



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

RE: 4893994 - HEATHERMAN RES.

MiTek, Inc.

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information:

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

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

Name: License #:
Address:
City: State:

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

Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.8
Wind Code: ASCE 7-22 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 20 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	T38803898	T01	10/10/25	15	T38803912	T10	10/10/25
2	T38803899	T01G	10/10/25	16	T38803913	T11	10/10/25
3	T38803900	T02	10/10/25	17	T38803914	T12	10/10/25
4	T38803901	T03	10/10/25	18	T38803915	T13	10/10/25
5	T38803902	T03G	10/10/25	19	T38803916	T14	10/10/25
6	T38803903	T04	10/10/25	20	T38803917	T15	10/10/25
7	T38803904	T05	10/10/25				
8	T38803905	T05G	10/10/25				
9	T38803906	T06	10/10/25				
10	T38803907	T07	10/10/25				
11	T38803908	T07G	10/10/25				
12	T38803909	T08	10/10/25				
13	T38803910	T09	10/10/25				
14	T38803911	T09G	10/10/25				

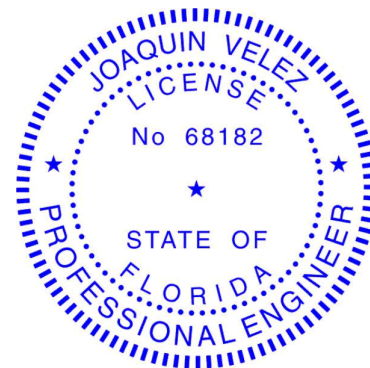
This item has been digitally signed and sealed by Velez, Joaquin, PE on the date adjacent to the seal.

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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: Velez, Joaquin
My license renewal date for the state of Florida is February 28, 2027.

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.



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

October 10,2025

Velez, Joaquin

1 of 1

Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803898
4893994	T01	Common	5	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:09 2025 Page 1
ID:5r2fgrbgregYyobjgsnrYiDyVSr7-RxH_gWBWNB6KalzFqCpadJKfttAzVkhELVpZyVC34 25-6-0 1-6-0

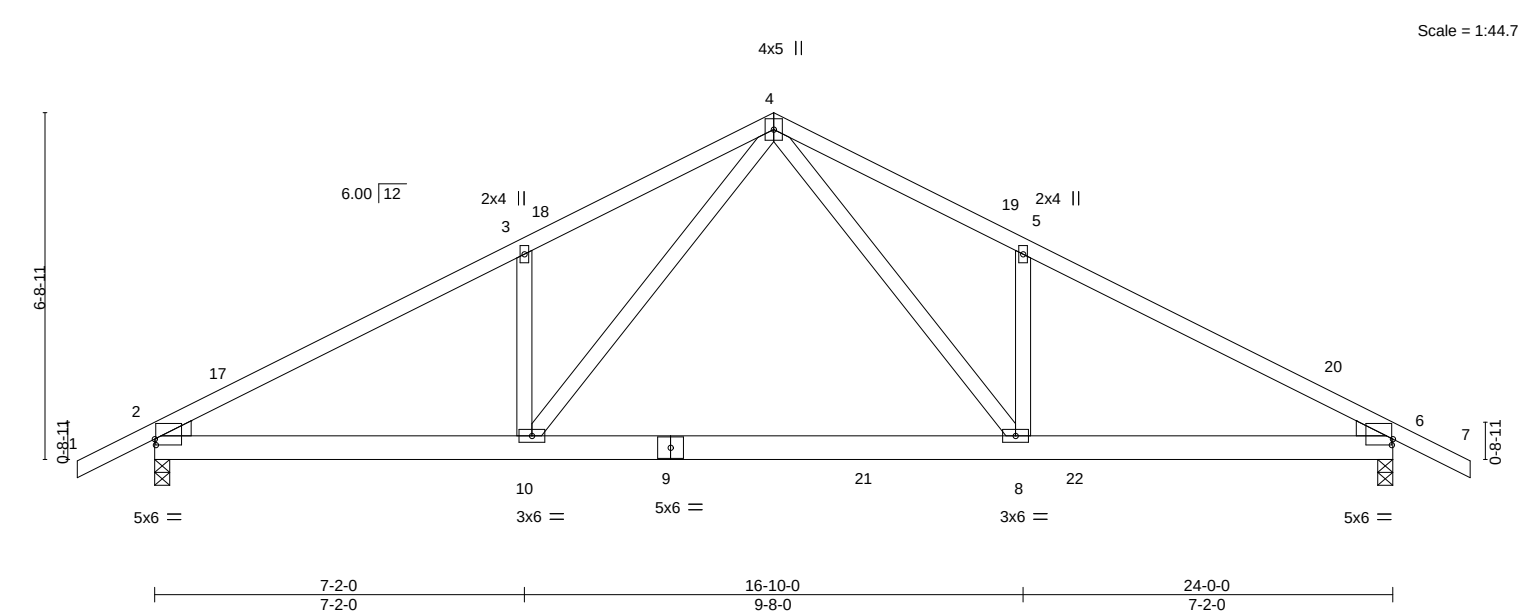


Plate Offsets (X,Y)-- [2:0-0-4,0-1-6], [6:0-0-4,0-1-6]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.83	Vert(LL)	0.25	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.44	Vert(CT)	-0.41	8-10	>708	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 136 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E or 2x6 SP M 26
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-11-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-11-14 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-113(LC 13)
Max Uplift 2=-405(LC 9), 6=-414(LC 8)
Max Grav 2=1392(LC 2), 6=1414(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2304/1123, 3-4=-2271/1218, 4-5=-2311/1247, 5-6=-2344/1153
BOT CHORD 2-10=-905/1979, 8-10=-549/1319, 6-8=-949/2015
WEBS 4-8=-659/1165, 5-8=-353/250, 4-10=-615/1106, 3-10=-353/250

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 25-6-0 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 405 lb uplift at joint 2 and 414 lb uplift at joint 6.
 - 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=-60, 4-7=-60, 10-11=-20, 10-22=-80(F=-60), 14-22=-20

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

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

October 10,2025

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

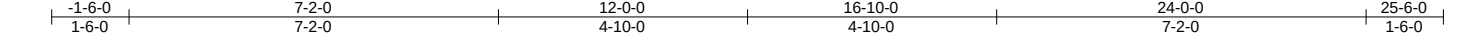
MiTek®

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

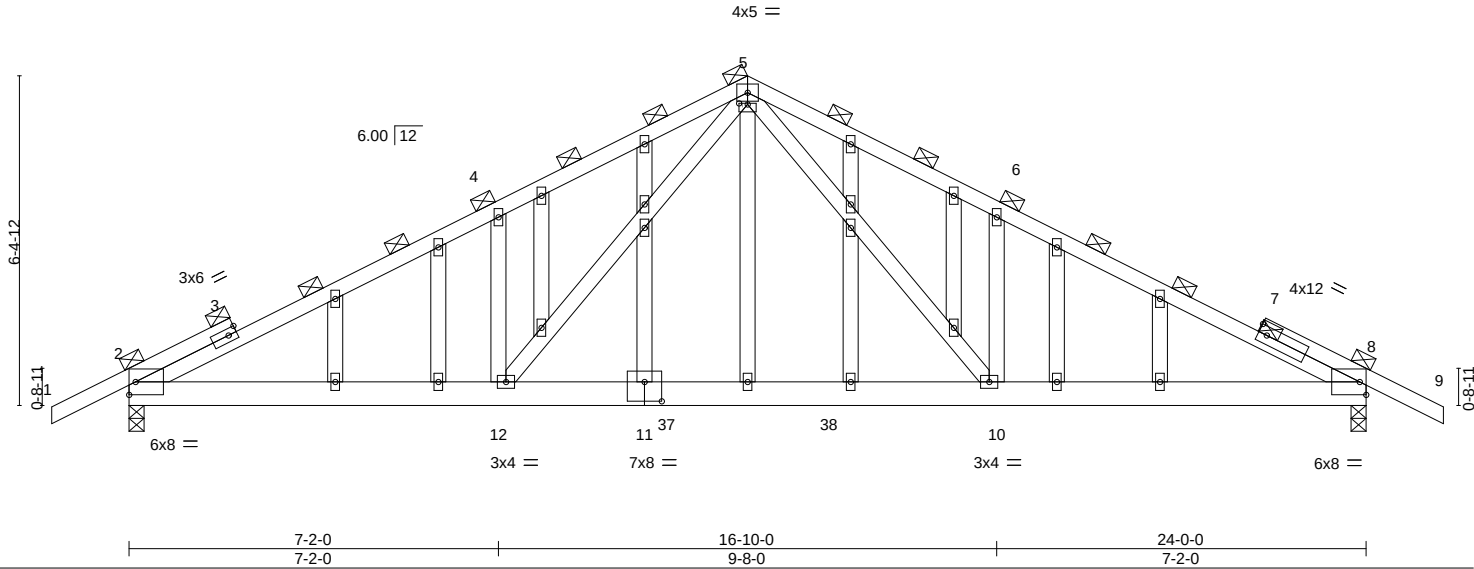
Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803899
4893994	T01G	GABLE	1	1		

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

8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:10 2025 Page 1
ID:5r2frgbregYyobjgsnrYiDyVSr7-v7rMC?XqHhJzykK9oXj26rrWVHCSvTGuwu53M?yVC33



