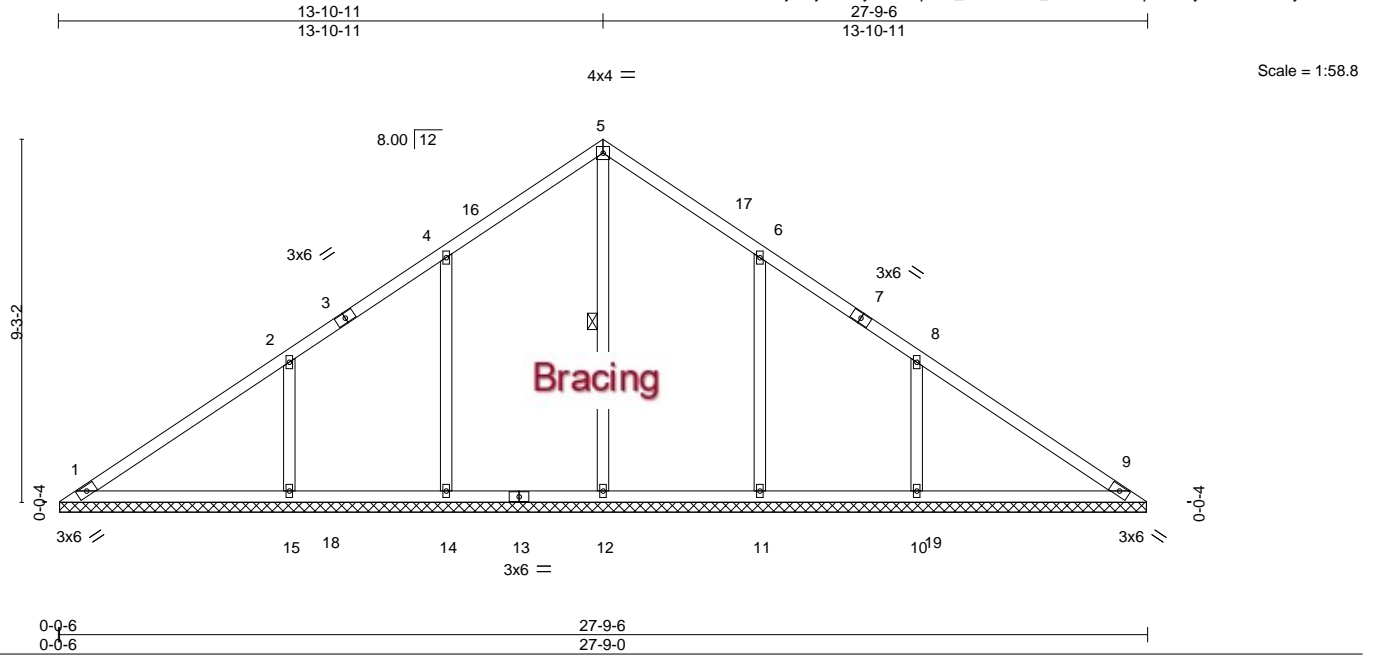


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009389
3358903	V06	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:50 2023 Page 1  
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-qJBR\_T3ovZL1n\_ClafYX7CZ0pA9uByfV12FUkaczyAN



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.30	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.24	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT)	0.01	9	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S					Weight: 130 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 5-12

#### REACTIONS.

All bearings 27-8-10.  
(lb) - Max Horz 1=-197(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-134(LC 12), 15=-197(LC 12), 11=-133(LC 13), 10=-197(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 9 except 12=391(LC 22), 14=399(LC 19), 15=542(LC 19), 11=398(LC 20), 10=542(LC 20)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-15=-313/219, 8-10=-313/219

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 13-10-11, Exterior(2R) 13-10-11 to 16-10-11, Interior(1) 16-10-11 to 27-3-9 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=134, 15=197, 11=133, 10=197.

