

RE: 4053698 - NORRIS CONST. - RUSSWOOD SPEC

MiTek, Inc.

Site Information:

16023 Swingley Ridge Rd. Chesterfield, MO 63017

Customer Info: JOHN NORRIS CONST. Project Name: Spec House Model: Custom4.434.1200

Lot/Block: TBD Subdivision: Russwood

Lot/Block: TBD 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:

11

12 13 T34003297

T34003298

T34003299

T04

T05

T05G

City: State:

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

Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7

Wind Code: ASCE 7-22 Wind Speed: 130 mph Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 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	
1	T34003287	CJ01	5/29/24 15	T34003301	T07	
2	T34003288	CJ03	5/29/24 16	T34003302	T08	,
3	T34003289	CJ05	5/29/24 17	T34003303	T09	
4	T34003290	EJ01	5/29/24 18	T34003304	T10	
5 6	T34003291	HJ10	5/29/24 19	T34003305	T10G	
6	T34003292	T01	5/29/24 20	T34003306	V01	
7	T34003293	T01G	5/29/24			
8	T34003294	T02	5/29/24			
9	T34003295	T03	5/29/24			
10	T34003296	T03G	5/29/24			

5/29/24

5/29/24



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

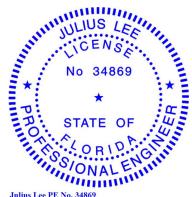
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Lake City, FL.

Truss Design Engineer's Name: Lee, Julius

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

**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.

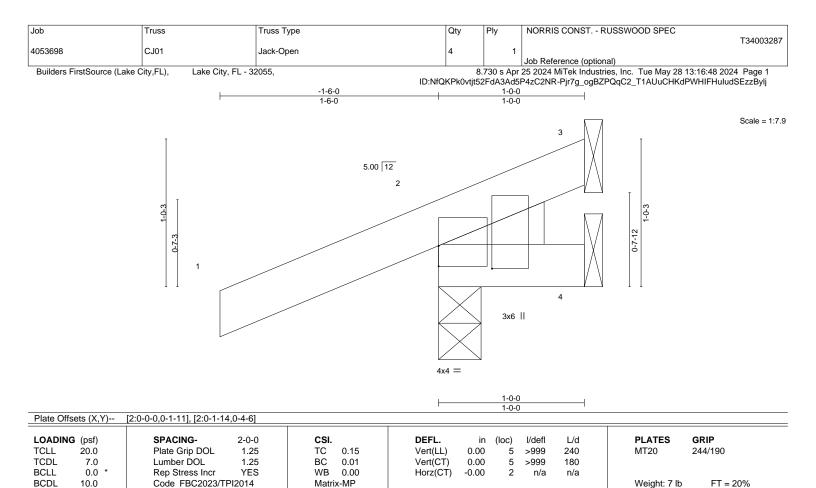


Julius Lee PE No. 34869 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

May 29,2024

Date 5/29/24 5/29/24 5/29/24

5/29/24 5/29/24



BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEDGE

Left: 2x4 SP No.3

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical Max Horz 2=37(LC 8)

Max Uplift 3=-8(LC 1), 2=-95(LC 8), 4=-17(LC 1) Max Grav 3=7(LC 16), 2=179(LC 1), 4=13(LC 16)

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

### NOTES-

- 1) 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 3, 95 lb uplift at joint 2 and 17 lb uplift at joint 4.

This item has been digitally signed and sealed by Lee, Julius, 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.

Structural wood sheathing directly applied or 1-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

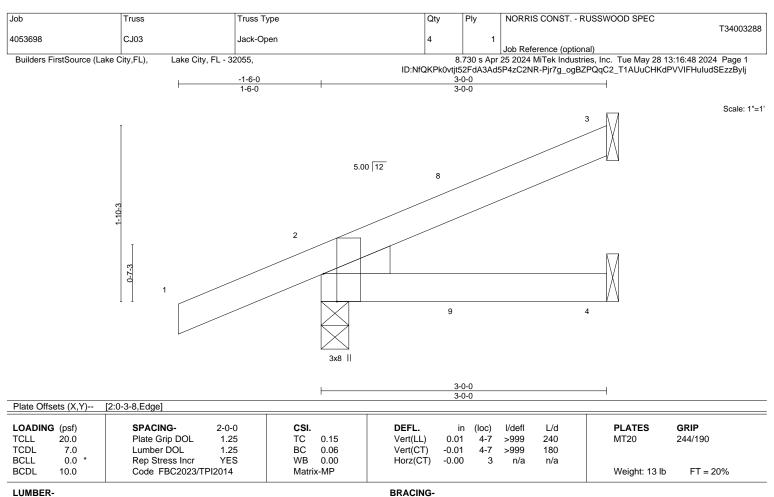
MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017

May 29,2024









TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEDGE

Left: 2x4 SP No.3

REACTIONS.