Scale = 1:44.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.76	Vert(LL)	-0.13 10-12 >999 240	MT20		244/190	
TCDL	10.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.23 10-12 >999 180				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.02 8 n/a n/a				
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							
								Weight: 182 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	2-0-0 oc purlins (4-1-3 max.).
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 8-1-10 oc bracing.
WEBS	2x4 SP No.3		
OTHERS	2x4 SP No.3		

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-107(LC 17)
Max Uplift 2=-298(LC 9), 8=-298(LC 8)
Max Grav 2=1114(LC 2), 8=1114(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1754/990, 4-5=-1771/1133, 5-6=-1771/1133, 6-8=-1754/990
BOT CHORD 2-12=-771/1527, 10-12=-425/994, 8-10=-776/1527
WEBS 5-10=-560/862, 6-10=-371/279, 5-12=-560/862, 4-12=-371/279

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 298 lb uplift at joint 2 and 298 lb uplift at joint 8.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

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

October 10,2025

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

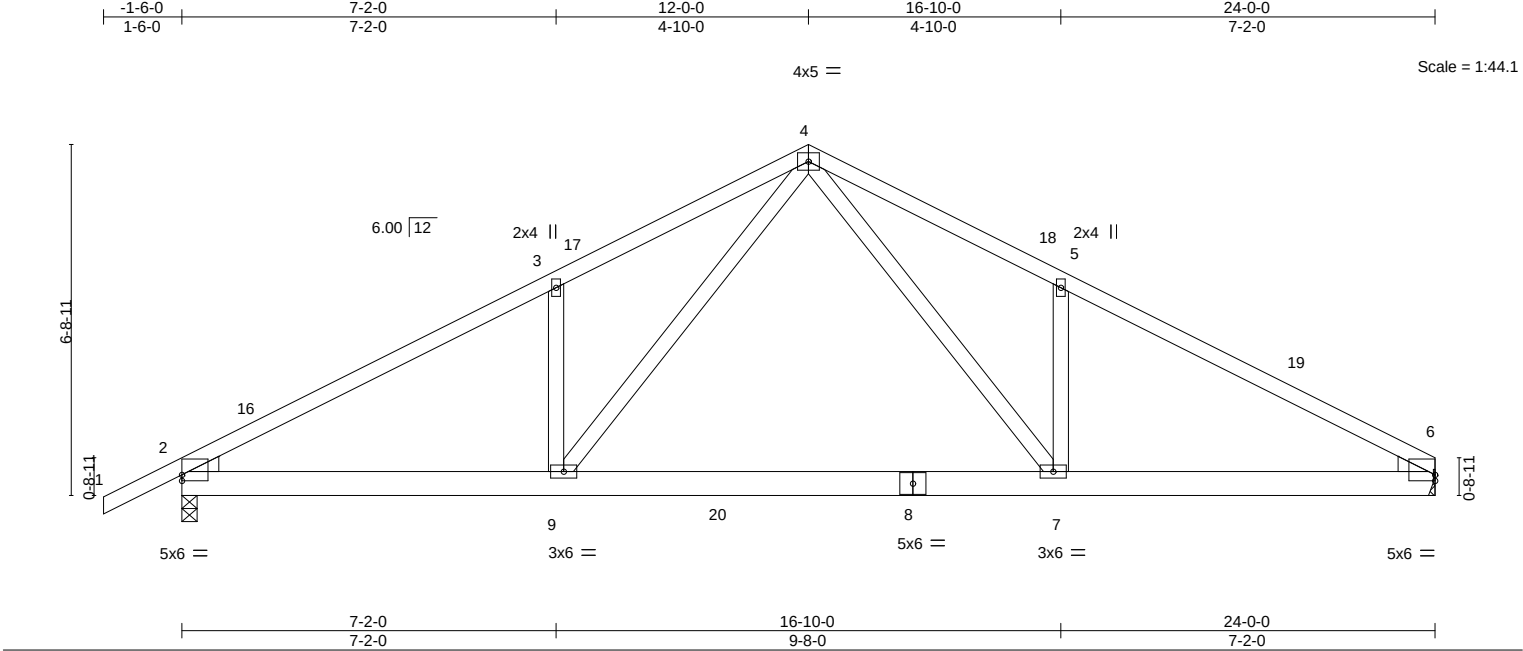
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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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Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803900
4893994	T02	Common	6	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:10 2025 Page 1
ID:5r2frgbregYyobjgsnrYiDyVSr7-v7rMC?XqHhJzykK9oXj26rVZHDmvVquwu53M?yVC33



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.82	Vert(LL)	-0.20	MT20		244/190	
TCDL	10.0	Lumber DOL	1.25	BC	0.43	Vert(CT)	-0.40				
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.03				
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							
										Weight: 134 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-0-14 oc purlins.
BOT CHORD	2x6 SP 2400F 2.0E or 2x6 SP M 26	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		
WEDGE			
Left: 2x4 SP No.3 , Right: 2x4 SP No.3			

REACTIONS.	
(size)	6=Mechanical, 2=0-3-8
Max Horz	2=125(LC 12)
Max Uplift	6=-314(LC 13), 2=-353(LC 12)
Max Grav	6=1300(LC 2), 2=1379(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-2277/538, 3-4=-2245/663, 4-5=-2258/670, 5-6=-2289/558
BOT CHORD	2-9=-491/1976, 7-9=-262/1301, 6-7=-414/1967
WEBS	4-7=-385/1129, 5-7=-357/252, 4-9=-377/1112, 3-9=-354/250

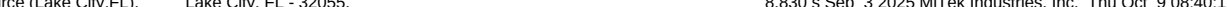
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 24-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 314 lb uplift at joint 6 and 353 lb uplift at joint 2.
 - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

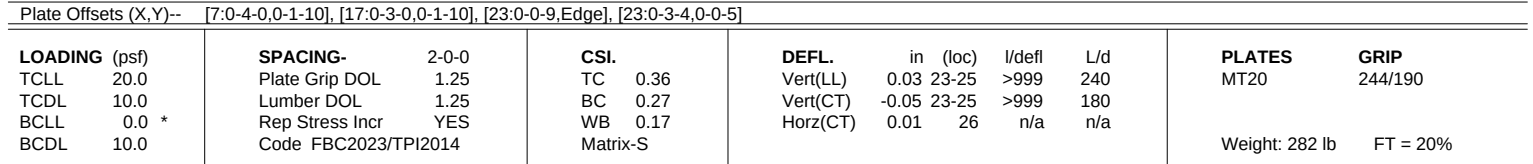
LOAD CASE(S) Standard	
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25	
Uniform Loads (plf)	
Vert: 1-4=-60, 4-6=-60, 9-13=-20, 7-9=-80(F=-60), 7-10=-20	

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

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Date:

October 10,2025

Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:12 2025 Page 1
 ID:5r2frgbregYyobjgsnrYiDYsVr7-sWz6chY4plZhB2UYwyIWCGxyJ4wqNUtBOCaAQyuvYC31

 Scale = 1:76.1



REACTIONS. All bearings 35-8-0 except (jt=length) 23=0-3-8.
 (lb) - Max Horz 46=-224(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 37, 38, 40, 41, 42, 43, 44, 35, 34, 33, 32, 30, 29, 28, 27
 except 46=-134(LC 17), 23=-225(LC 9), 45=-195(LC 12), 26=-209(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) 46, 36, 37, 38, 40, 41, 42, 43, 44, 35, 34, 33, 32, 30, 29,
 28, 27 except 23=394(LC 1), 45=269(LC 22), 26=411(LC 1), 26=411(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 10-11=-96/289, 11-12=-96/289, 21-23=-498/281
 BOT CHORD 25-26=-232/461, 23-25=-232/461
 WEBS 21-26=-553/492

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 5) All plates are 2x4 MT20 unless otherwise indicated.
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 37, 38, 40, 41, 42, 43, 44, 35, 34, 33, 32, 30, 29, 28, 27 except (jt=lb) 46=134, 23=225, 45=195, 26=209.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- This item has been digitally signed and sealed by Velez, Joaquin, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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Date:

October 10, 2025



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MiTek®
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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803903
4893994	T04	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:13 2025 Page 1
ID:5r2frgbregYyojbgnsnrYiDyVSr7-KiXVq1ZiZchYpC3kUfHlKTT_LU9O6p1KcsJjyKyVC30