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

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

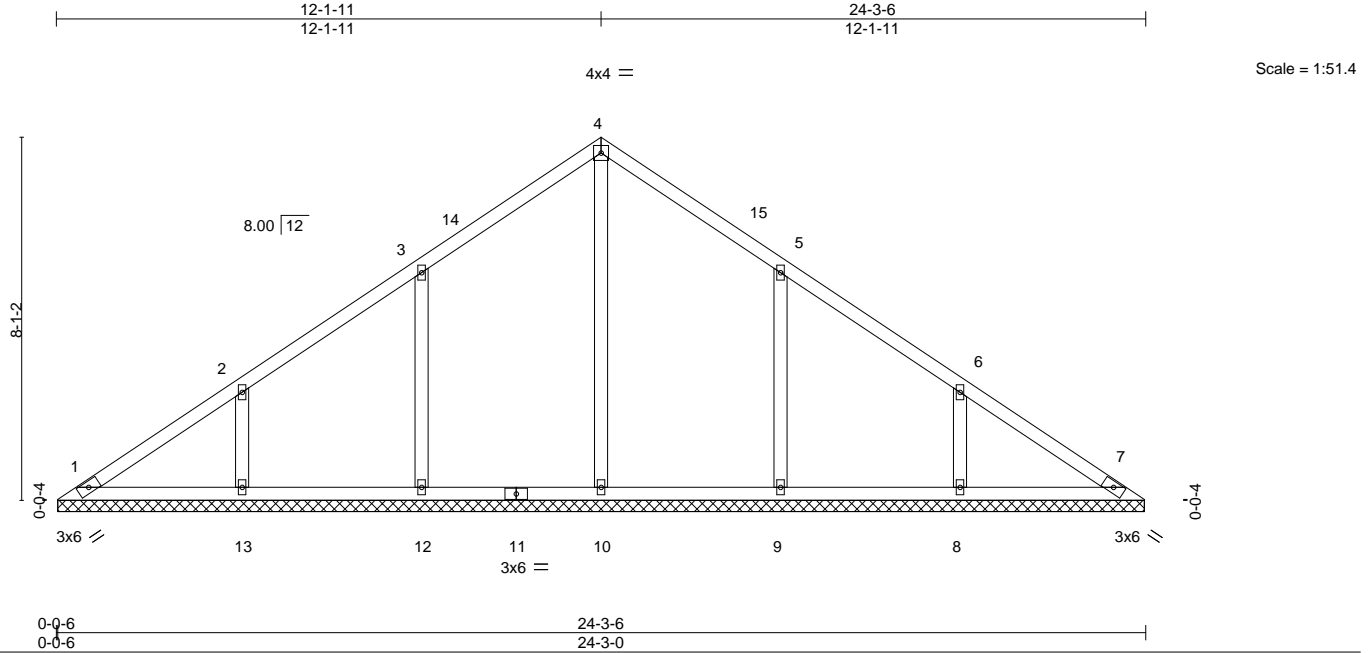


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009390
3358903	V07	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:51 2023 Page 1  
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-IVlpBp4RgtTuO8nU8N3mgQ6DkaW4wPUeGi?2G0zcyAM



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.18	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.19	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S					Weight: 110 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

All bearings 24-2-10.  
(lb) - Max Horz 1=171(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 12=151(LC 12), 13=149(LC 12), 9=151(LC 13), 8=149(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=374(LC 22), 12=409(LC 19), 13=389(LC 19), 9=409(LC 20), 8=389(LC 20)

**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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 12-1-11, Exterior(2R) 12-1-11 to 15-1-11, Interior(1) 15-1-11 to 23-9-9 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 12=151, 13=149, 9=151, 8=149.

