MiTek®

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

RE: 4894002 - TOLAR RES.

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

Site Information:

Customer Info: GIEBEIG CONST. Project Name: Tolar Res Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: TBD, TBD
City: Lake City, 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 17 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	T38828911	T01	10/13/25	15	T38828925	T10G	10/13/25
2	T38828912	T01G	10/13/25	16	T38828926	T11	10/13/25
3	T38828913	T01GG	10/13/25	17	T38828927	T11G	10/13/25
4	T38828914	T02	10/13/25				
5	T38828915	T03	10/13/25				
6	T38828916	T03G	10/13/25				
7	T38828917	T04	10/13/25				
8	T38828918	T05	10/13/25				
9	T38828919	T06	10/13/25				
10	T38828920	T06G	10/13/25				
11	T38828921	T07	10/13/25				
12	T38828922	T08	10/13/25				
13	T38828923	T09	10/13/25				
14	T38828924	T10	10/13/25				

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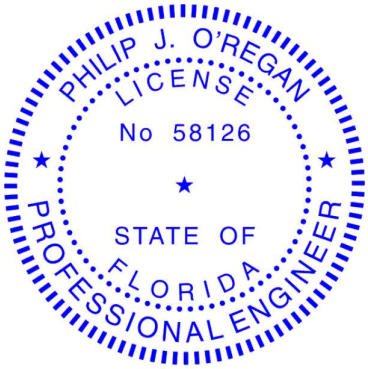
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Lake City, FL.

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



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

October 13,2025

Job	Truss	Truss Type	Qty	Ply	TOLAR RES.
4894002	T01	Common	6	1	T38828911
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:28 2025 Page 1
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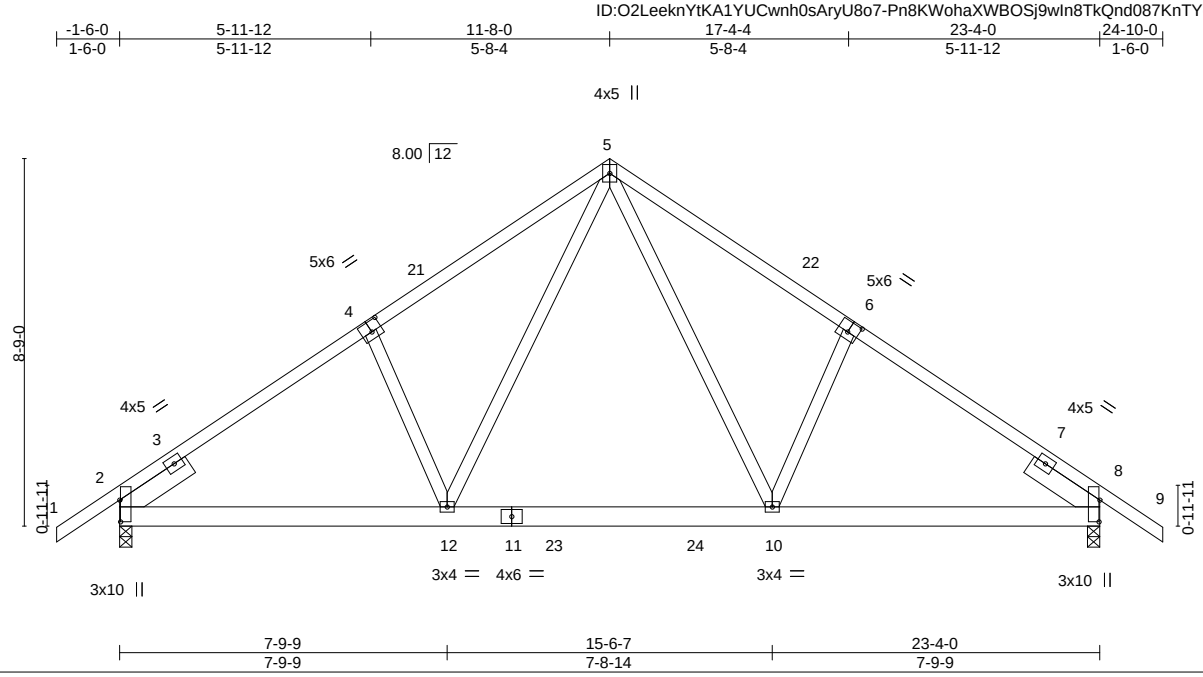

Plate Offsets (X,Y)-- [2:0-6-3,0-0-4], [4:0-3-0,0-3-0], [6:0-3-0,0-3-0], [8:0-6-3,0-0-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.66	Vert(LL)	-0.13	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.26	10-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 151 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-217(LC 10)
Max Uplift 2=-317(LC 12), 8=-317(LC 13)
Max Grav 2=1380(LC 19), 8=1380(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1728/400, 4-5=-1655/472, 5-6=-1655/472, 6-8=-1728/400
BOT CHORD 2-12=-352/1511, 10-12=-146/1040, 8-10=-236/1382
WEBS 5-10=-277/867, 6-10=-277/233, 5-12=-277/867, 4-12=-277/233

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 11-8-0, Zone2 11-8-0 to 15-10-15, Zone1 15-10-15 to 24-10-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 317 lb uplift at joint 2 and 317 lb uplift at joint 8.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-60, 5-9=-60, 12-13=-20, 10-12=-80(F=-60), 10-17=-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:

October 13,2025

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

Job	Truss	Truss Type	Qty	Ply	TOLAR RES.
4894002	T01G	GABLE	1	1	T38828912
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:29 2025 Page 1
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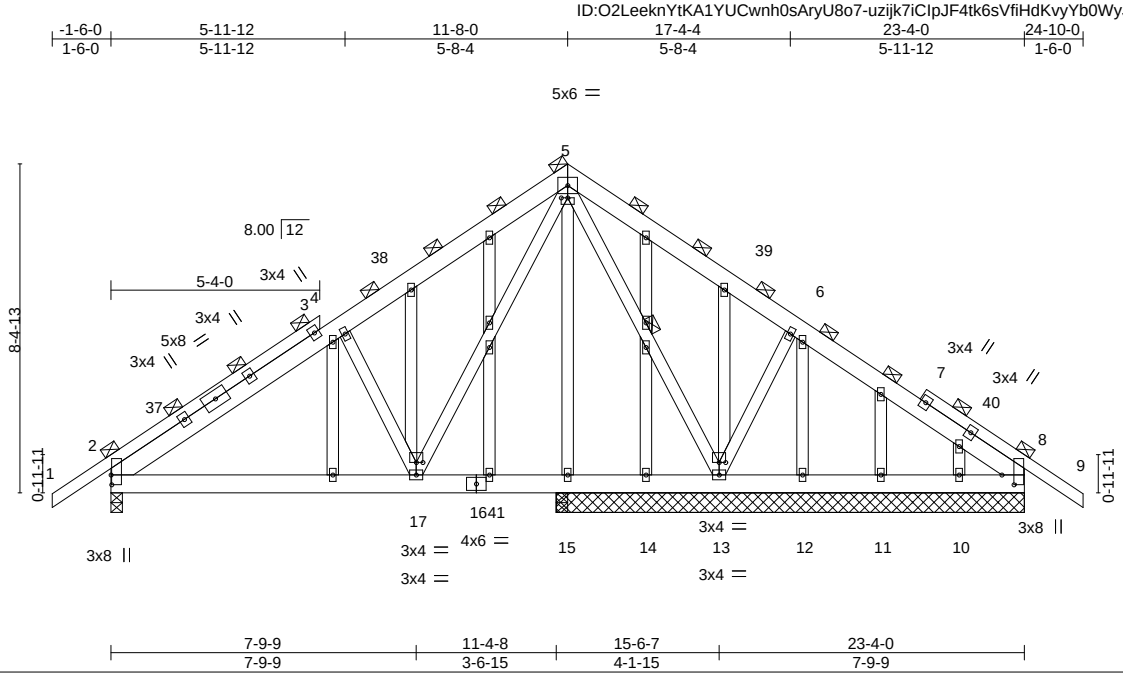

Plate Offsets (X,Y)-- [2:0-3-0,0-0-3], [5:0-2-0,0-0-0], [8:0-3-0,0-3-11], [13:0-2-0,0-0-0], [17:0-2-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.20	Vert(LL)	-0.02	17-31	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.04	17-31	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.01	33	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 234 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2 *Except*
	1-3,7-9: 2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	2-0-0 oc purlins (6-0-0 max.).
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-13