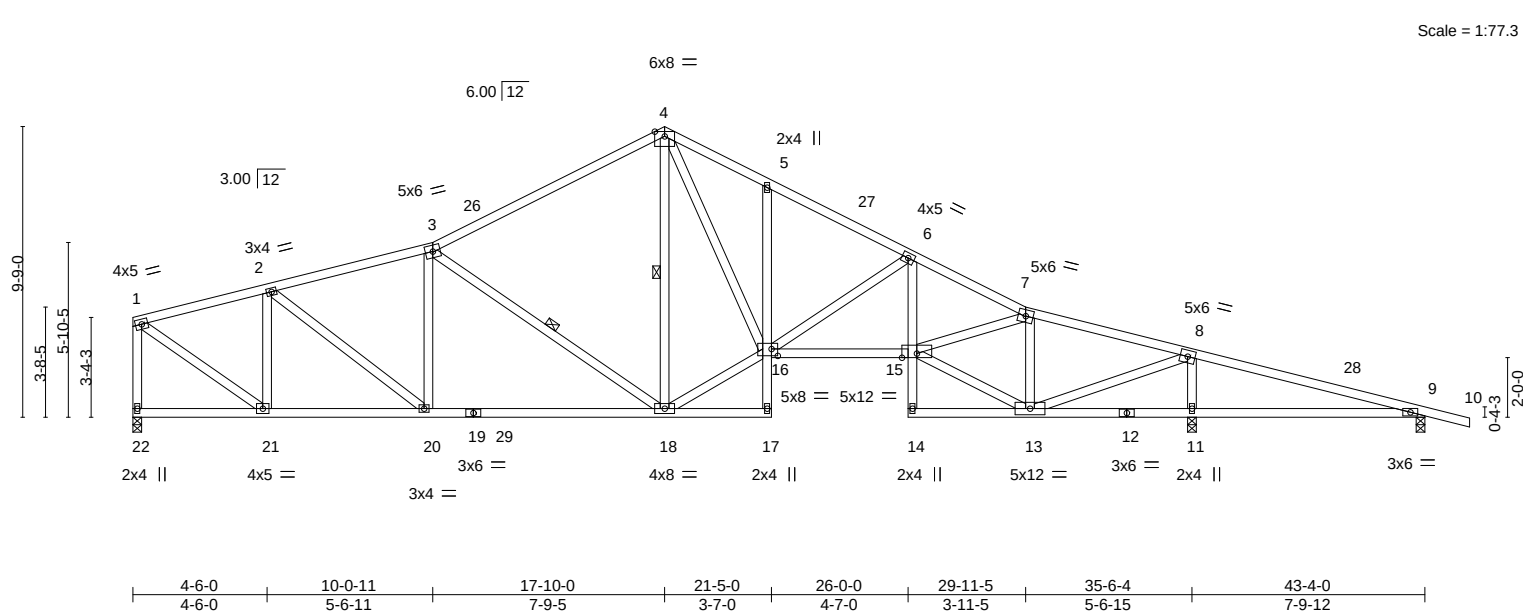


Plate Offsets (X,Y)--		[16:0-2-8,0-2-12]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.92	Vert(LL)	0.15	11-25	>611	240	MT20	244/190		
TCDL	10.0	Lumber DOL	1.25	BC	0.76	Vert(CT)	-0.41	18-20	>999	180				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.15	11	n/a	n/a				
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 269 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 3-4: 2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 2-1-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 5-17,6-14: 2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 4-5-5 oc bracing.
WEBS	2x4 SP No.3 *Except* 8-13: 2x4 SP No.2	WEBS	1 Row at midpt 3-18, 4-18

REACTIONS. (size) 22=0-3-8, 11=0-3-8, 9=0-3-8
Max Horz 22=-236(LC 13)
Max Uplift 22=-325(LC 12), 11=-506(LC 13), 9=-221(LC 9)
Max Grav 22=1442(LC 2), 11=2319(LC 2), 9=109(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1410/331, 2-3=-1952/442, 3-4=-1538/405, 4-5=-2198/555, 5-6=-2248/477,
6-7=-2915/584, 7-8=-1390/349, 8-9=-214/1332, 1-22=-1369/368
BOT CHORD 20-21=-325/1347, 18-20=-391/1865, 15-16=-369/2614, 6-15=-63/508, 11-13=-1238/233,
9-11=-1238/233
WEBS 2-21=-788/233, 2-20=-122/651, 3-18=-710/276, 16-18=-182/1493, 4-16=-305/1536,
6-16=-785/260, 13-15=-245/1504, 7-15=-191/1286, 7-13=-1541/324, 8-13=-475/2708,
8-11=-1995/516, 1-21=-352/1626

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-1-12 to 4-6-0, Zone1 4-6-0 to 17-10-0, Zone2 17-10-0 to 23-11-9, Zone1 23-11-9 to 44-10-0 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 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) 22=325, 11=506, 9=221.

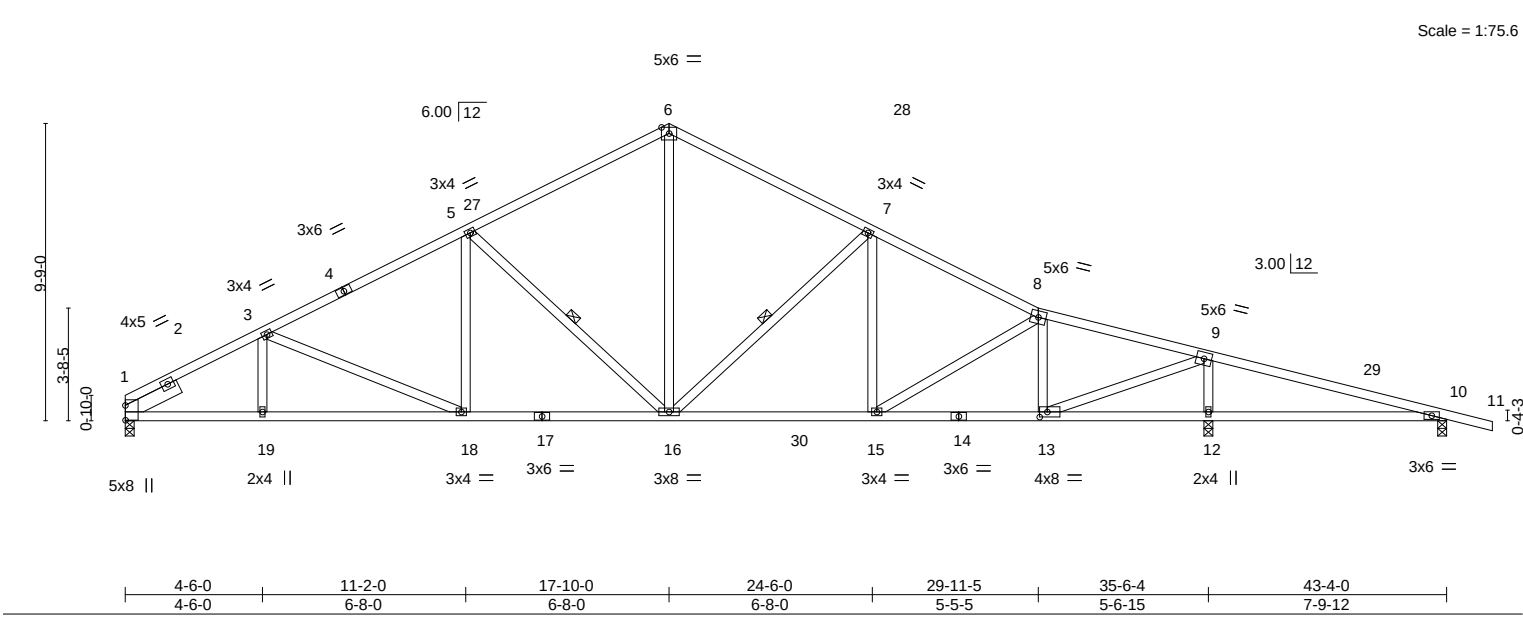
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Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingle Ridge Rd.
Chesterfield, MO 63017
Date:

October 10,2025

Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803904
4893994	T05	Roof Special	7	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:14 2025 Page 1
ID:5r2frgbregYyobjgsnrYiDyVSr7-ou4t1NaKKwpPRMew1No_Hh0ASuSKrB3TrW3GVnyVC3? 44-10-0 1-6-0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.89	Vert(LL)	0.15 12-26 >609 240	MT20		244/190	
TCDL	10.0	Lumber DOL	1.25	BC	0.90	Vert(CT)	-0.32 18-19 >999 180				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.08 12 n/a n/a				
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 237 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-1-8 oc purlins.
BOT CHORD	2x4 SP No.1 *Except*	BOT CHORD	Rigid ceiling directly applied or 5-11-9 oc bracing.
	10-14: 2x4 SP No.2	WEBS	1 Row at midpt 5-16, 7-16
WEBS	2x4 SP No.3		
SLIDER	Left 2x6 SP No.2 1-11-8		

REACTIONS. (size) 1=0-3-8, 12=0-3-8, 10=0-3-8
Max Horz 1=-179(LC 13)
Max Uplift 1=-327(LC 12), 12=-481(LC 13), 10=-219(LC 9)
Max Grav 1=1492(LC 2), 12=2180(LC 2), 10=228(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-2428/553, 3-5=-2198/490, 5-6=-1637/435, 6-7=-1634/416, 7-8=-2033/459, 8-9=-1736/404, 9-10=-140/794
BOT CHORD 1-19=-553/2111, 18-19=-553/2111, 16-18=-410/1927, 15-16=-257/1778, 13-15=-275/1671, 12-13=-707/158, 10-12=-707/158
WEBS 5-18=-24/384, 5-16=-744/309, 6-16=-219/1092, 7-16=-567/271, 7-15=-2/251, 8-13=-738/195, 9-13=-440/2502, 9-12=-1866/493

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 4-6-0, Zone1 4-6-0 to 17-10-0, Zone2 17-10-0 to 23-11-9, Zone1 23-11-9 to 44-10-0 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=327, 12=481, 10=219.