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

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

March 9,2023

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

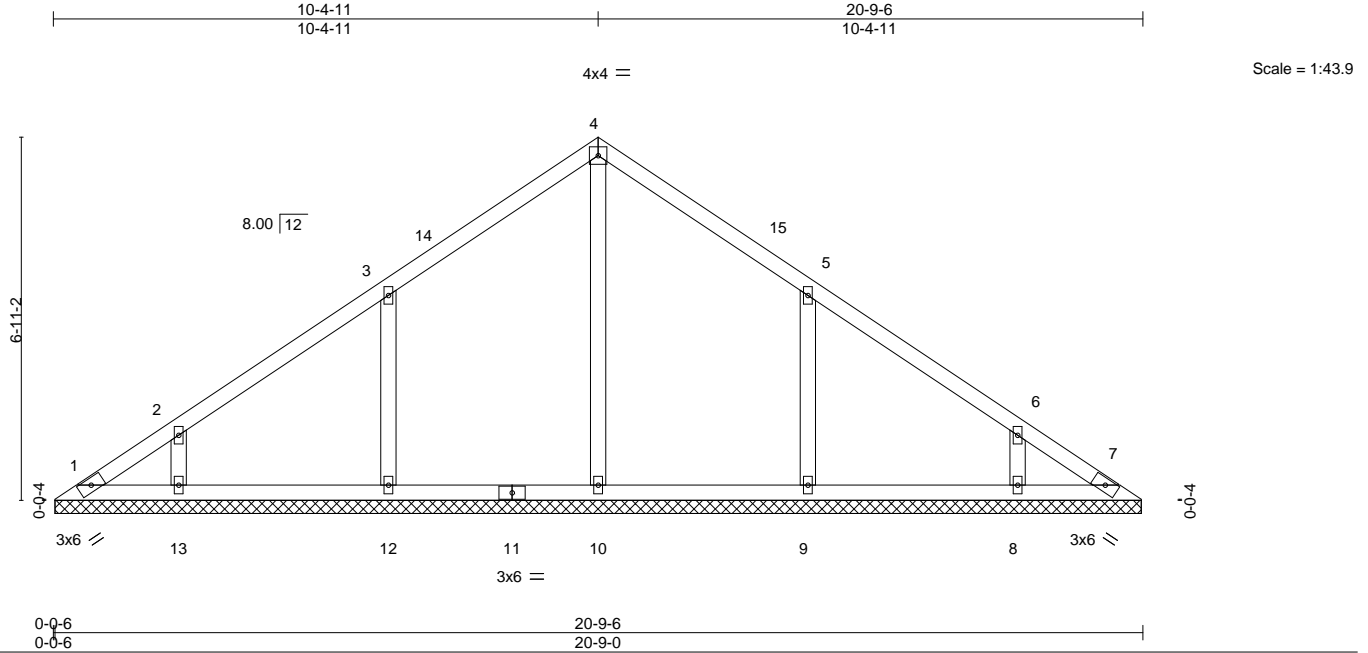


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009391
3358903	V08	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:52 2023 Page 1  
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-niJCP953RABl0IMgi4a?DdeOI\_sOfsfoVMkbpSzcYAL



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.17	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.17	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S					Weight: 90 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

All bearings 20-8-10.

- (lb) - Max Horz 1=-146(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-158(LC 12), 13=-116(LC 12), 9=-158(LC 13), 8=-116(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=355(LC 22), 12=428(LC 19), 13=303(LC 19), 9=428(LC 20), 8=303(LC 20)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-12=-254/183, 5-9=-254/183

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 10-4-11, Exterior(2R) 10-4-11 to 13-4-11, Interior(1) 13-4-11 to 20-3-9 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 12=158, 13=116, 9=158, 8=116.