REACTIONS. All bearings 11-11-8 except (jt=length) 2=0-3-8, 15=0-3-8, 15=0-3-8.
(lb) - Max Horz 2=-206(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 8, 14, 10, 15 except 2=-179(LC 12), 13=-260(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 14, 12, 11, 10, 15, 15 except 2=739(LC 19), 8=292(LC 26), 13=845(LC 1), 8=272(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-697/170, 4-5=-607/228
BOT CHORD 2-17=-179/684, 15-17=-48/277, 14-15=-48/277, 13-14=-48/277
WEBS 5-13=-592/155, 6-13=-349/250, 5-17=-197/574, 4-17=-378/255

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 11-8-0, Zone2 11-8-0 to 15-10-15, Zone1 15-10-15 to 24-10-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 14, 10, 15, 8 except (jt=lb) 2=179, 13=260.
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 ORegan, Philip, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

October 13,2025

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

Job	Truss	Truss Type	Qty	Ply	TOLAR RES.
4894002	T01GG	Common Supported Gable	1	1	T38828913
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:29 2025 Page 1
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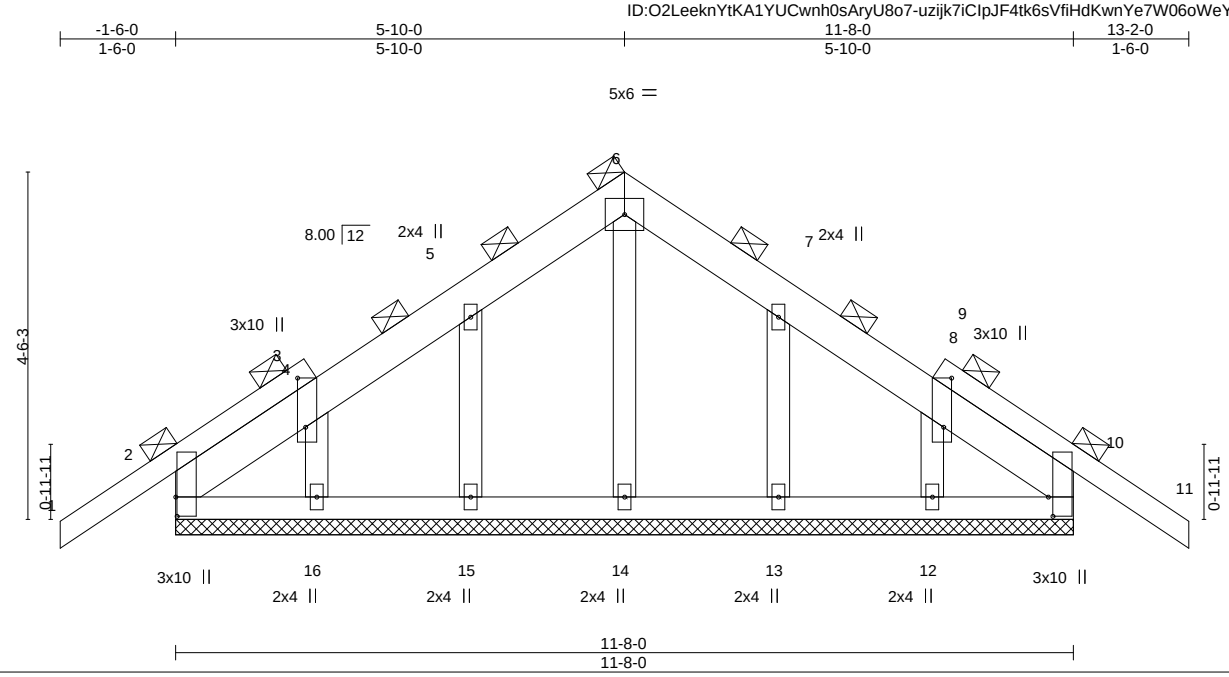

Plate Offsets (X,Y)-- [2:0-3-0,0-0-3], [3:0-7-11,0-1-4], [9:0-7-11,0-1-4], [10:0-3-0,0-0-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	-0.01	11	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	-0.01	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S							Weight: 79 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
1-4,8-11: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

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

REACTIONS. All bearings 11-8-0.
(lb) - Max Horz 2=110(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 16, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 16, 13, 12

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

NOTES-
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; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Gable requires continuous bottom chord bearing.
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) 2, 10, 15, 16, 13, 12.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

October 13,2025

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

Job	Truss	Truss Type	Qty	Ply	TOLAR RES.
4894002	T02	Common	5	1	T38828914
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:30 2025 Page 1
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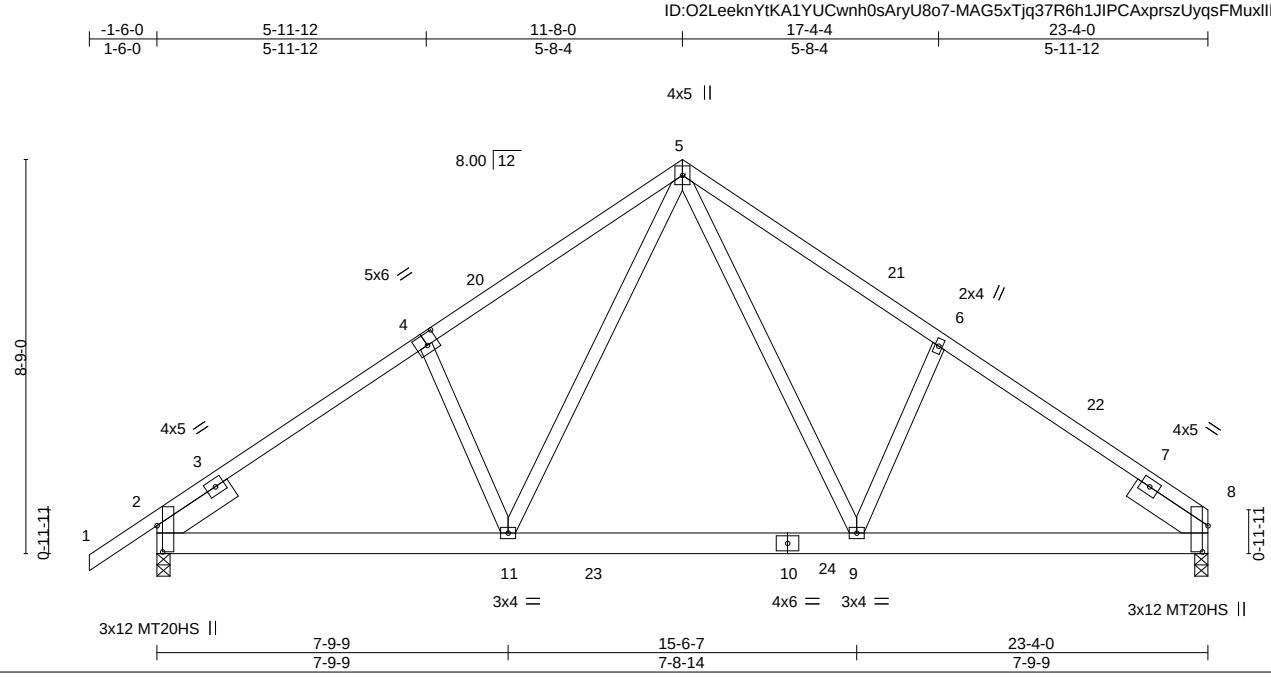

Plate Offsets (X,Y)-- [2:0-7-0,0-1-8], [4:0-3-0,0-3-0], [8:0-7-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.66	Vert(LL)	-0.13	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.25	9-11	>999	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.45	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 148 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=209(LC 11)
Max Uplift 8=-279(LC 13), 2=-317(LC 12)
Max Grav 8=1293(LC 20), 2=1382(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1731/400, 4-5=-1658/472, 5-6=-1668/477, 6-8=-1740/405
BOT CHORD 2-11=-369/1500, 9-11=-163/1030, 8-9=-254/1378
WEBS 5-9=-282/880, 6-9=-281/235, 5-11=-276/865, 4-11=-277/233

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 11-8-0, Zone2 11-8-0 to 15-10-15, Zone1 15-10-15 to 23-4-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are MT20 plates unless otherwise indicated.
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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=279, 2=317.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-60, 5-8=-60, 11-16=-20, 9-11=-80(F=-60), 9-12=-20

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Date:

October 13,2025

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

Job	Truss	Truss Type	Qty	Ply	TOLAR RES.
4894002	T03	Common	5	1	T38828915
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:31 2025 Page 1
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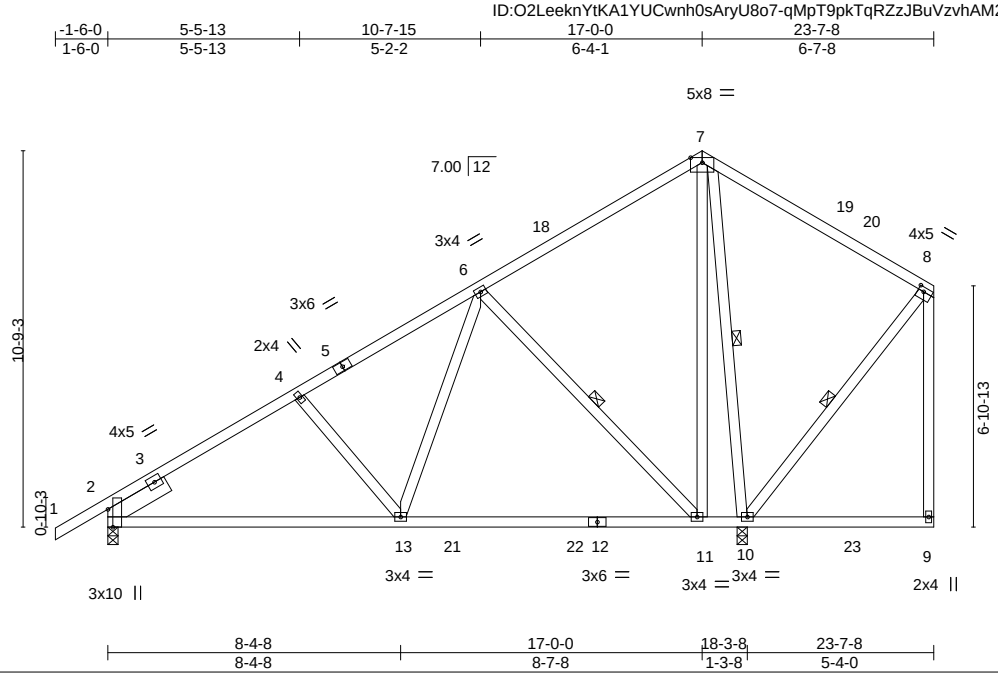

Plate Offsets (X,Y)-- [2:0-6-2,Edge], [8:0-2-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.60	Vert(LL)	-0.18	11-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.30	11-13	>718	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 165 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-11, 7-10, 8-10

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=329(LC 12)
Max Uplift 2=-175(LC 12), 10=-322(LC 12)
Max Grav 2=859(LC 19), 10=1432(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-909/170, 4-6=-787/164
BOT CHORD 2-13=-373/877, 11-13=-223/534
WEBS 4-13=-253/185, 6-13=-104/573, 6-11=-749/315, 7-11=-157/754, 7-10=-1170/271

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 17-0-0, Zone2 17-0-0 to 21-2-15, Zone1 21-2-15 to 23-5-12 zone; cantilever right exposed ; end vertical left 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=175, 10=322.

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Philip J. O'Regan PE No.58126
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 13,2025

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

Job	Truss	Truss Type	Qty	Ply	TOLAR RES. T38828916
4894002	T03G	GABLE	1	1	Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:31 2025 Page 1
ID:O2LeeknYtKA1YUCwnh0sAryU8o7-qMpT9pkTqRZzJBuVzvhAM2PGHMK9_uK5zy1eZUyU7J2

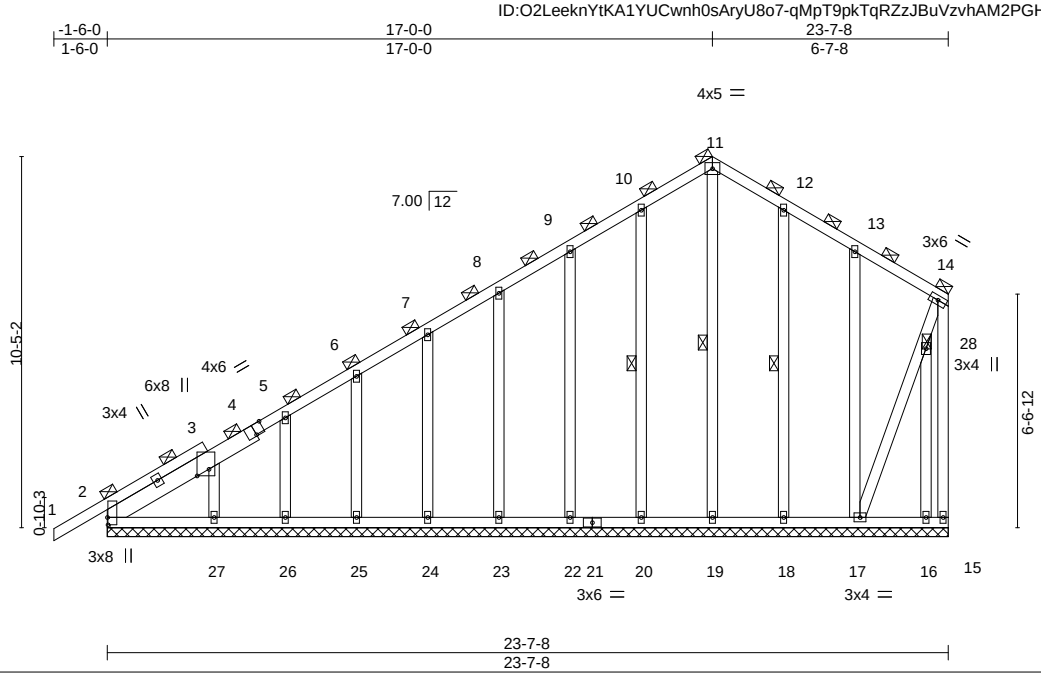

Plate Offsets (X,Y)-- [2:0-2-8,0-0-3], [3:0-2-4,0-4-0], [4:0-3-0,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.00	17	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S							Weight: 207 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except*
	2-4: 2x6 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	2-0-0 oc purlins (6-0-0 max.), except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
	10-0-0 oc bracing: 2-27,16-17,15-16.
WEBS	1 Row at midpt 11-19, 10-20, 12-18
JOINTS	1 Brace at Jt(s): 11, 28, 14

REACTIONS. All bearings 23-7-8.
(lb) - Max Horz 2=319(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 15, 2, 20, 22, 23, 24, 25, 26, 18 except 27=-133(LC 12), 17=-160(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 15, 2, 19, 20, 22, 23, 24, 25, 26, 27, 18, 17, 16

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-317/188

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; end vertical left 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 requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 2, 20, 22, 23, 24, 25, 26, 18 except (jt=lb) 27=133, 17=160.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Date:

October 13,2025

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Job	Truss	Truss Type	Qty	Ply	TOLAR RES.
4894002	T04	Common	2	1	T38828917
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:32 2025 Page 1
ID:O2LeeknYtKA1YUCwnh0sAryU8o7-IYNrM9l5bkhqxLThXdCPvGyKhlVXjJXECcmB5wyU7J1

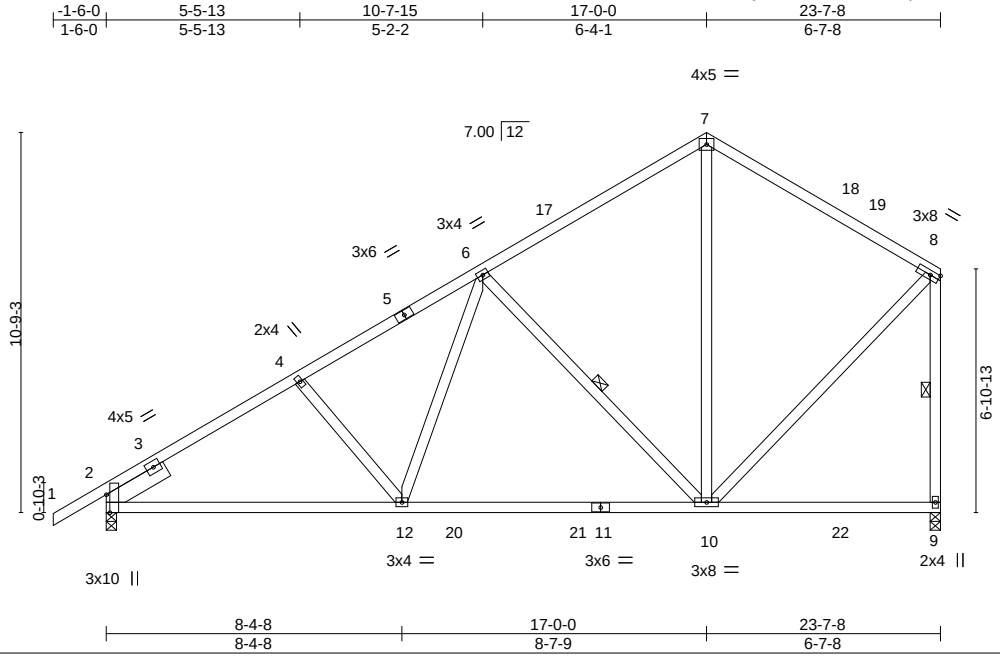

Plate Offsets (X,Y)-- [2:0-6-2,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.61	Vert(LL)	-0.19	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.75	Vert(CT)	-0.31	10-12	>911	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 152 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-6-8 oc bracing.
WEBS 1 Row at midpt 6-10, 8-9

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=329(LC 12)
Max Uplift 2=-248(LC 12), 9=-249(LC 12)
Max Grav 2=1185(LC 19), 9=1114(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1485/296, 4-6=-1353/291, 6-7=-675/181, 7-8=-702/206, 8-9=-1000/263
BOT CHORD 2-12=-478/1341, 10-12=-338/1047
WEBS 6-12=-91/510, 6-10=-718/308, 7-10=-46/316, 8-10=-178/779

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 17-0-0, Zone2 17-0-0 to 21-2-15, Zone1 21-2-15 to 23-5-12 zone; end vertical left 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=248, 9=249.