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

October 10,2025

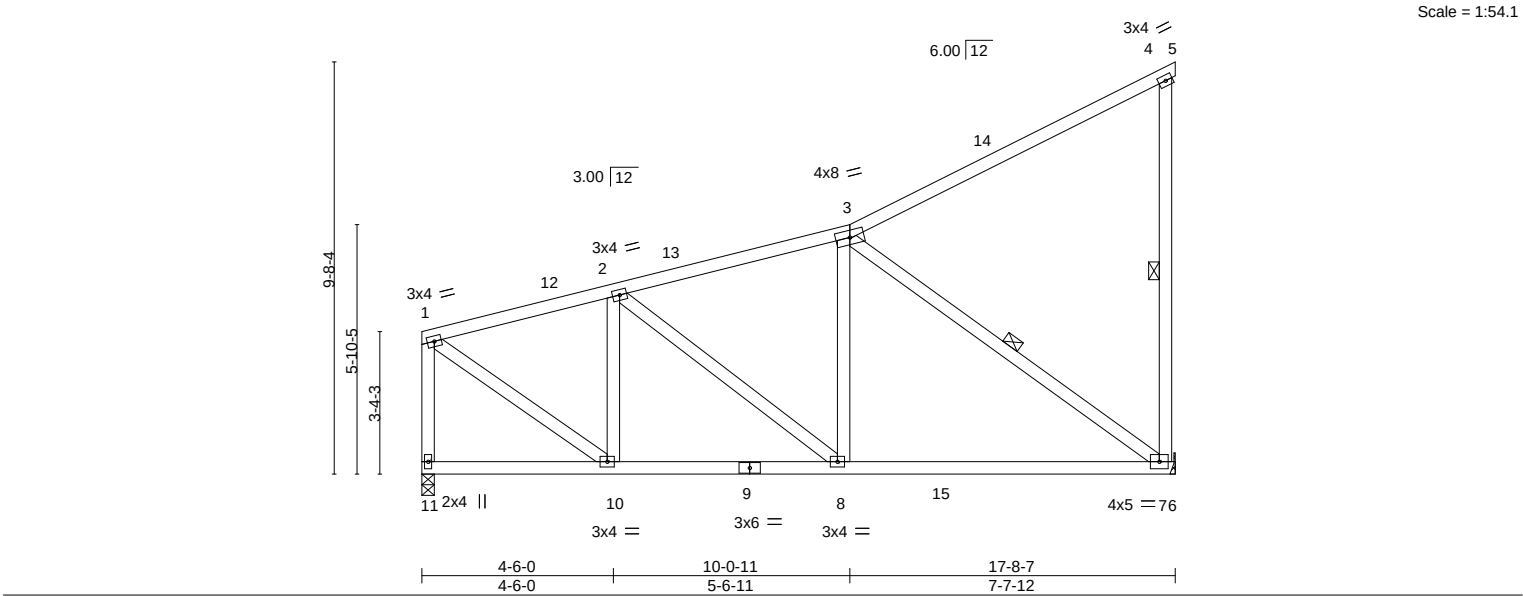
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.
4893994	T06	Jack-Closed	9	1	T38803906

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.830 s Sep 3 2025
MiTek Industries, Inc.
Thu Oct 9 08:40:15 2025
Page 1
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17-8-7
7-7-12



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.72	Vert(LL)	-0.11	7-8	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.25	BC 0.57	Vert(CT)	-0.21	7-8	>988	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.35	Horz(CT)	0.01	7	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS						Weight: 116 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 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-7, 3-7

REACTIONS. (size) 11=0-3-8, 7=Mechanical
Max Horz 11=186(LC 12)
Max Uplift 11=-124(LC 8), 7=-186(LC 12)
Max Grav 11=749(LC 2), 7=770(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-677/143, 1-2=-667/113, 2-3=-694/67
BOT CHORD 8-10=-282/626, 7-8=-205/634
WEBS 1-10=-105/746, 2-10=-312/89, 3-8=-32/322, 3-7=-768/244

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-1-12 to 3-1-12, Zone1 3-1-12 to 17-8-7 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.
 - 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) 11=124, 7=186.

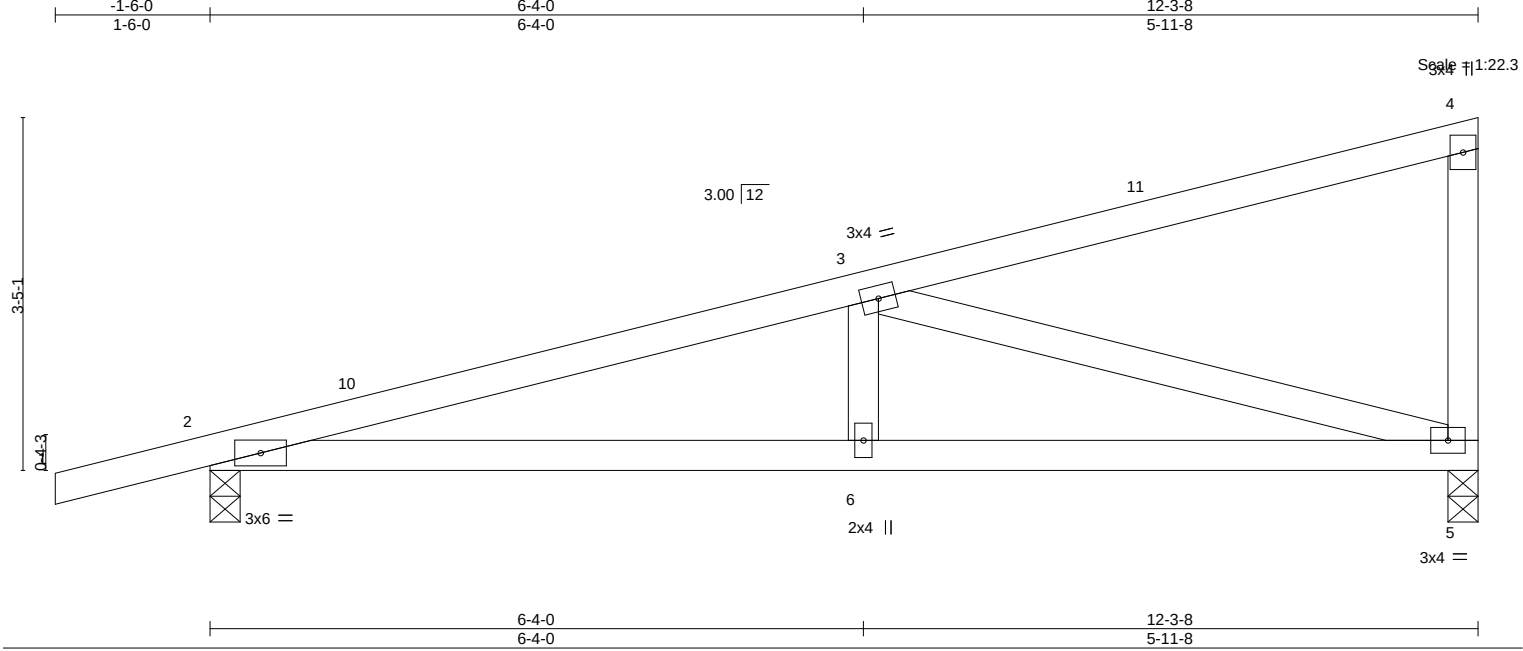
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Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

October 10,2025

Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803907
4893994	T07	Monopitch	10	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:16 2025 Page 1
ID:5r2frgbregYyobjgsnrYiDyVSr7-kHCdS3basX36gfnJ9oqSM65coiG1J8xmqYNYfyVC2z



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.39	Vert(LL) 0.08	6-9	>999	240		MT20	244/190
TCDL 10.0	Lumber DOL 1.25	BC 0.44	Vert(CT) -0.11	6-9	>999	180			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.02	5	n/a	n/a			
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS						Weight: 54 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-2-7 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-7-13 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS.	(size) 2=0-3-8, 5=0-3-8 Max Horz 2=137(LC 8) Max Uplift 2=-312(LC 8), 5=-270(LC 8) Max Grav 2=581(LC 1), 5=480(LC 1)
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FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1100/656 BOT CHORD 2-6=-745/1045, 5-6=-745/1045 WEBS 3-6=-124/268, 3-5=-1055/745
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- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCdL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 12-1-12 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
 - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=312, 5=270.