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

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

March 9,2023

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

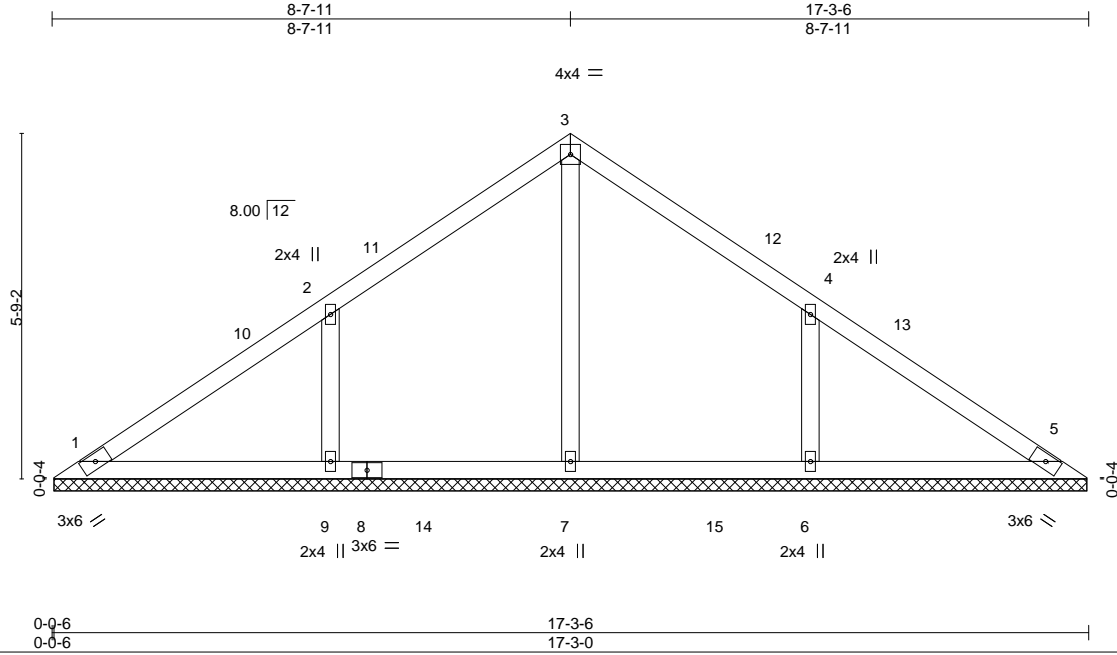


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009392
3358903	V09	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:54 2023 Page 1  
ID:Ys8zlwKNmTR0LjtaCjYR7AYuufK-j4Qyqq6JzorTFbW3pVcTI2kiBnY97ns5ygEitLzcyAJ



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.21	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S					Weight: 70 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

All bearings 17-2-10.

(lb) - Max Horz 1=-120(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-176(LC 12), 6=-175(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=321(LC 19), 9=455(LC 19), 6=455(LC 20)

#### FORCES.

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

WEBS 2-9=-278/196, 4-6=-278/196

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 8-7-11, Exterior(2R) 8-7-11 to 11-7-11, Interior(1) 11-7-11 to 16-9-9 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=176, 6=175.

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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 9,2023

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



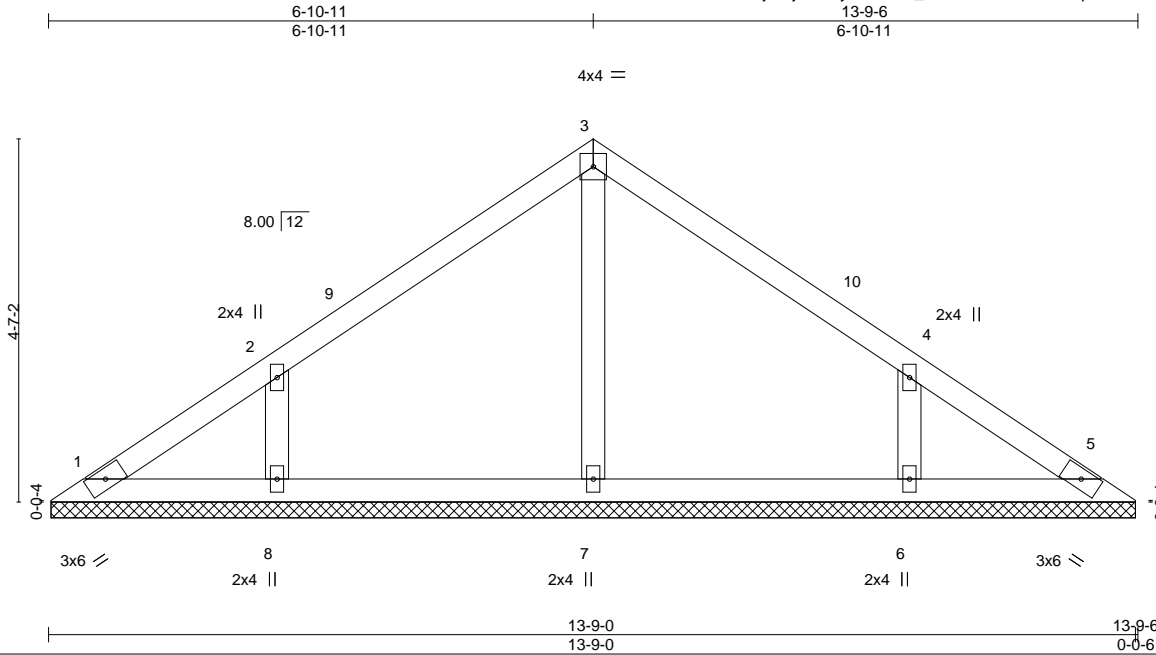
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009393
3358903	V10	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:55 2023 Page 1  
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-BH\_K1A7xk5zKtl5FND7iqGGuvBvvsFUEBKzFQnzcyAl