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Date:

October 13,2025

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Job	Truss	Truss Type	Qty	Ply	TOLAR RES.
4894002	T05	Roof Special	4	1	T38828918
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:33 2025 Page 1
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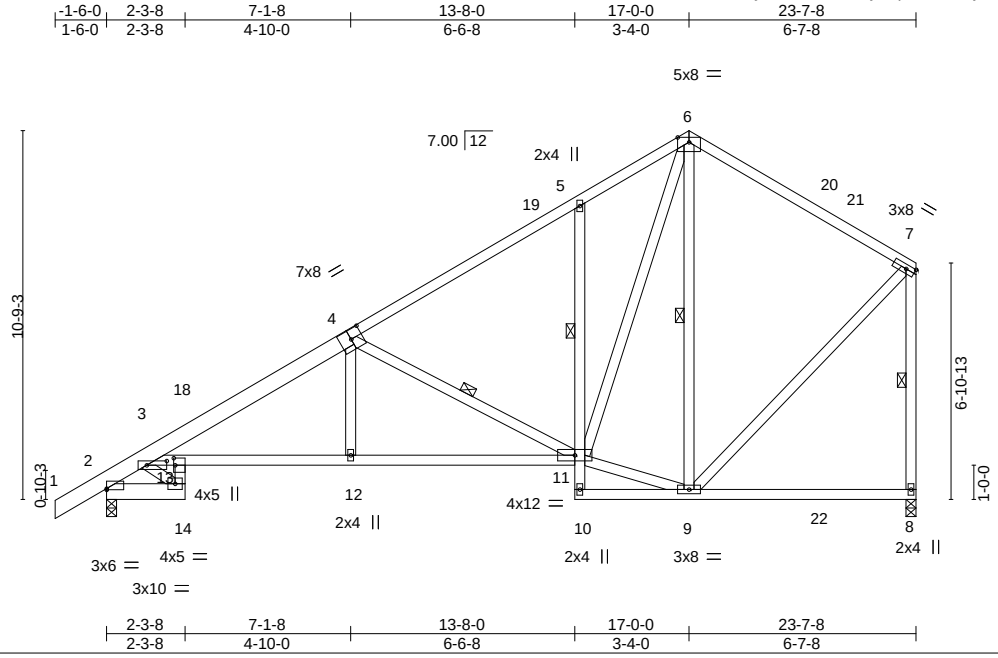

Plate Offsets (X,Y)-- [2:0-0-0,0-0-6], [3:0-7-0,0-1-8], [4:0-4-0,0-3-4], [13:0-2-8,0-0-8]

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	0.62	Vert(LL)	0.16	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-0.28	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.13	8	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 178 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 1-4: 2x6 SP No.2
BOT CHORD	2x4 SP No.3 *Except* 2-14: 2x6 SP No.2 3-11: 2x4 SP 2700F 2.2E or 2x4 SP 2850F 2.0E or 2x4 SP M 31 8-10: 2x4 SP No.2
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-2-13 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 9-8-5 oc bracing: 12-13 6-0-0 oc bracing: 9-10. 1 Row at midpt 5-11
WEBS	1 Row at midpt 4-11, 6-9, 7-8

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=333(LC 12)
Max Uplift 2=-249(LC 12), 8=-248(LC 12)
Max Grav 2=1175(LC 19), 8=1089(LC 19)

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

TOP CHORD	3-16=-993/150, 3-4=-1853/416, 4-5=-1032/247, 5-6=-1000/362, 6-7=-673/206, 7-8=-958/264
BOT CHORD	2-14=-326/644, 13-14=-204/425, 3-13=-489/1492, 12-13=-585/1712, 11-12=-585/1718, 5-11=-294/212
WEBS	4-12=-16/379, 4-11=-956/368, 9-11=-83/537, 6-11=-403/1056, 6-9=-448/190, 7-9=-175/733, 3-14=-537/291

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 17-0-0, Zone2 17-0-0 to 21-2-15, Zone1 21-2-15 to 23-5-12 zone; end vertical left 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=249, 8=248.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 13,2025

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314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	TOLAR RES.
4894002	T06	Common	2	1	T38828919
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:34 2025 Page 1
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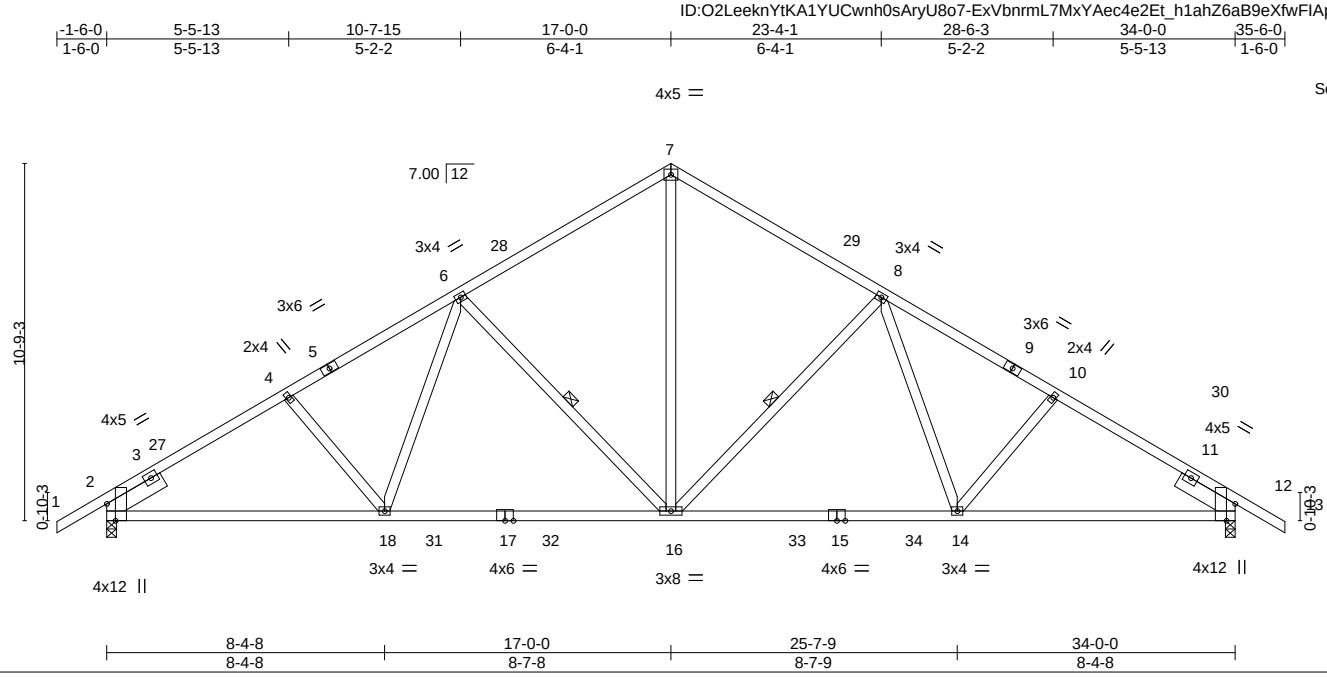

Plate Offsets (X,Y)-- [2:0-6-2,Edge], [12:0-6-2,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.96	Vert(LL)	-0.26	14-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.97	Vert(CT)	-0.45	14-16	>901	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.12	12	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 199 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 8-16, 6-16

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=-267(LC 10)
Max Uplift 2=-352(LC 12), 12=-352(LC 13)
Max Grav 2=1651(LC 19), 12=1651(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2286/474, 4-6=-2151/472, 6-7=-1594/405, 7-8=-1594/405, 8-10=-2151/472, 10-12=-2286/474
BOT CHORD 2-18=-477/2068, 16-18=-353/1844, 14-16=-224/1701, 12-14=-297/1868
WEBS 7-16=-253/1209, 8-16=-678/302, 8-14=-73/421, 6-16=-678/302, 6-18=-73/421

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 1-10-13, Zone1 1-10-13 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 35-6-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=352, 12=352.