3=Mechanical, 2=0-3-8, 4=Mechanical Max Horz 2=68(LC 12)

Max Uplift 3=-38(LC 12), 2=-97(LC 8), 4=-21(LC 9) Max Grav 3=58(LC 1), 2=210(LC 1), 4=49(LC 3)

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

### NOTES-

- 1) 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 2-11-4 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 3, 97 lb uplift at joint 2 and 21 lb uplift at joint 4.

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Structural wood sheathing directly applied or 3-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

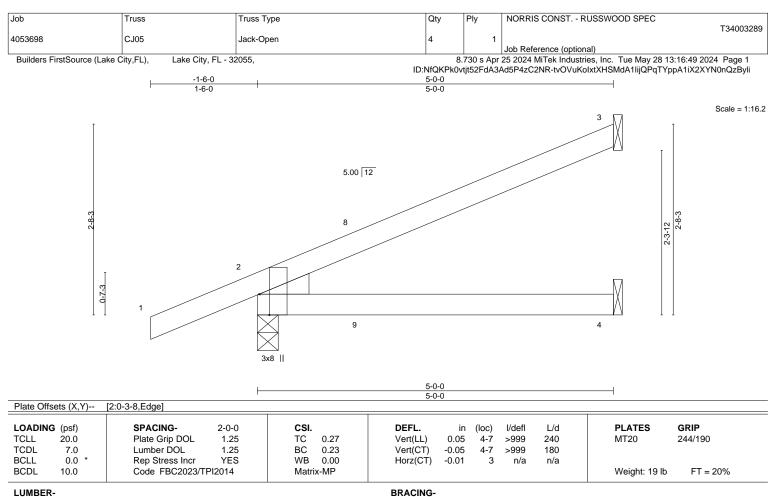
MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

May 29,2024



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





TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEDGE

Left: 2x4 SP No.3

REACTIONS.

3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=100(LC 12)

Max Uplift 3=-72(LC 12), 2=-119(LC 8), 4=-35(LC 9) Max Grav 3=112(LC 1), 2=276(LC 1), 4=87(LC 3)

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

### NOTES-

- 1) 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 4-11-4 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 72 lb uplift at joint 3, 119 lb uplift at joint 2 and 35 lb uplift at joint 4.

This item has been digitally signed and sealed by Lee, Julius, 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.

Structural wood sheathing directly applied or 5-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

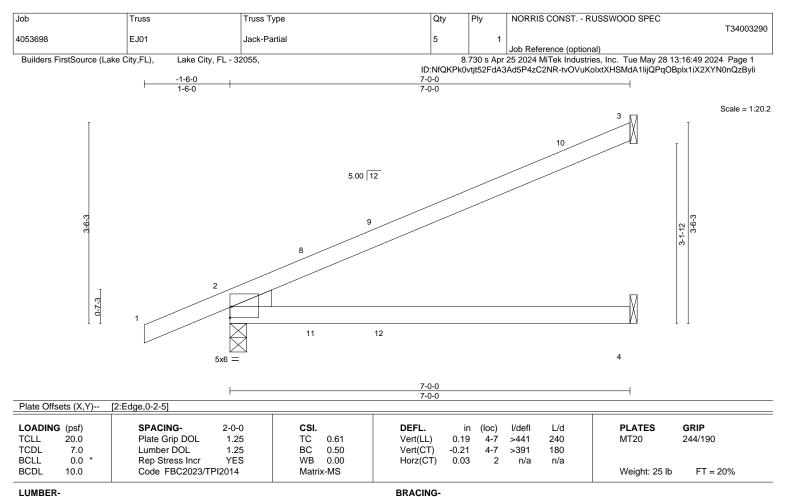
MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

May 29,2024









TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEDGE

Left: 2x4 SP No.3

REACTIONS.

3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=128(LC 12)

Max Uplift 3=-92(LC 12), 2=-144(LC 8), 4=-49(LC 9) Max Grav 3=163(LC 1), 2=346(LC 1), 4=124(LC 3)

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

### NOTES-

- 1) 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 6-11-4 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 3, 144 lb uplift at joint 2 and 49 lb uplift at joint 4.

This item has been digitally signed and sealed by Lee, Julius, 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.