Scale = 1:29.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.12	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S						Weight: 53 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

All bearings 13-8-10.  
(lb) - Max Horz 1=94(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=142(LC 12), 6=141(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=297(LC 19), 6=297(LC 20)

**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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 6-10-11, Exterior(2R) 6-10-11 to 9-10-11, Interior(1) 9-10-11 to 13-3-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=142, 6=141.

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

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

March 9,2023

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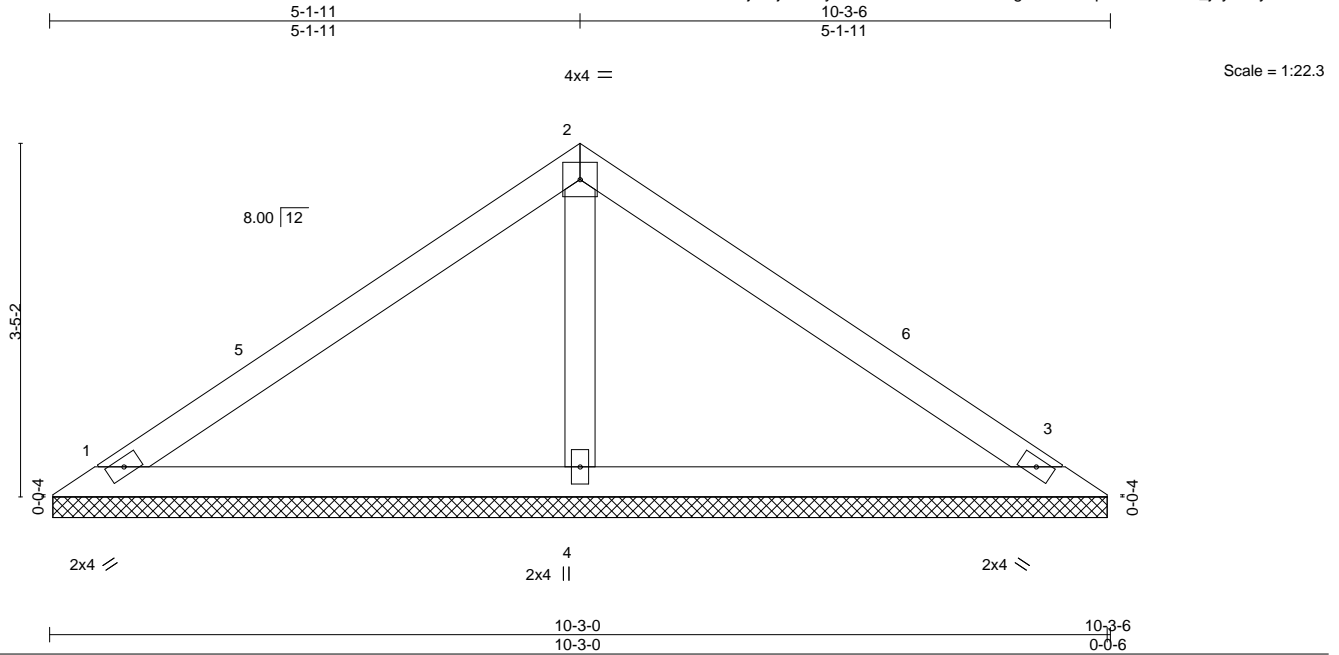


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009394
3358903	V11	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:56 2023 Page 1  
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-fTYiFW8ZVP5BVvgRxxwexNTP1ubChbisOP\_joyDzcyAH