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Date:

October 13,2025

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Job	Truss	Truss Type	Qty	Ply	TOLAR RES. T38828920
4894002	T06G	Common Supported Gable	1	1	Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:35 2025 Page 1
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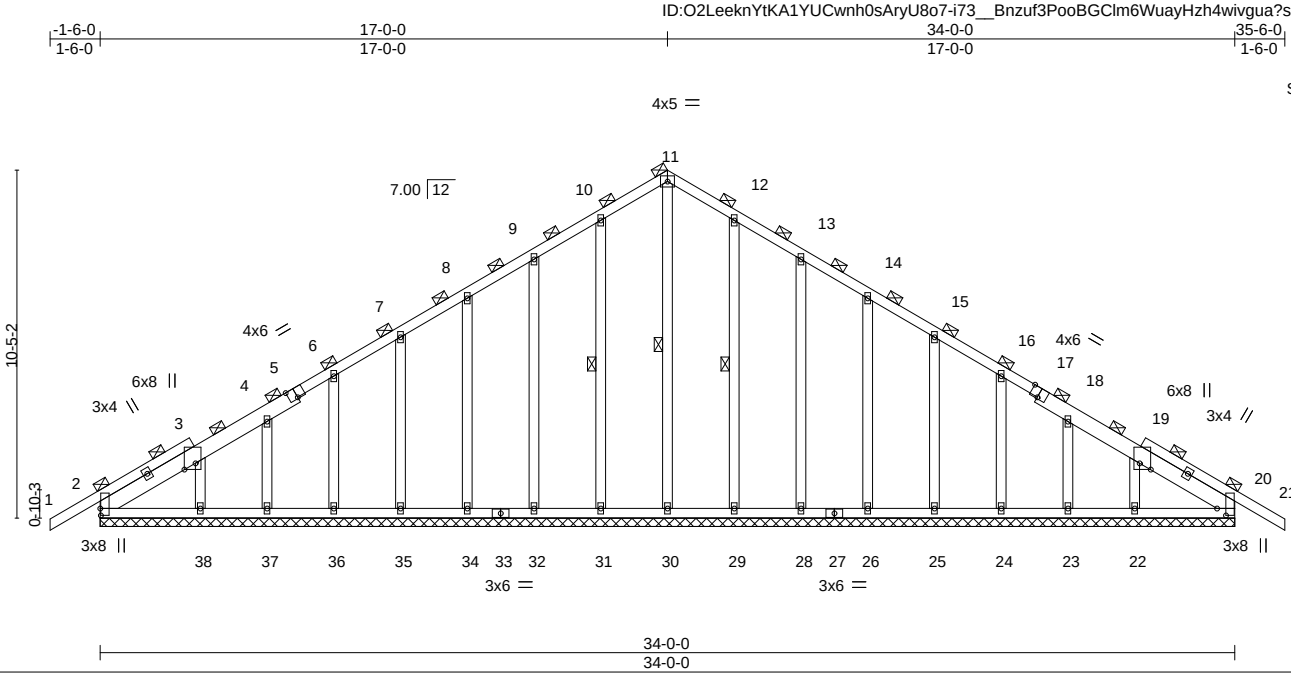

Plate Offsets (X,Y)-- [2:0-2-8,0-0-3], [3:0-2-4,0-4-0], [5:0-3-0,Edge], [17:0-3-0,Edge], [19:0-2-4,0-4-0], [20:0-2-8,0-3-3]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	-0.00	21	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	-0.01	21	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S							Weight: 258 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
2-5,17-20: 2x6 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 11-30, 10-31, 12-29

REACTIONS. All bearings 34-0-0.
(lb) - Max Horz 2=258(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 31, 32, 34, 35, 36, 37, 29, 28, 26, 25, 24, 23, 20 except 38=-122(LC 12), 22=-110(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 30, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22, 20

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

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) 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 requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 31, 32, 34, 35, 36, 37, 29, 28, 26, 25, 24, 23, 20 except (jt=lb) 38=122, 22=110.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Date:

October 13,2025

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Job	Truss	Truss Type	Qty	Ply	TOLAR RES.
4894002	T07	Common	4	1	T38828921
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:35 2025 Page 1
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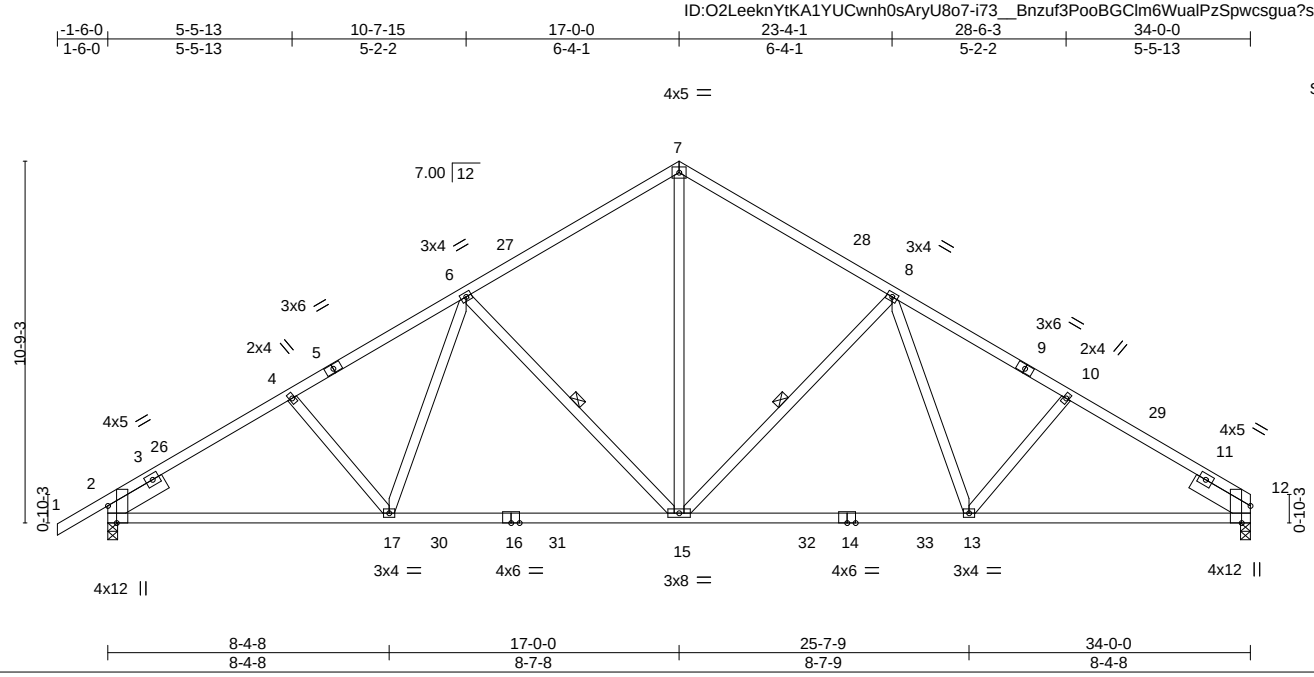

Plate Offsets (X,Y)-- [2:0-6-2,Edge], [12:0-6-2,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.97	Vert(LL)	-0.26	15-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.97	Vert(CT)	-0.45	15-17	>902	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.11	12	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 197 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 8-15, 6-15

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=259(LC 11)
Max Uplift 2=-352(LC 12), 12=-314(LC 13)
Max Grav 2=1653(LC 19), 12=1565(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2288/475, 4-6=-2153/472, 6-7=-1597/406, 7-8=-1596/405, 8-10=-2164/477, 10-12=-2301/480
BOT CHORD 2-17=-491/2059, 15-17=-368/1835, 13-15=-239/1695, 12-13=-332/1890
WEBS 7-15=-255/1212, 8-15=-683/304, 8-13=-78/433, 6-15=-678/302, 6-17=-73/421

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 1-10-13, Zone1 1-10-13 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 34-0-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=352, 12=314.