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

October 10,2025

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803908
4893994	T07G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:16 2025 Page 1
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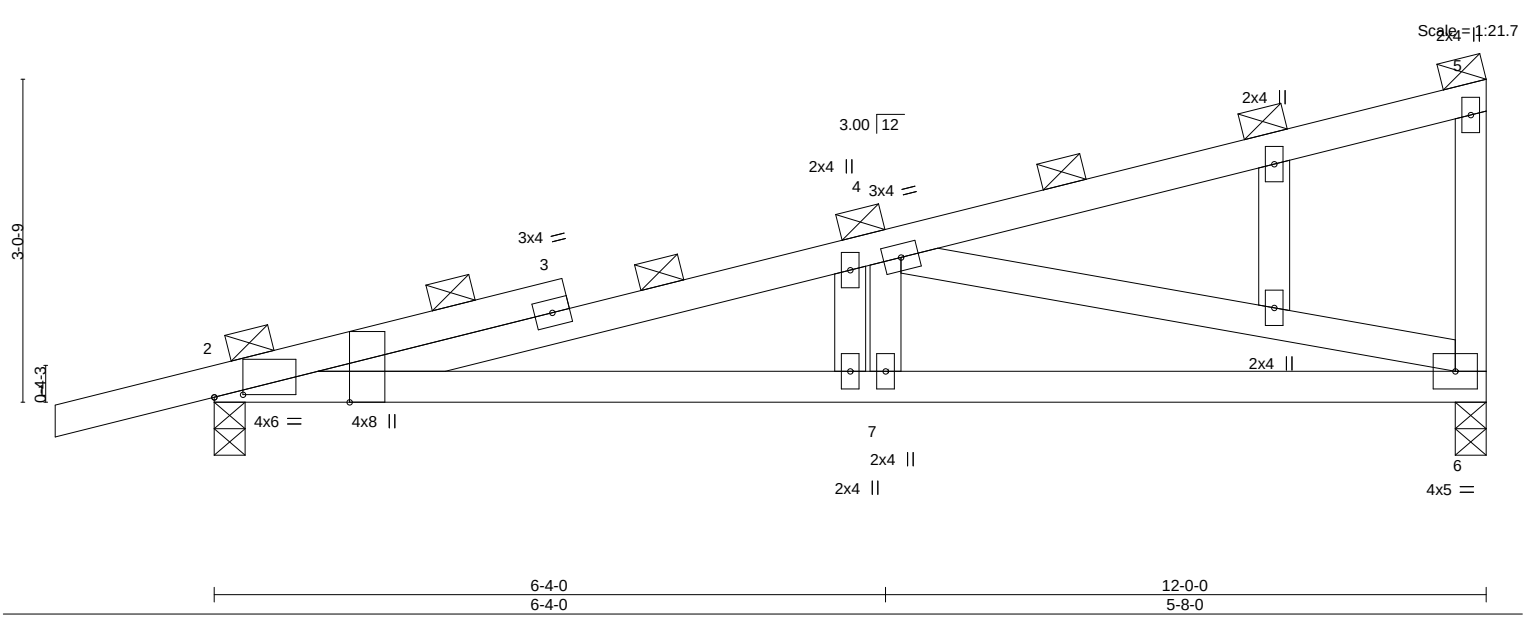


Plate Offsets (X,Y)--		[2:0-3-4,0-0-5], [2:0-0-9,Edge]										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.61	Vert(LL)	0.12	7-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	-0.14	7-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014		Matrix-MS						Weight: 59 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD 2-0-0 oc purlins (4-1-14 max.), except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 5-0-1 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=123(LC 8)
Max Uplift 2=-313(LC 8), 6=-256(LC 8)
Max Grav 2=574(LC 1), 6=461(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1206/1100
BOT CHORD 2-7=-1220/1179, 6-7=-1220/1179
WEBS 4-7=-134/253, 4-6=-1181/1221

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 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) except (jt=lb) 2=313, 6=256.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

October 10,2025

Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803909
4893994	T08	Monopitch Girder	1	2	Job Reference (optional)	

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

8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:17 2025 Page 1
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6-4-06-4-012-3-85-11-8

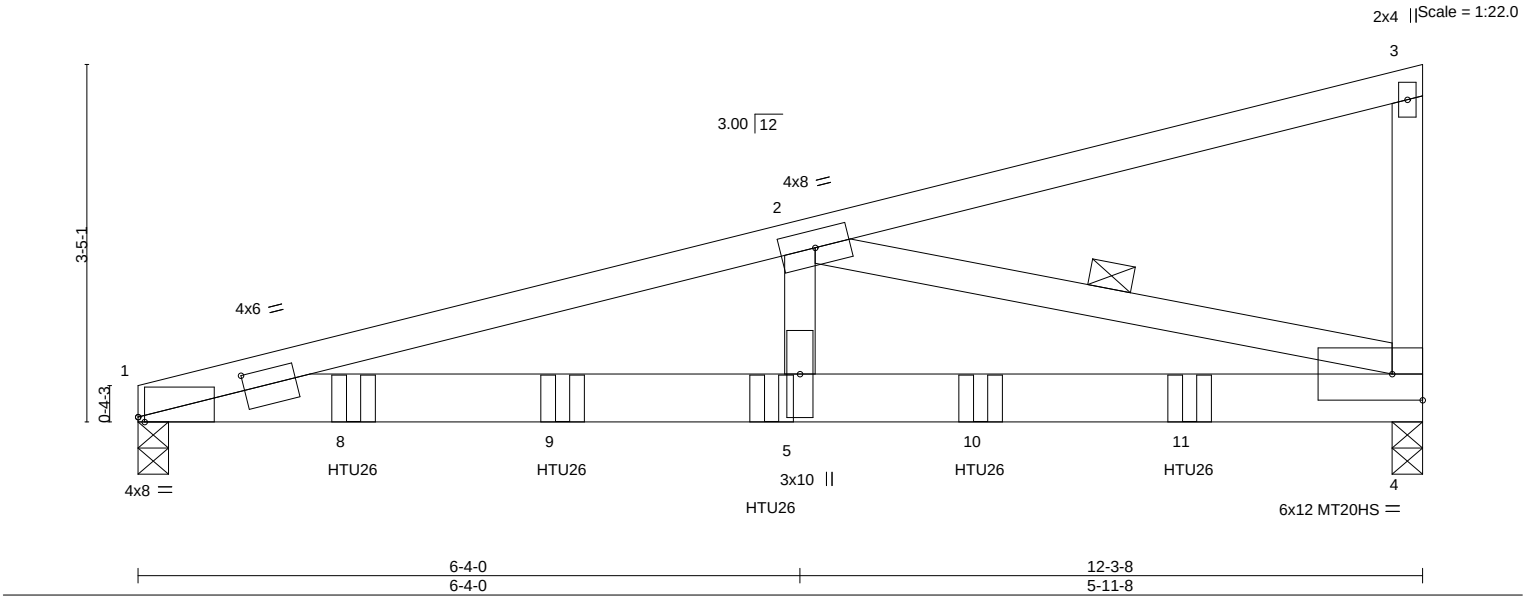


Plate Offsets (X,Y)--		[1:0-0-12,Edge], [1:1-0-10,0-1-12]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 1.00
TCDL 10.0	Lumber DOL	1.25	BC 0.80
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.84
BCDL 10.0	Code	FBC2023/TP12014	Matrix-MS
DEFL.	in (loc)	I/defl	L/d
Vert(LL)	-0.17	5-7	>833
Vert(CT)	-0.34	5-7	>431
Horz(CT)	0.05	4	n/a
PLATES	GRIP		
MT20	244/190		
MT20HS	187/143		
Weight: 124 lb	FT = 20%		

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x6 SP 2400F 2.0E or 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 2-4
2-4: 2x4 SP No.2	

REACTIONS.	(size) 1=0-3-8, 4=0-3-8
Max Horz	1=118(LC 25)
Max Uplift	1=-993(LC 4), 4=-1033(LC 4)
Max Grav	1=3601(LC 2), 4=3648(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-9693/2599
BOT CHORD	1-5=-2604/9403, 4-5=-2604/9403
WEBS	2-5=-1110/4432, 2-4=-9576/2647

- 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 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - All plates are MT20 plates unless otherwise indicated.
 - 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=993, 4=1033.
 - Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 10-0-12 to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S)	Standard
--------------	----------

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Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:
October 10,2025

Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803909
4893994	T08	Monopitch Girder	1	2	Job Reference (optional)	

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

8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:17 2025 Page 2
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LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 1-4=-20

Concentrated Loads (lb)

Vert: 5=-1227(F) 8=-1227(F) 9=-1227(F) 10=-1227(F) 11=-1227(F)

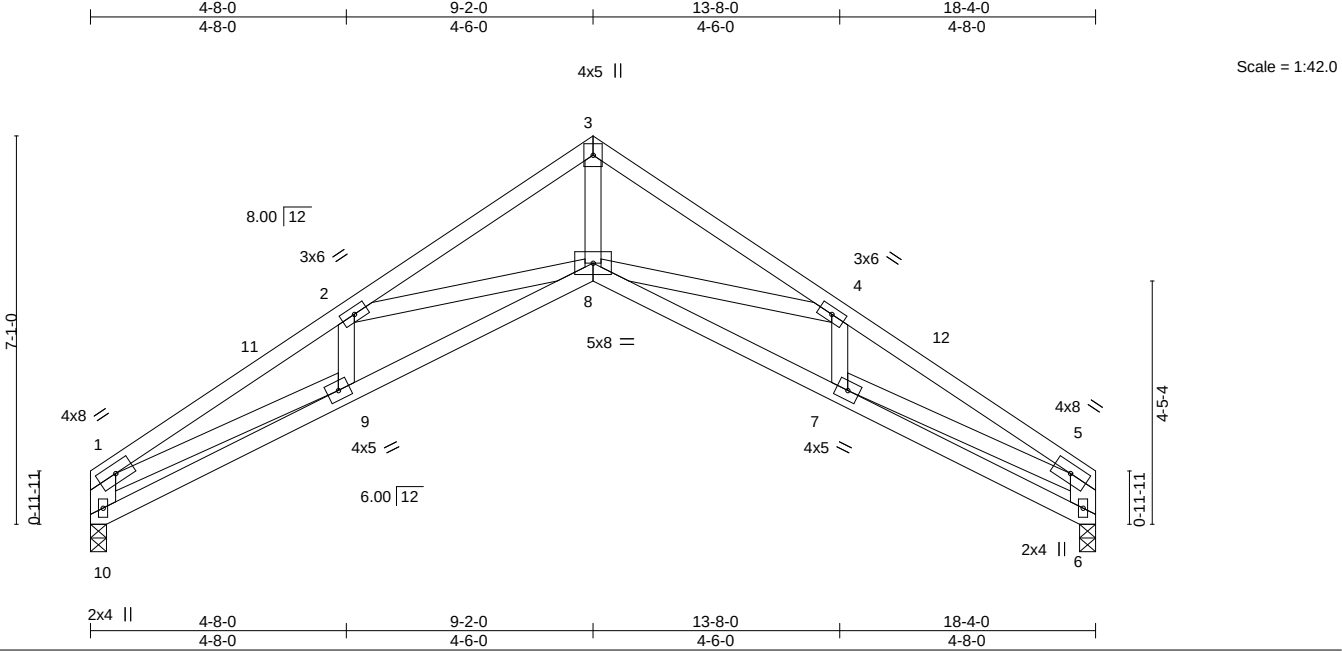
 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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

Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803910
4893994	T09	Scissor	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:18 2025 Page 1
ID:5r2frgbregYyobjgsnrYiDyVSr7-gfKOtkdrO8JqvzxiGCswRXA_iVw_n4H3m81UdYyVC2x



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) -0.11	8	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.25	BC 0.47	Vert(CT) -0.23	8-9	>919	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.62	Horz(CT) 0.26	6	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS					Weight: 101 lb	FT = 20%

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

REACTIONS. (size) 10=0-3-8, 6=0-3-8
Max Horz 10=147(LC 11)
Max Uplift 10=-158(LC 12), 6=-158(LC 13)
Max Grav 10=715(LC 1), 6=715(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1984/523, 2-3=-1778/345, 3-4=-1778/369, 4-5=-1984/387, 1-10=-735/242, 5-6=-735/209
BOT CHORD 9-10=-184/307, 8-9=-531/1865, 7-8=-308/1785
WEBS 3-8=-295/1625, 4-8=-302/327, 2-8=-277/271, 1-9=-337/1504, 5-7=-254/1504

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-2-12 to 3-2-12, Zone1 3-2-12 to 9-2-0, Zone2 9-2-0 to 13-8-0, Zone1 13-8-0 to 18-1-4 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.
 - 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) 10, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=158, 6=158.

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Joaquin Velez PE No.68182
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Chesterfield, MO 63017
Date:

October 10,2025

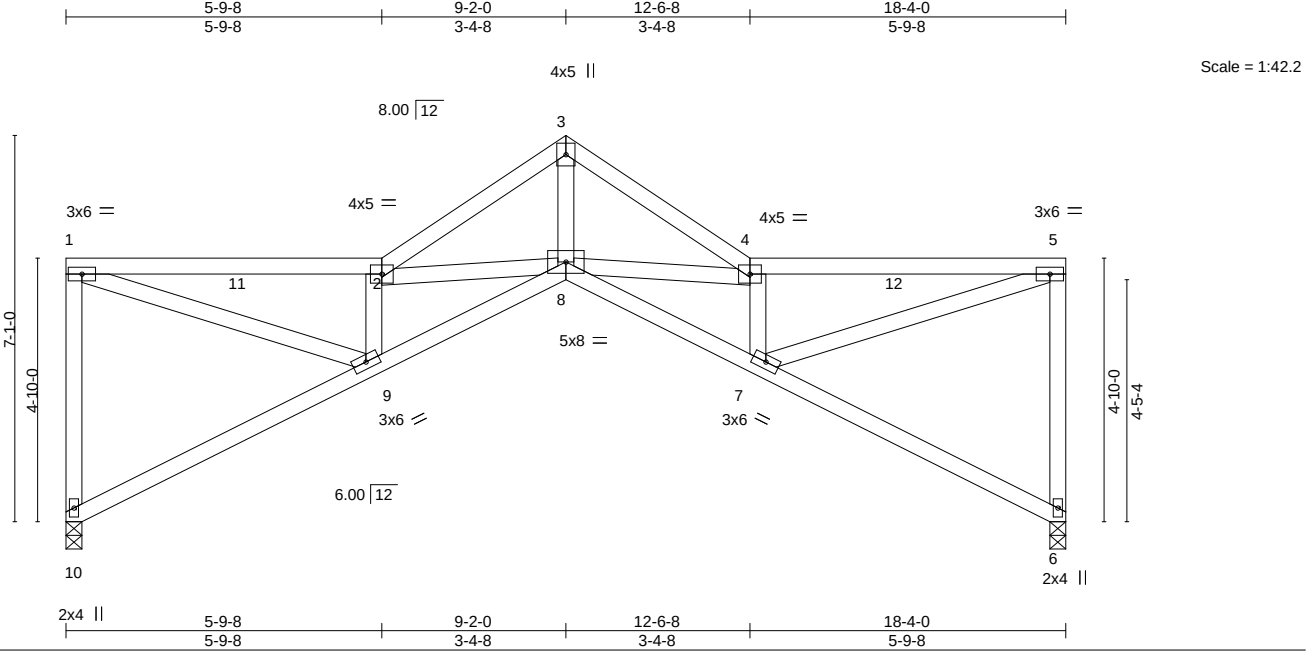
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Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803912
4893994	T10	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:19 2025 Page 1
ID:5r2frgbregYyobjgsnrYiDyVSr7-8sum44eT9SRhX7WuqwN9_kj5cvHqWW9C?om19_vVC2w



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.55	Vert(LL) -0.11	8	>999	240		MT20	244/190
TCDL 10.0	Lumber DOL 1.25	BC 0.44	Vert(CT) -0.22	8	>989	180			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.64	Horz(CT) 0.25	6	n/a	n/a			
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS						Weight: 107 lb	FT = 20%

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

REACTIONS. (size) 10=0-3-8, 6=0-3-8
Max Horz 10=55(LC 9)
Max Uplift 10=-169(LC 12), 6=-169(LC 13)
Max Grav 10=722(LC 1), 6=722(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-675/203, 1-2=-1524/363, 2-3=-1759/389, 3-4=-1759/407, 4-5=-1524/319, 5-6=-675/186
BOT CHORD 8-9=-486/1820, 7-8=-391/1820
WEBS 1-9=-376/1584, 2-9=-1212/351, 2-8=-275/119, 3-8=-359/1686, 4-8=-275/133, 4-7=-1212/312, 5-7=-330/1584

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-1-12 to 3-1-12, Zone1 3-1-12 to 9-2-0, Zone3 9-2-0 to 12-6-8, Zone1 12-6-8 to 18-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 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) 10, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=169, 6=169.

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

October 10,2025

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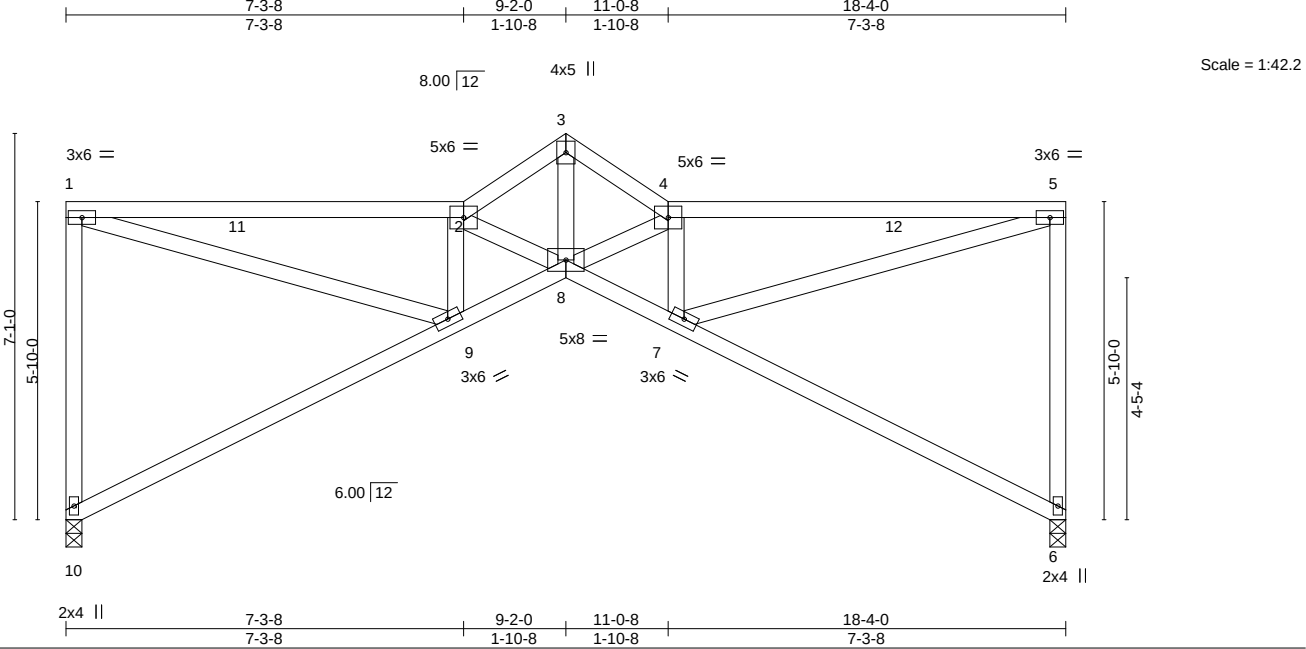
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Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803913
4893994	T11	Roof Special	1	1	Job Reference (optional)	

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

8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:19 2025 Page 1

ID:5r2frgbregYyobjgsnrYiDyVSr7-8sum44eT9SRhX7Wuqwn9_kj?AvE5WWDC?om19_yVC2w



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.96	Vert(LL)	-0.11	8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.61	Vert(CT)	-0.23	6-7	>932		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.24	6	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 110 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-9-15 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 10=0-3-8, 6=0-3-8
Max Horz 10=-30(LC 10)
Max Uplift 10=-174(LC 12), 6=-174(LC 13)
Max Grav 10=722(LC 1), 6=722(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-667/204, 1-2=-1545/340, 2-3=-1726/386, 3-4=-1726/386, 4-5=-1545/307, 5-6=-667/194
BOT CHORD 8-9=-440/1802, 7-8=-377/1802
WEBS 1-9=-346/1585, 2-9=-1116/328, 2-8=-313/98, 3-8=-417/1843, 4-8=-313/103, 4-7=-1116/300, 5-7=-311/1585

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-1-12 to 3-1-12, Zone1 3-1-12 to 9-2-0, Zone3 9-2-0 to 11-0-8, Zone1 11-0-8 to 18-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 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) 10, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=174, 6=174.