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

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

May 29,2024



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



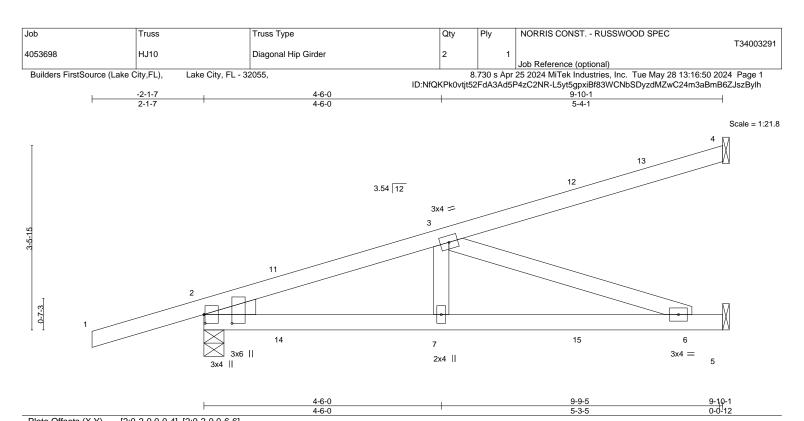


Plate Offsets (X,Y)	[2:0-2-0,0-0-4], [2:0-2-0,0-6-6]		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.61	Vert(LL) 0.12 6-7 >951 240 MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.70	Vert(CT) -0.15 6-7 >772 180
BCLL 0.0 *	Rep Stress Incr NO	WB 0.40	Horz(CT) 0.01 5 n/a n/a
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS	Weight: 44 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEDGE

Left: 2x4 SP No.3

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 2=0-4-9

Max Horz 2=139(LC 4)

Max Uplift 4=-88(LC 4), 5=-186(LC 4), 2=-315(LC 4) Max Grav 4=154(LC 1), 5=296(LC 1), 2=529(LC 1)

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

TOP CHORD 2-3=-784/425

BOT CHORD 2-7=-483/729, 6-7=-483/729 WEBS 3-7=-102/275, 3-6=-770/510

### NOTES-

- 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; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 4, 186 lb uplift at joint 5 and 315 lb uplift at joint 2.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb down and 76 lb up at 1-6-1, 66 lb down and 76 lb up at 1-6-1, 23 lb down and 44 lb up at 4-4-0, 23 lb down and 44 lb up at 4-4-0, and 45 lb down and 82 lb up at 7-1-15, and 45 lb down and 82 lb up at 7-1-15 on top chord, and 40 lb down and 40 lb up at 1-6-1, 40 lb down and 40 lb up at 1-6-1, 19 lb down and 29 lb up at 4-4-0, 19 lb down and 29 lb up at 4-4-0, and 41 lb down and 50 lb up at 7-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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

Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)

Vert: 1-4=-54, 5-8=-20

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Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 7-10-7 oc bracing.

Julius Lee PE No.34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

May 29,2024

Continued on page 2

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



Job	Truss	Truss Type	Qty	Ply	NORRIS CONST RUSSWOOD SPEC
			_		T34003291
4053698	HJ10	Diagonal Hip Girder	2	1	
					Job Reference (optional)

Builders FirstSource (Lake City,FL),

Lake City, FL - 32055,

8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 28 13:16:50 2024 Page 2 ID:NfQKPk0vtjt52FdA3Ad5P4zC2NR-L5yt5gpxiBf83WCNbSDyzdMZwC24m3aBmB6ZJszBylh

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 7=-9(F=-5, B=-5) 12=-70(F=-35, B=-35) 15=-61(F=-31, B=-31)





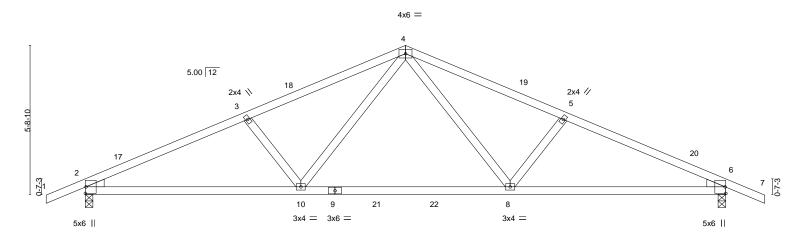
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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.sbcscomponents.com)



Job Truss Truss Type Qty Ply NORRIS CONST. - RUSSWOOD SPEC T34003292 4053698 T01 3 Common Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 28 13:16:50 2024 Page 1 ID:NfQKPk0vtjt52FdA3Ad5P4zC2NR-L5yt5gpxiBf83WCNbSDyzdMWQC\_gm4cBmB6ZJszBylh 12-3-8 18-4-3 24-7-0 6-0-11 6-2-13 1-6-0