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

Philip J. O'Regan PE No.58126
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 13,2025

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Job	Truss	Truss Type	Qty	Ply	TOLAR RES.
4894002	T08	Roof Special	8	1	T38828922
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:36 2025 Page 1
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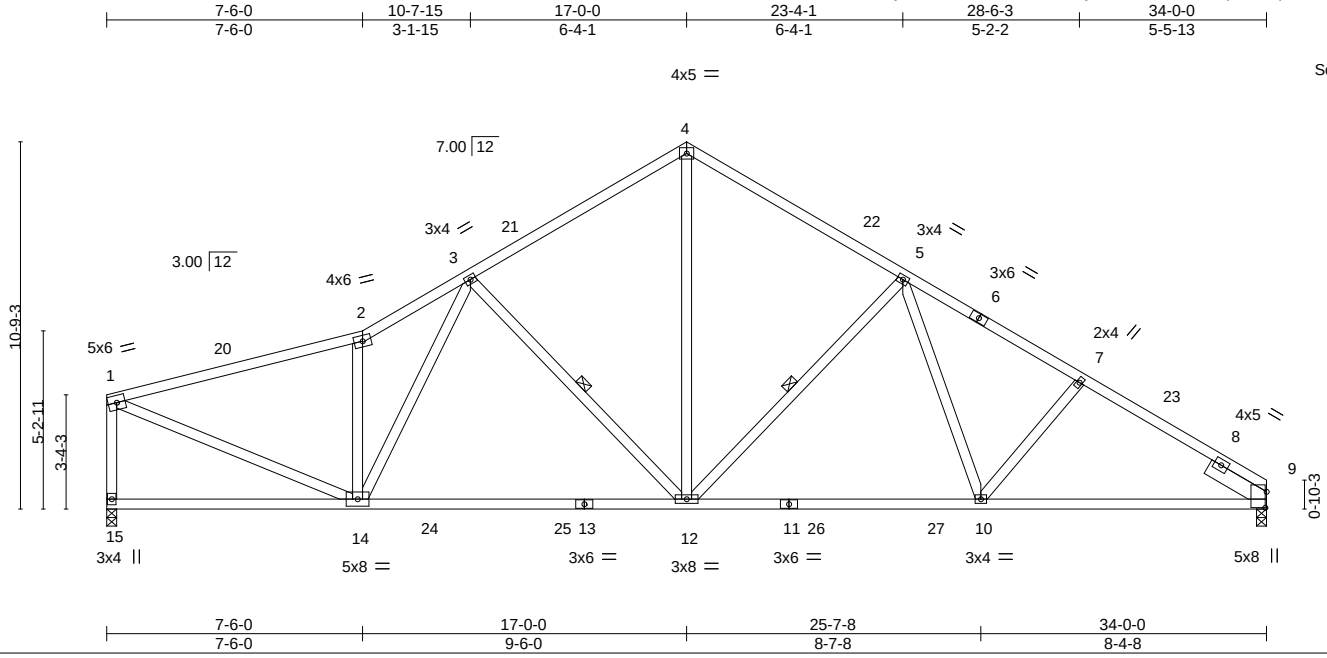

Plate Offsets (X,Y)-- [9:0-5-10,0-0-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.89	Vert(LL)	-0.30	12-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.95	Vert(CT)	-0.52	12-14	>784	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 204 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 1-2: 2x4 SP No.1
BOT CHORD	2x4 SP No.2 *Except* 11-13: 2x4 SP No.1
WEBS	2x4 SP No.3
SLIDER	Right 2x6 SP No.2 1-11-8

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 3-12, 5-12

REACTIONS. (size) 15=0-3-8, 9=0-3-8
Max Horz 15=223(LC 11)
Max Uplift 15=-317(LC 12), 9=-310(LC 13)
Max Grav 15=1496(LC 2), 9=1561(LC 20)

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

TOP CHORD	1-2=-1921/380, 2-3=-2161/504, 3-4=-1590/397, 4-5=-1561/396, 5-7=-2153/471, 7-9=-2291/474, 1-15=-1398/352
BOT CHORD	12-14=-346/1695, 10-12=-230/1652, 9-10=-327/1882
WEBS	2-14=-852/300, 3-14=-131/513, 3-12=-551/284, 4-12=-243/1199, 5-12=-676/305, 5-10=-80/426, 1-14=-327/1915

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 0-1-12 to 3-6-9, Zone1 3-6-9 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 34-0-0 zone; end vertical 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=317, 9=310.

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Date:

October 13,2025

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Job	Truss	Truss Type	Qty	Ply	TOLAR RES.
4894002	T09	Roof Special	7	1	T38828923
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:37 2025 Page 1
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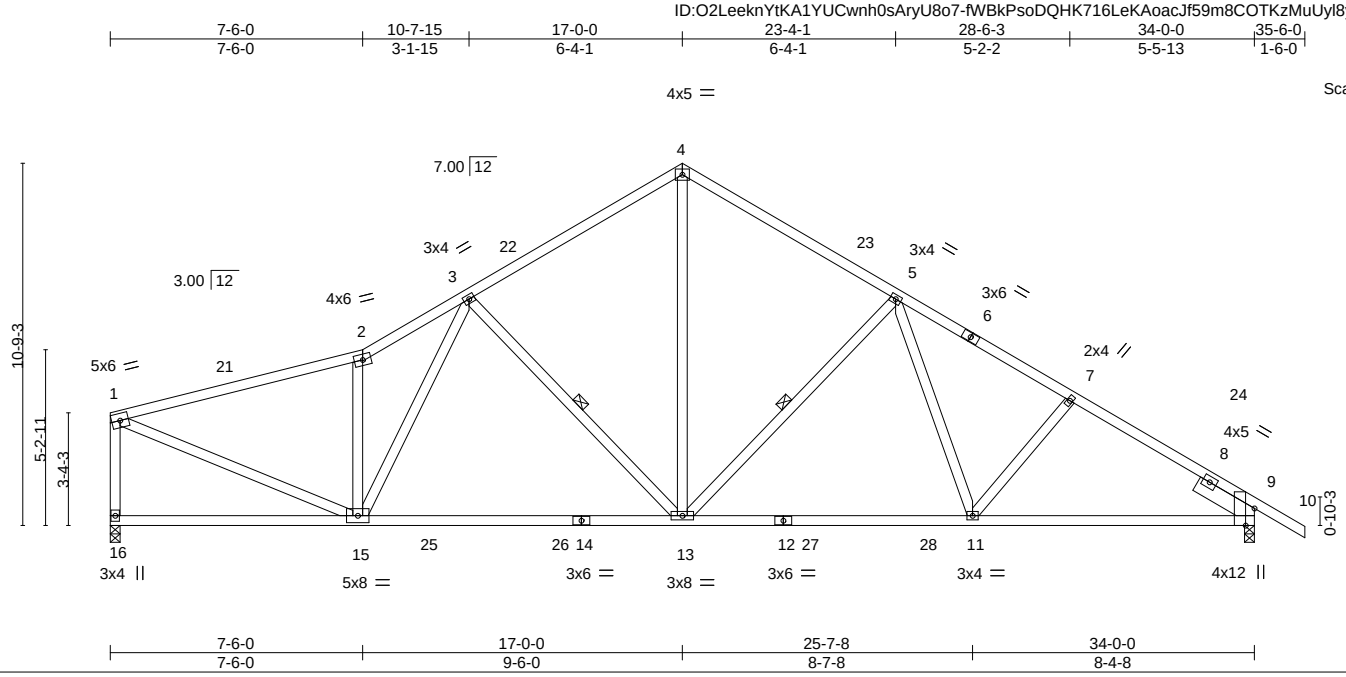

Plate Offsets (X,Y)-- [9:0-6-2,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.95	Vert(LL)	-0.30	13-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.98	Vert(CT)	-0.52	13-15	>784	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 207 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except*
	1-2: 2x4 SP No.1
BOT CHORD	2x4 SP No.2 *Except*
	12-14: 2x4 SP No.1
WEBS	2x4 SP No.3
SLIDER	Right 2x6 SP No.2 1-11-8

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 3-13, 5-13

REACTIONS. (size) 16=0-3-8, 9=0-3-8
Max Horz 16=-250(LC 13)
Max Uplift 16=-317(LC 12), 9=-348(LC 13)
Max Grav 16=1494(LC 2), 9=1647(LC 20)

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

TOP CHORD	1-2=-1918/379, 2-3=-2158/504, 3-4=-1586/396, 4-5=-1558/393, 5-7=-2140/466, 7-9=-2276/468, 1-16=-1396/351
BOT CHORD	13-15=-331/1703, 11-13=-215/1646, 9-11=-292/1860
WEBS	2-15=-851/300, 3-15=-131/513, 3-13=-551/284, 4-13=-242/1196, 5-13=-671/303, 5-11=-76/414, 1-15=-327/1912

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 0-1-12 to 3-6-9, Zone1 3-6-9 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 35-6-0 zone; end vertical 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=317, 9=348.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 13,2025