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.26	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.21	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S					Weight: 36 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 1=10-2-10, 3=10-2-10, 4=10-2-10  
Max Horz 1=-68(LC 8)  
Max Uplift 1=-44(LC 12), 3=-54(LC 13), 4=-48(LC 12)  
Max Grav 1=169(LC 1), 3=169(LC 1), 4=352(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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 5-1-11, Exterior(2R) 5-1-11 to 8-1-11, Interior(1) 8-1-11 to 9-9-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

March 9,2023

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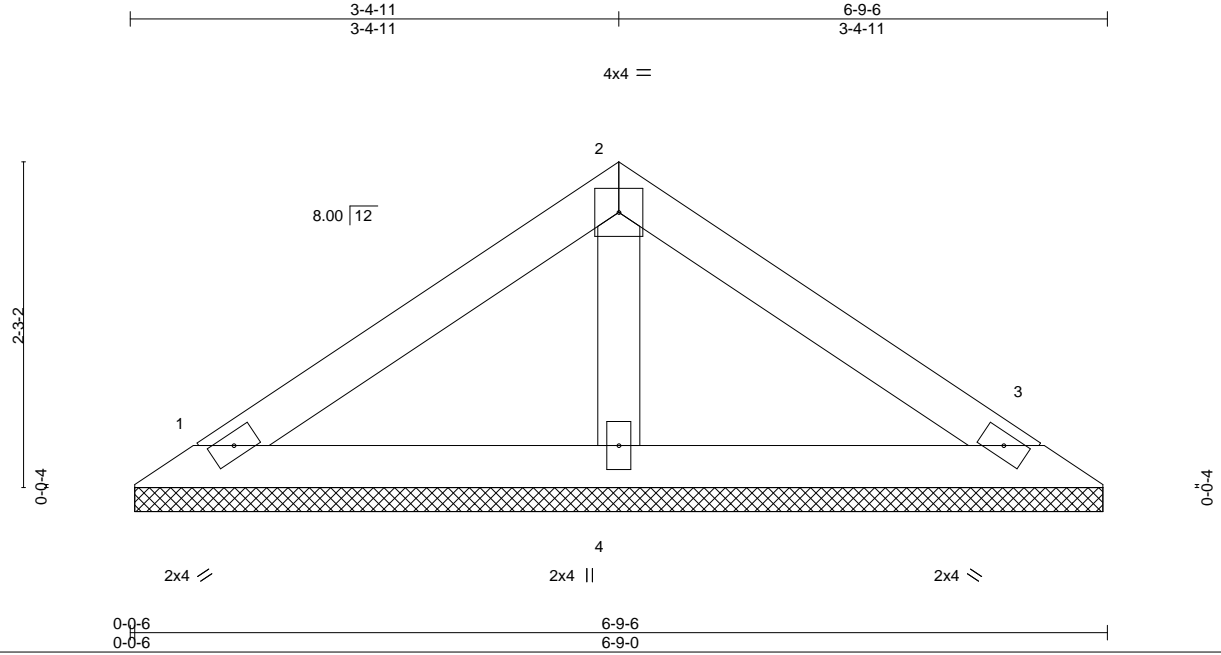
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009395
3358903	V12	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:57 2023 Page 1

ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-7f64Ss9BGjD263FeVeAAwhMEg?avK9YXeeSMUgzcYAG



Scale: 3/4"=1'

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 23 lb	FT = 20%
	Code FBC2020/TPI2014							

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 1=6-8-10, 3=6-8-10, 4=6-8-10  
Max Horz 1=43(LC 11)  
Max Uplift 1=-34(LC 12), 3=-40(LC 13), 4=-17(LC 12)  
Max Grav 1=115(LC 1), 3=115(LC 1), 4=200(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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.