Scale = 1:44.2



8-3-5					8-0-7				8-3-5			
LOADIN	VI /	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.77	Vert(LL)	-0.33	8-10	>897	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.92	Vert(CT)	-0.62	8-10	>479	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.07	6	n/a	n/a		
BCDL	10.0	Code FBC2023/T	PI2014	Matri	x-MS						Weight: 113 lb	FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

16-3-11

LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No.1 \*Except\* BOT CHORD

6-9: 2x4 SP 2850F 2.0E or 2x4 SP M 31

WFBS 2x4 SP No 3

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 6=0-3-8

Max Horz 2=96(LC 12) Max Uplift 2=-353(LC 12), 6=-353(LC 13)

Max Grav 2=1262(LC 2), 6=1262(LC 2)

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

8-3-5

 $2\hbox{-}3\hbox{--}2318/630,\ 3\hbox{-}4\hbox{--}2177/600,\ 4\hbox{-}5\hbox{--}2185/602,\ 5\hbox{-}6\hbox{--}2326/632}$ TOP CHORD

**BOT CHORD** 2-10=-592/2085, 8-10=-321/1464, 6-8=-498/2092

WEBS 4-8=-252/870, 5-8=-274/206, 4-10=-249/858, 3-10=-273/205

### 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 12-3-8, Zone2 12-3-8 to 16-6-7, Zone1 16-6-7 to 26-1-0 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 353 lb uplift at joint 2 and 353 lb uplift at
- 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: 1-4=-54, 4-7=-54, 10-11=-20, 8-10=-80(F=-60), 8-14=-20

This item has been digitally signed and sealed by Lee, Julius, 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.

24-7-0

Structural wood sheathing directly applied or 3-0-9 oc purlins.

Rigid ceiling directly applied or 8-0-10 oc bracing.

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

May 29,2024



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



Job Truss Truss Type Qty Ply NORRIS CONST. - RUSSWOOD SPEC T34003293 4053698 T01G Common Supported Gable Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 28 13:16:51 2024 Page 1 ID:NfQKPk0vtjt52FdA3Ad5P4zC2NR-qIWGJ0qZTUn?hgnZ9AkBVqvsHcYeVcFL\_rs7rlzBylg -1-6-0 1-6-0 24-7-0

1-6-0 Scale = 1:45.7

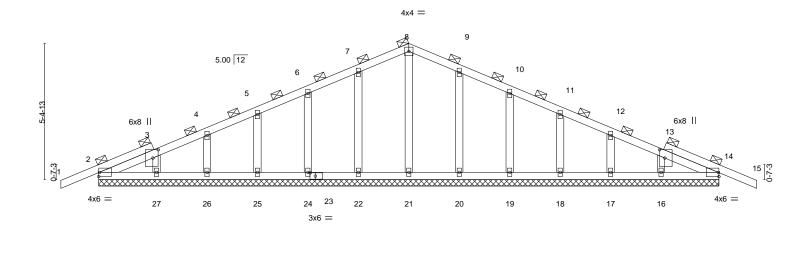


Plate Offsets (X,Y)--[3:0-4-0,0-2-8], [13:0-4-0,0-2-8], [23:0-2-8,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.13 Vert(LL) -0.01 15 n/r 120 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 вс 0.04 Vert(CT) -0.01 15 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.05 Horz(CT) 0.00 14 n/a n/a BCDL 10.0 Code FBC2023/TPI2014 Matrix-S Weight: 130 lb FT = 20%

24-7-0

LUMBER-

OTHERS

2x4 SP No 2

TOP CHORD BOT CHORD 2x4 SP No 2 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.

12-3-8

REACTIONS. All bearings 24-7-0.

Max Horz 2=-91(LC 17)

Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 22, 24, 25, 26, 27, 20, 19, 18, 17, 16 All reactions 250 lb or less at joint(s) 2, 14, 21, 22, 24, 25, 26, 27, 20, 19, 18, 17, 16

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

- 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.
- 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, 14, 22, 24, 25,
- 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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May 29,2024



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6-0-11

(loc)

7-9

6

-0.32

-0.61

0.06

I/defI

>909

>484

n/a

L/d

240

180

n/a

Rigid ceiling directly applied or 8-6-10 oc bracing.

Structural wood sheathing directly applied or 3-0-7 oc purlins.