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Job	Truss	Truss Type	Qty	Ply	TOLAR RES.
4894002	T10	Common	3	1	T38828924
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:37 2025 Page 1
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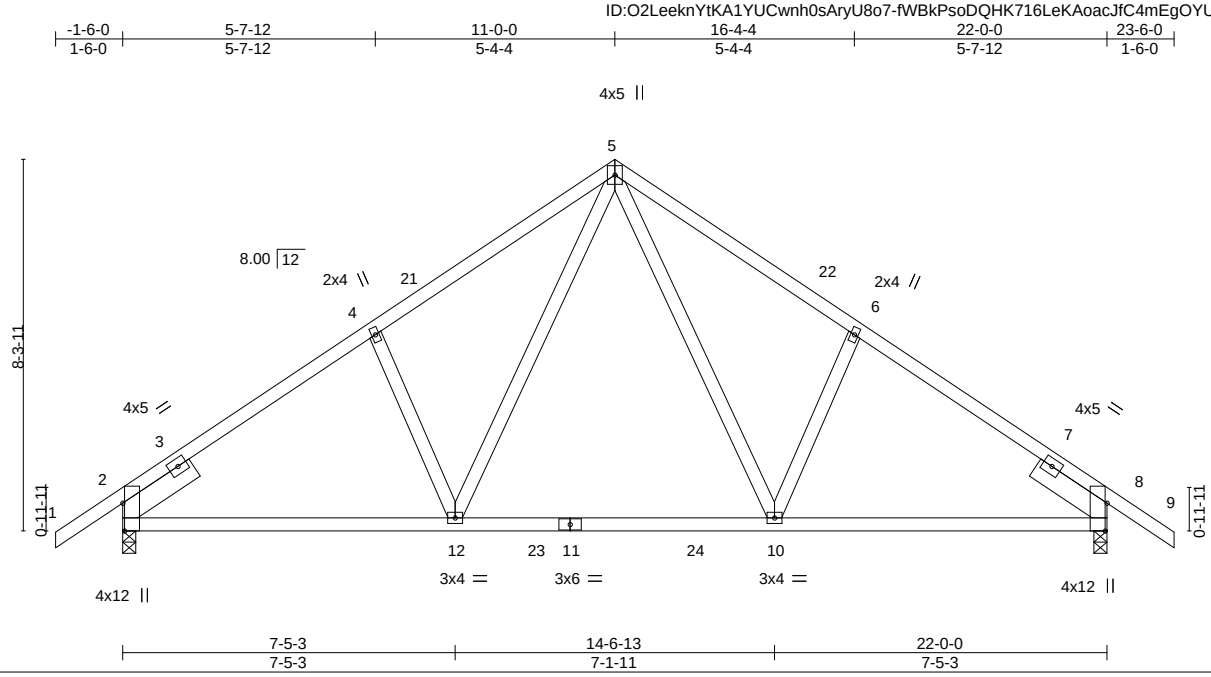

Plate Offsets (X,Y)-- [2:0-7-7,Edge], [8:0-7-7,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.51	Vert(LL)	-0.14	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.63	Vert(CT)	-0.23	10-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 126 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=206(LC 11)
Max Uplift 2=-234(LC 12), 8=-234(LC 13)
Max Grav 2=1037(LC 2), 8=1037(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1186/493, 4-5=-1100/543, 5-6=-1100/543, 6-8=-1186/493
BOT CHORD 2-12=-302/936, 10-12=-149/673, 8-10=-318/924
WEBS 5-10=-271/490, 6-10=-263/230, 5-12=-271/490, 4-12=-263/229

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 11-0-0, Zone2 11-0-0 to 15-2-15, Zone1 15-2-15 to 23-6-0 zone; end vertical left and right exposed; 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=234, 8=234.

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Date:

October 13,2025

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Job	Truss	Truss Type	Qty	Ply	TOLAR RES. T38828925
4894002	T10G	GABLE	1	1	Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:38 2025 Page 1
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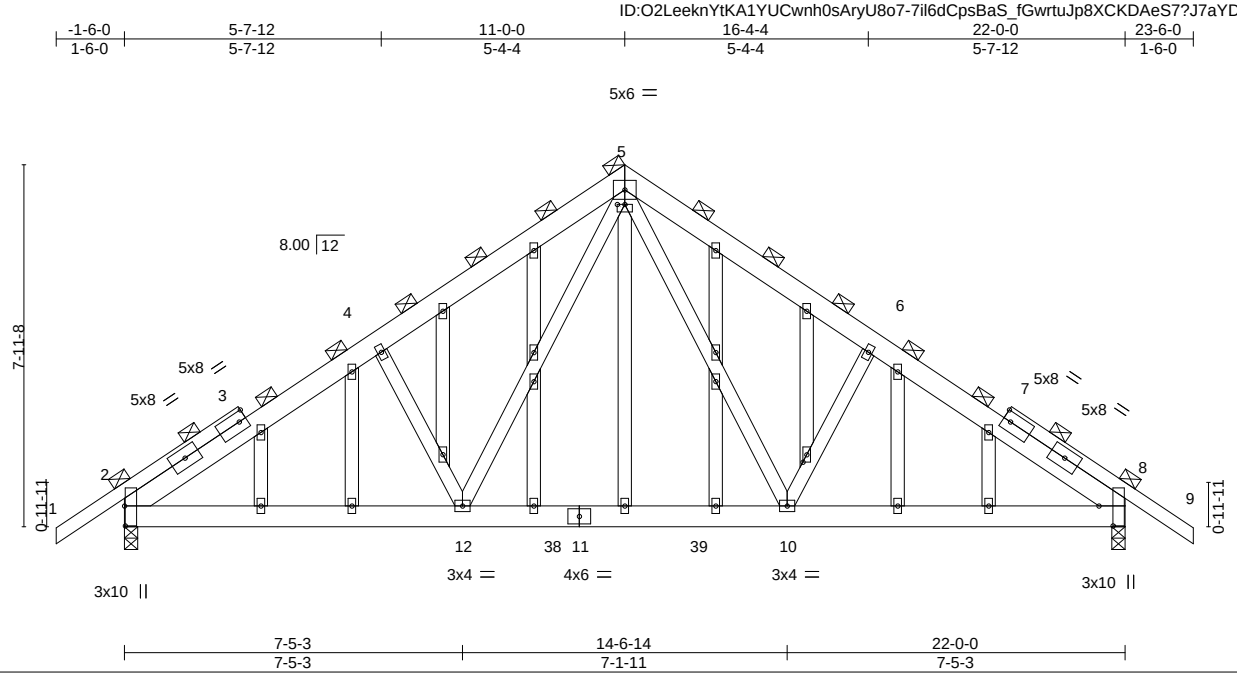

Plate Offsets (X,Y)-- [2:0-5-4,0-0-3], [5:0-2-0,0-0-0], [8:0-5-4,0-3-11], [24:0-0-1,0-0-0], [24:0-0-1,0-0-0], [25:0-1-15,0-1-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.67	Vert(LL)	-0.06	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.33	Vert(CT)	-0.11	10-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 214 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
1-3,7-9: 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD 2-0-0 oc purlins (4-10-10 max.).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-195(LC 10)
Max Uplift 2=-237(LC 12), 8=-237(LC 13)
Max Grav 2=1034(LC 2), 8=1034(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1290/626, 4-5=-1211/680, 5-6=-1211/680, 6-8=-1290/626
BOT CHORD 2-12=-438/1060, 10-12=-198/705, 8-10=-442/1061
WEBS 4-12=-337/238, 5-12=-337/558, 5-10=-337/558, 6-10=-338/238

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; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=237, 8=237.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Date:

October 13,2025

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Job	Truss	Truss Type	Qty	Ply	TOLAR RES. T38828926
4894002	T11	Monopitch	15	1	Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:39 2025 Page 1
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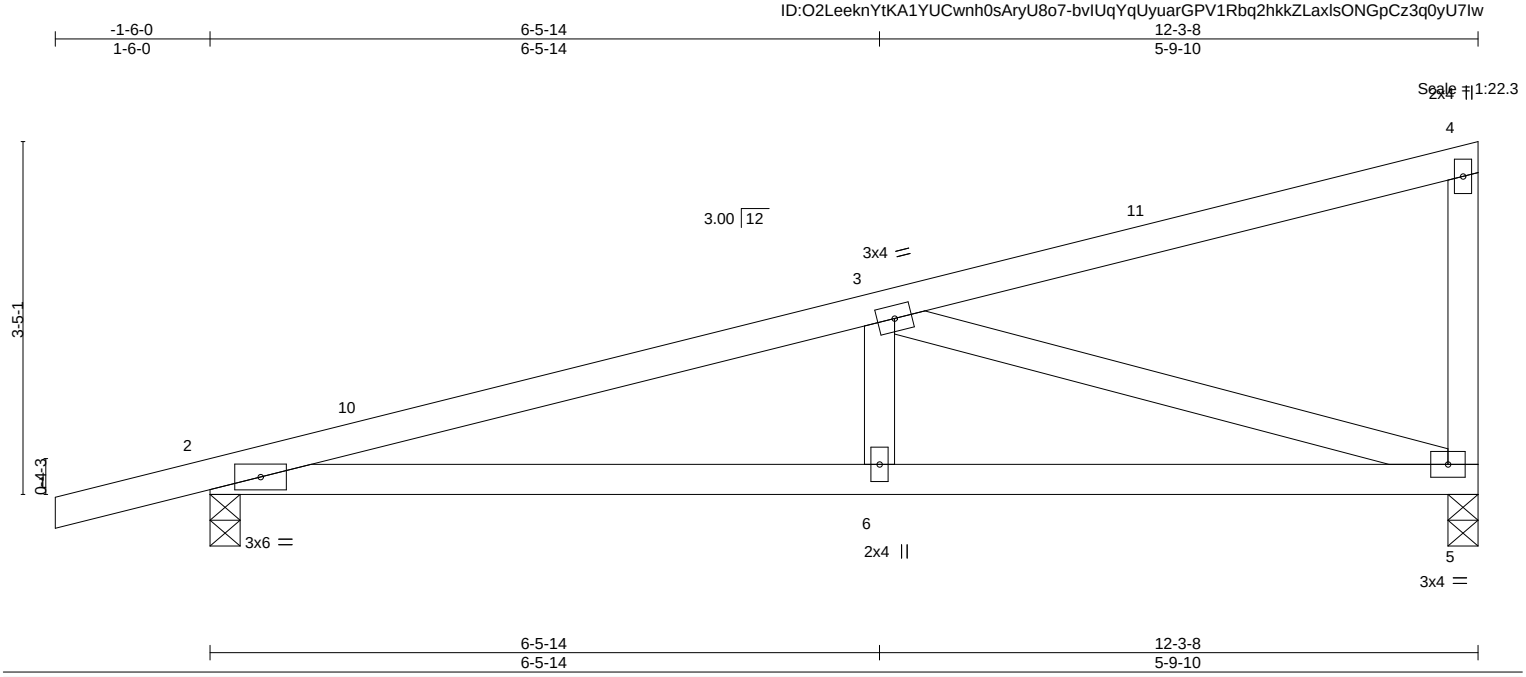

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.39	Vert(LL)	0.09	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.46	Vert(CT)	-0.12	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 54 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-8-4 oc bracing.

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)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1078/642
BOT CHORD 2-6=-730/1023, 5-6=-730/1023
WEBS 3-6=-126/269, 3-5=-1040/735

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.

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

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

October 13,2025

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

Job	Truss	Truss Type	Qty	Ply	TOLAR RES. T38828927
4894002	T11G	Monopitch Supported Gable	2	1	Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Sep 3 2025 MiTek Industries, Inc. Sun Oct 12 14:53:39 2025 Page 1
ID:O2LeeknYtKA1YUCwnh0sAryU8o7-bvIUqYqUyuarGPV1Rbq2hkkbra_lsXhGpCz3q0yU7lw

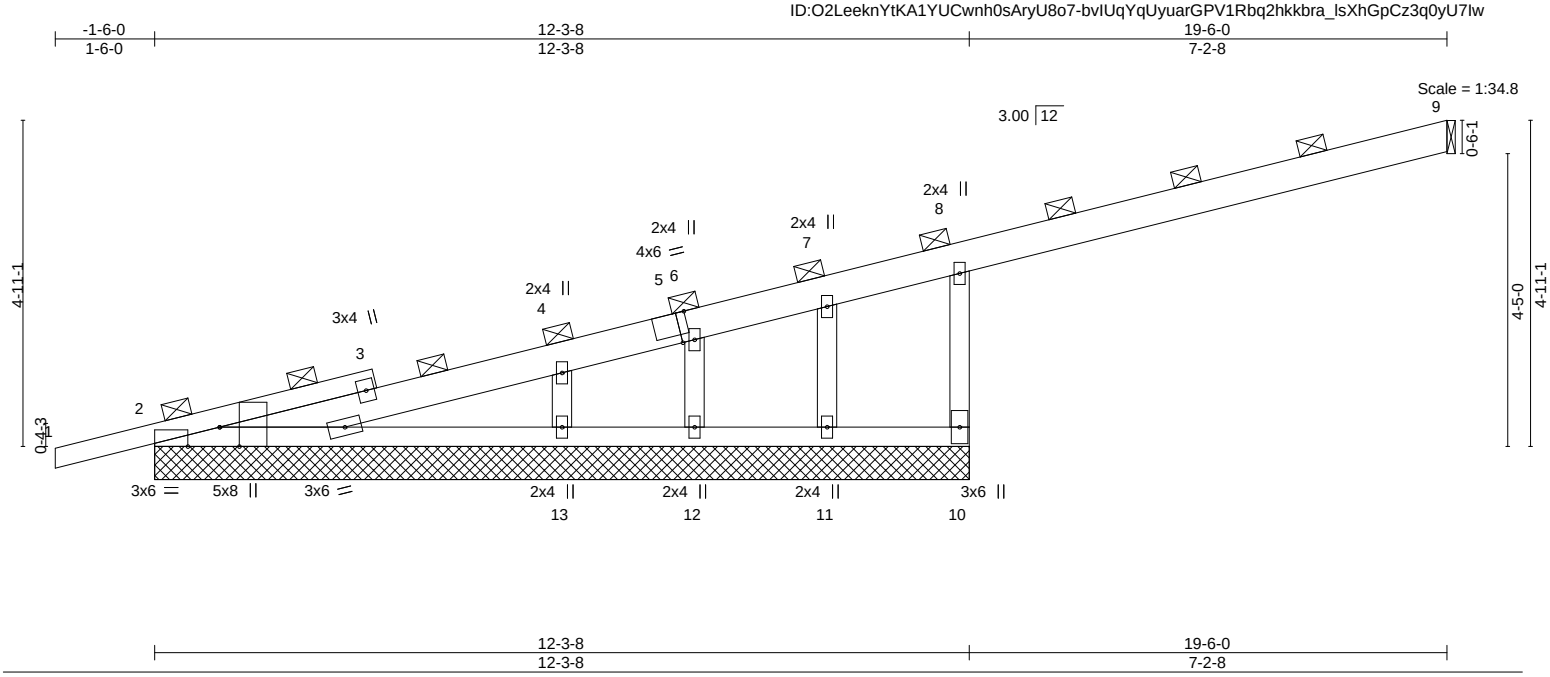

Plate Offsets (X,Y)-- [2:0-5-12,Edge], [2:0-3-8,Edge], [5:0-1-9,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.30	Vert(LL)	-0.03	2-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.27	Vert(CT)	-0.07	2-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.00	9	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S							Weight: 80 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
1-3: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 12-3-8 except (jt=length) 9=Mechanical.
(lb) - Max Horz 2=191(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 9, 12 except 10=-258(LC 8), 2=-108(LC 8), 13=-129(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 9, 12, 11 except 10=493(LC 1), 2=306(LC 1), 13=476(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-302/98, 8-10=-483/521
WEBS 4-13=-350/327

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 left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 12 except (jt=lb) 10=258, 2=108, 13=129.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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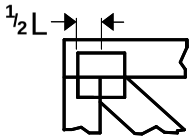
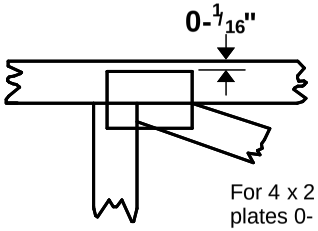
Symbols

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.

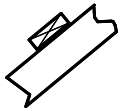
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

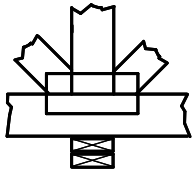
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

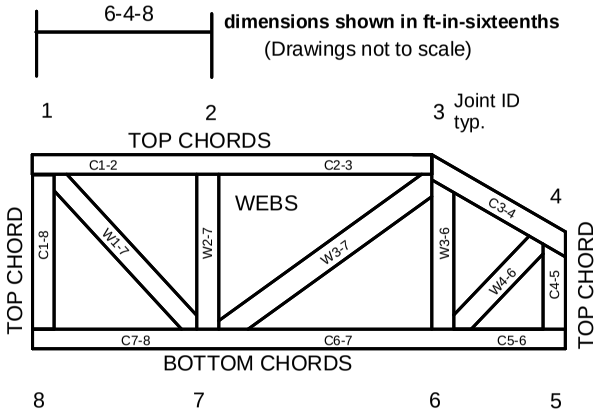


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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