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

October 10,2025

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803914
4893994	T12	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:20 2025 Page 1
ID:5r2frgbregYyojbgsnrYiDyVSr7-d2S8lQf5wmZY9H54OdVOWyGGaJXFF1VMDSWbhQyVC2v

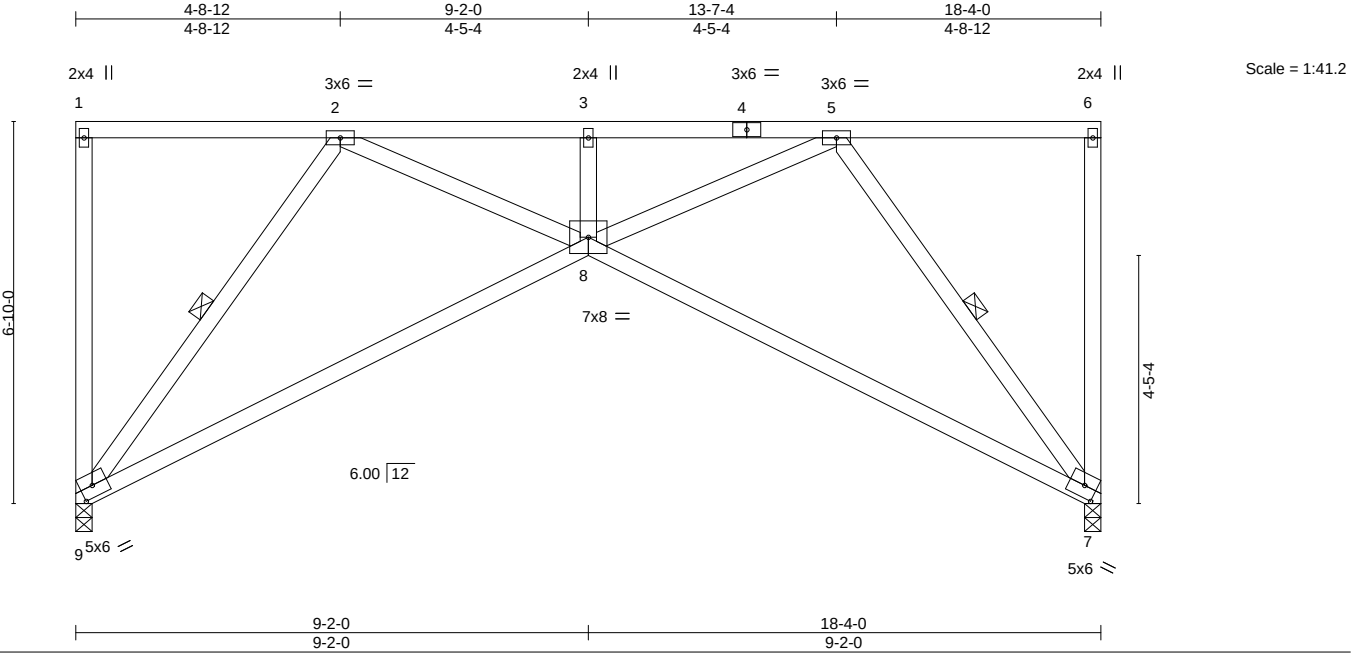


Plate Offsets (X,Y)--		[7:0-2-11,0-2-8], [9:0-2-11,0-2-8]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.25	TC 0.53	Vert(LL)	-0.26	8-9	>827	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.81	Vert(CT)	-0.54	8-9	>400	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.44	Horz(CT)	0.15	7	n/a	n/a		
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 116 lb	FT = 20%

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

REACTIONS.	(size) 9=0-3-8, 7=0-3-8
	Max Uplift 9=-218(LC 8), 7=-218(LC 8)
	Max Grav 9=722(LC 1), 7=722(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1628/936, 3-5=-1628/936
BOT CHORD	8-9=-430/681, 7-8=-430/681
WEBS	2-9=-978/655, 2-8=-620/1167, 5-8=-620/1167, 5-7=-978/655

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Bearing at joint(s) 9, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=218, 7=218.

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

October 10,2025

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Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803915
4893994	T13	Roof Special	1	1	Job Reference (optional)	

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

8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:21 2025 Page 1

ID:5r2fgrbgYyobjgsnrYiDyVSr7-5E0WVmfmjh3hPmQgHyLQd39oSkjth_V_VS6F8DtyVC2u

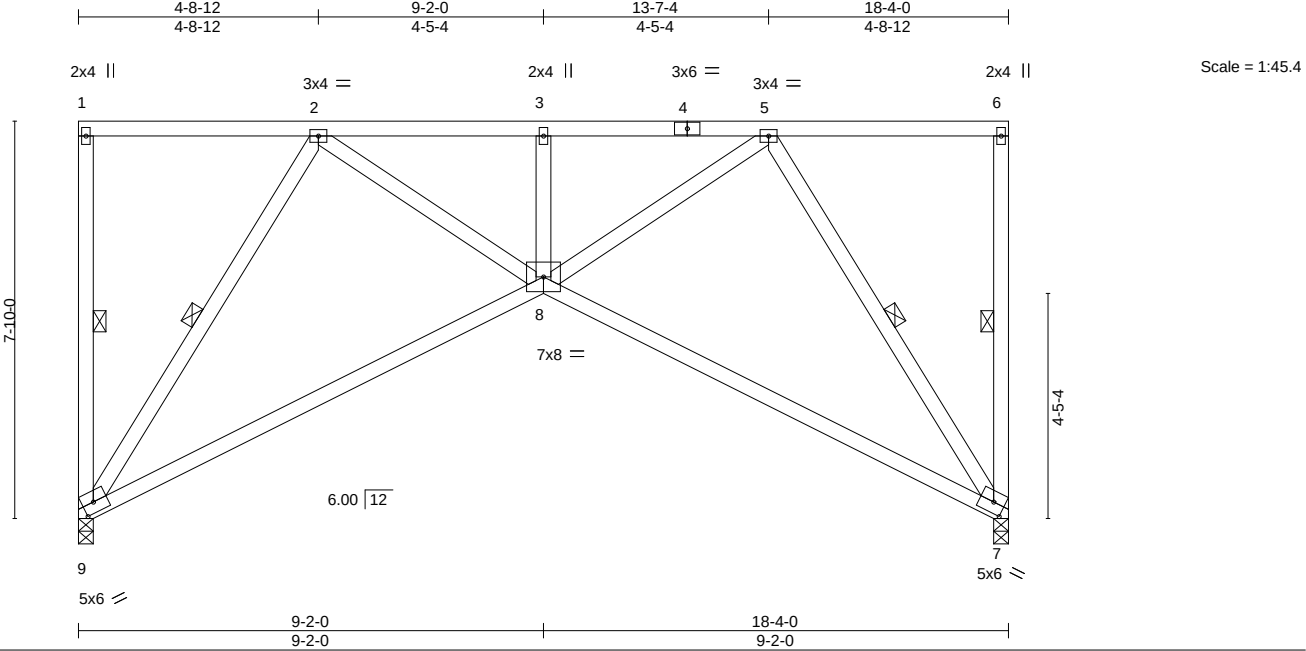


Plate Offsets (X,Y)--		[7:0-2-11,0-2-8], [9:0-2-11,0-2-8]	
LOADING (psf)	SPACING-	2-0-0	CSL.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.51
TCDL 10.0	Lumber DOL	1.25	BC 0.79
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.37
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-MS
DEFL.	in (loc)	I/defl	L/d
Vert(LL)	-0.26	8-9	>844
Vert(CT)	-0.52	8-9	>414
Horz(CT)	0.09	7	n/a
PLATES	GRIP		
MT20	244/190		
Weight: 125 lb		FT = 20%	

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

REACTIONS. (size) 9=0-3-8, 7=0-3-8
Max Uplift 9=-218(LC 8), 7=-218(LC 8)
Max Grav 9=722(LC 1), 7=722(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1108/636, 3-5=-1108/636
BOT CHORD 8-9=-351/561, 7-8=-351/561
WEBS 2-9=-876/588, 2-8=-405/785, 5-8=-405/785, 5-7=-876/588

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C 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.
 - 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) 9, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=218, 7=218.