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

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

March 9,2023

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

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

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

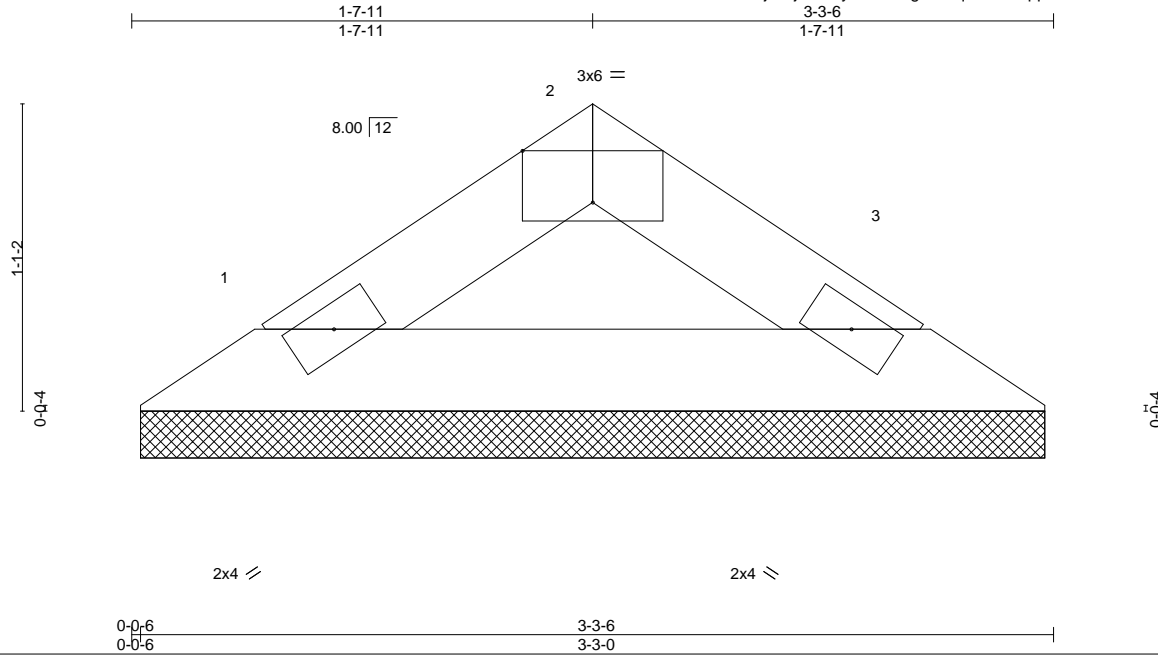


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Job	Truss	Truss Type	Qty	Ply	WIDERGREN RES.	T30009396
3358903	V13	Valley	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Mar 8 14:51:58 2023 Page 1  
ID:Ys8zlwKNmTR0LjtaCjYR7AyUufK-bsgTfC9q10LvDqq2LhPSuuR1OxW3cAgtlCv06zcyAF



Scale = 1:8.2

Plate Offsets (X,Y)--		[2:0-3:0,Edge]											
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d				<b>PLATES</b>		<b>GRIP</b>	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	n/a	-	n/a	999			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-P						Weight: 9 lb		FT = 20%	

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-3-6 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 1=3-2-10, 3=3-2-10  
Max Horz 1=17(LC 11)  
Max Uplift 1=17(LC 12), 3=17(LC 13)  
Max Grav 1=86(LC 1), 3=86(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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

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

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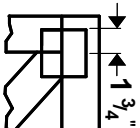
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601  
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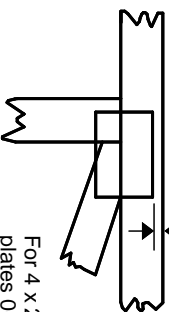
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# Symbols

## 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.

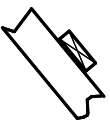
\* Plate location details available in **MiTek 20/20** software or upon request.

## PLATE SIZE

4 X 4

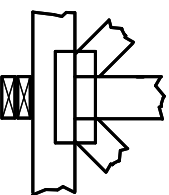
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



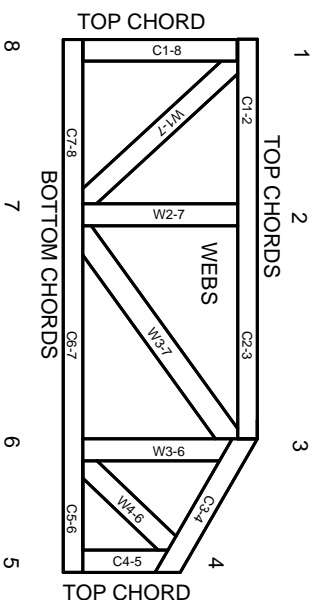
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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



# General Safety Notes

**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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.