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314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803916
4893994	T14	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),

Lake City, FL - 32055,

8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:21 2025 Page 1

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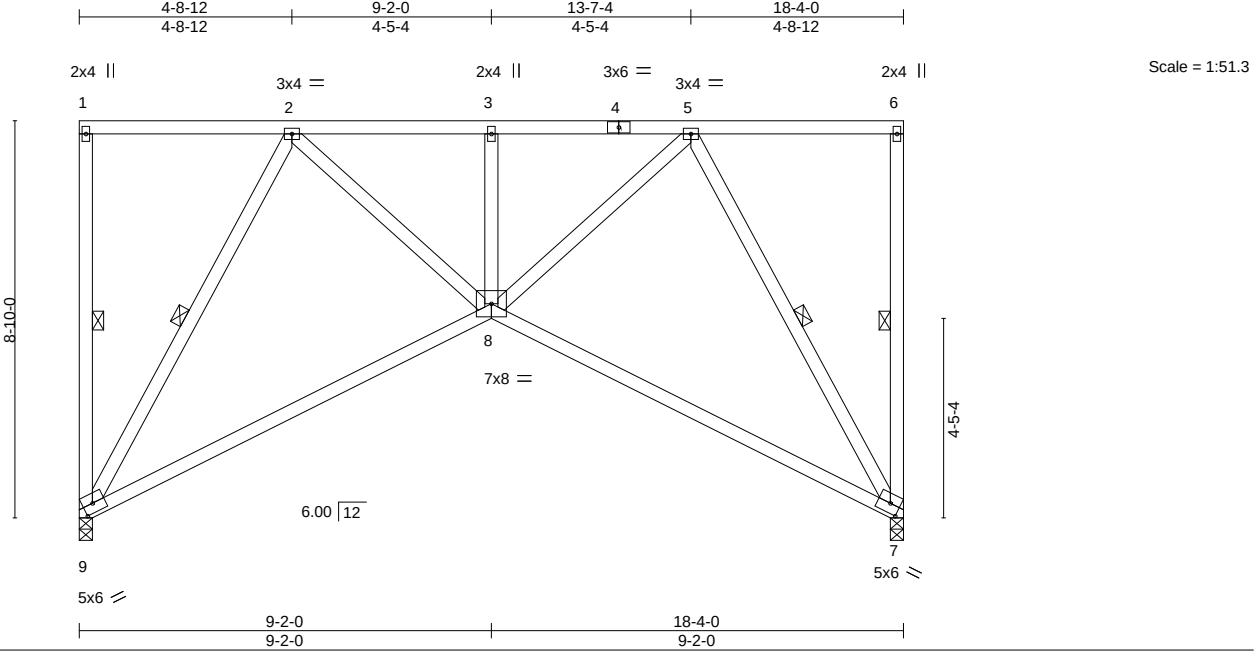


Plate Offsets (X,Y)--		[7:0-2-11,0-2-8], [9:0-2-11,0-2-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	20.0	Plate Grip DOL 1.25		TC	0.49	Vert(LL)	-0.26	8-9	>845	240	MT20 244/190
TCDL	10.0	Lumber DOL 1.25		BC	0.79	Vert(CT)	-0.52	8-9	>417	180	
BCLL	0.0 *	Rep Stress Incr YES		WB	0.40	Horz(CT)	0.07	7	n/a	n/a	
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 133 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 10'-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 1-9, 6-7, 2-9, 5-7
REACTIONS.			
(size) 9=0-3-8, 7=0-3-8			
Max Uplift 9=-218(LC 8), 7=-218(LC 8)			
Max Grav 9=722(LC 1), 7=722(LC 1)			

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

TOP CHORD 2-3=-839/481, 3-5=-839/481

BOT CHORD 8-9=-297/479, 7-8=-297/479

WEBS 2-9=-809/543, 2-8=-306/610, 5-8=-306/610, 5-7=-809/543

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C 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.
 - 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" tall by 2'-0" wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 9, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=218, 7=218.

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

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

October 10,2025

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.	T38803917
4893994	T15	FLAT GIRDER	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL),

Lake City, FL - 32055,

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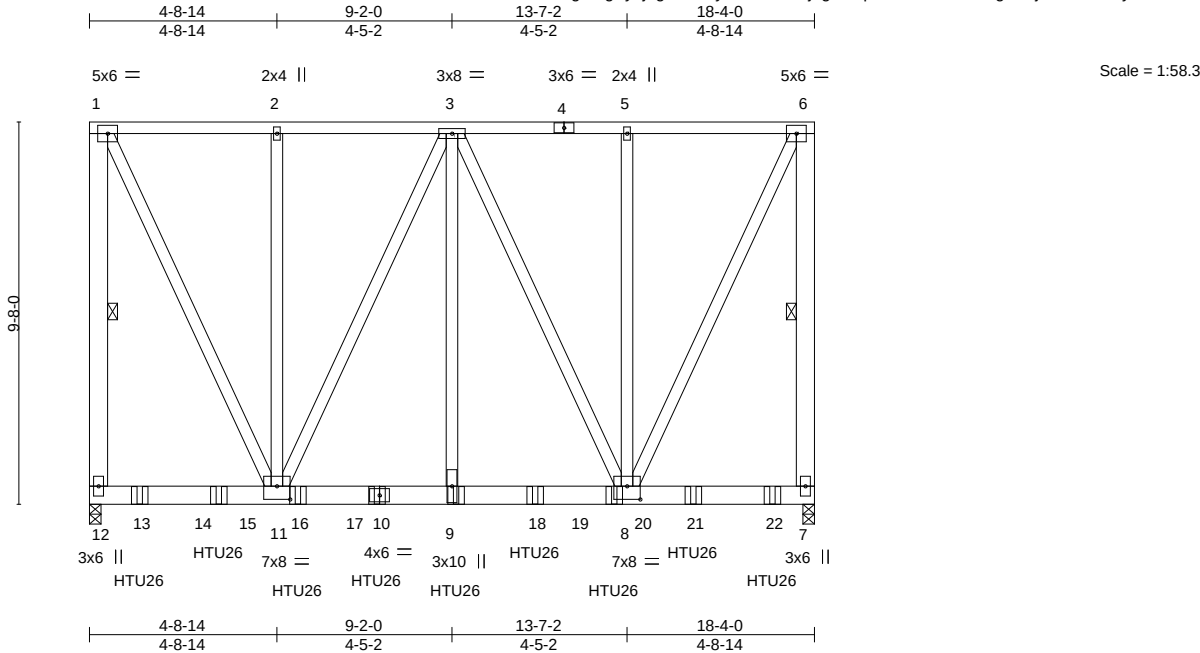


Plate Offsets (X,Y)--		[8:0-4-0,0-4-0], [11:0-4-0,0-4-0]										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.17	Vert(LL)	-0.05	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.56	Vert(CT)	-0.09	9-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 420 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 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 1-12, 6-7
1-12,6-7: 2x6 SP No.2	

REACTIONS. (size) 12=0-3-8, 7=0-3-8
Max Uplift 12=-1075(LC 4), 7=-1094(LC 4)
Max Grav 12=4084(LC 2), 7=4162(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-12=-3319/905, 1-2=-1584/417, 2-3=-1584/417, 3-5=-1582/416, 5-6=-1582/416, 6-7=-3313/903
BOT CHORD 9-11=-537/2040, 8-9=-537/2040
WEBS 1-11=-935/3563, 2-11=-270/153, 3-11=-1058/280, 3-9=-375/1691, 3-8=-1064/282, 5-8=-270/153, 6-8=-933/3556

- NOTES-
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 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.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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=1075, 7=1094.
 - Use Simpson Strong-Tie HTU26 (10-10d Girder, 14-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-3-4 from the left end to 17-3-4 to connect truss(es) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	HEATHERMAN RES.
4893994	T15	FLAT GIRDER	1	2	T38803917

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

8.830 s Sep 3 2025 MiTek Industries, Inc. Thu Oct 9 08:40:22 2025 Page 2
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LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-6=-60, 7-12=-20

Concentrated Loads (lb)

Vert: 10=-687(B) 9=-687(B) 13=-687(B) 15=-687(B) 16=-687(B) 18=-687(B) 20=-687(B) 21=-687(B) 22=-689(B)

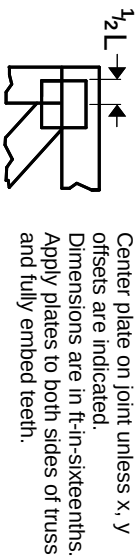
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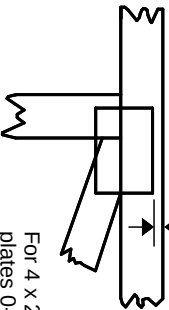
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Symbols

PLATE LOCATION AND ORIENTATION



0- $\frac{1}{16}$ "



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

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

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

PLATE SIZE

4 X 4

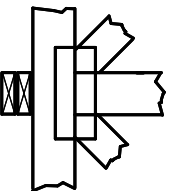
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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/TP1.1: 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.

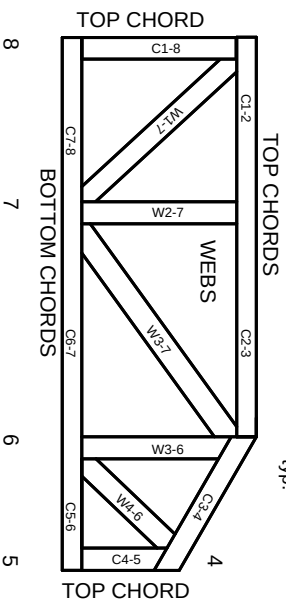
Numbering System

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

1

2

3 Joint ID typ.



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

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

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MITek Engineering Reference Sheet: MIL-7473 rev. 1/12/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.