**PLATES** 

Weight: 110 lb

MT20

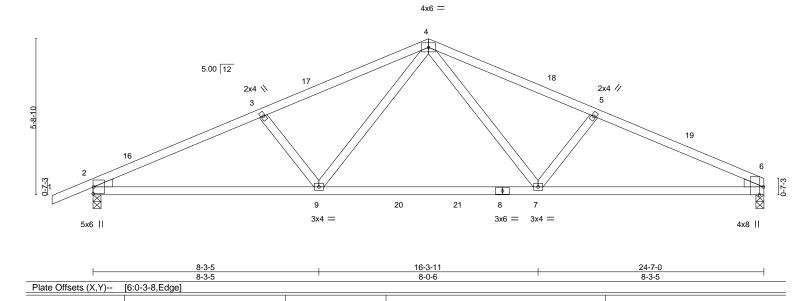
GRIP

244/190

FT = 20%

Scale = 1:42.2

6-2-13



DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

**TCLL** 

TCDL

**BCLL** 

BCDL

LOADING (psf)

20.0

7.0

0.0

10.0

TOP CHORD 2x4 SP No.2

2x4 SP 2850F 2.0E or 2x4 SP M 31 \*Except\* BOT CHORD

SPACING-

Plate Grip DOL

Rep Stress Incr

Code FBC2023/TPI2014

Lumber DOL

6-8: 2x4 SP No.1

**WEBS** 2x4 SP No.3

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 6=0-3-8

Max Horz 2=106(LC 12) Max Uplift 2=-353(LC 12), 6=-315(LC 13)

Max Grav 2=1264(LC 2), 6=1194(LC 2)

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

2-3=-2329/633, 3-4=-2188/602, 4-5=-2189/610, 5-6=-2332/639

BOT CHORD 2-9=-605/2095, 7-9=-332/1468, 6-7=-525/2099

**WEBS** 4-7=-256/868, 5-7=-280/209, 4-9=-252/868, 3-9=-274/206

- 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 12-3-8, Zone2 12-3-8 to 16-6-7. Zone1 16-6-7 to 24-7-0 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.

2-0-0

1.25

1.25

NO

CSI.

TC

BC

WB

Matrix-MS

0.77

0.93

0.33

- 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=353, 6=315.
- 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: 1-4=-54, 4-6=-54, 9-10=-20, 7-9=-80(F=-60), 7-13=-20

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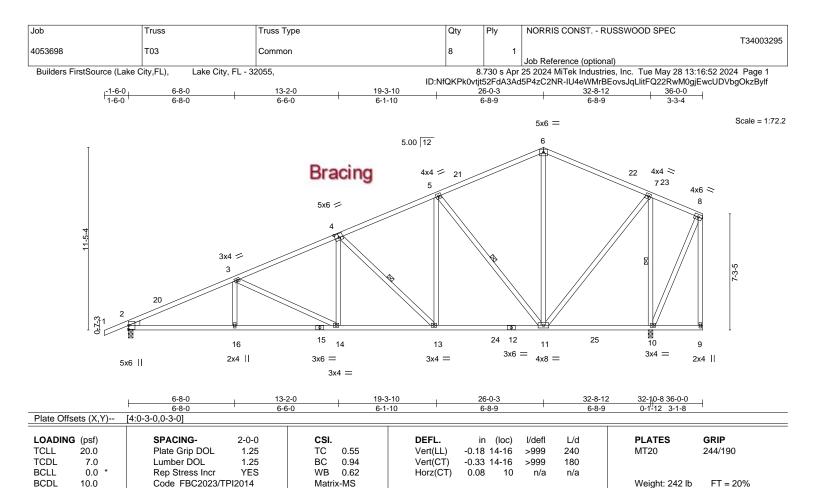
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May 29,2024



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LUMBER-

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

WFBS 2x4 SP No 3

WEDGE

Left: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-2-4 oc purlins,

except end verticals.

**BOT CHORD** Rigid ceiling directly applied or 2-2-0 oc bracing. WEBS 1 Row at midpt 4-13, 5-11, 7-10

REACTIONS. (size) 2=0-3-8, 10=0-3-8

Max Horz 2=349(LC 12)

Max Uplift 2=-373(LC 12), 10=-368(LC 12) Max Grav 2=1371(LC 2), 10=1636(LC 2)

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

2-3=-2535/641, 3-4=-2029/524, 4-5=-1443/399, 5-6=-757/245, 6-7=-756/265 TOP CHORD BOT CHORD  $2\text{-}16\text{=-}852/2284,\ 14\text{-}16\text{=-}852/2284,\ 13\text{-}14\text{=-}644/1828,\ 11\text{-}13\text{=-}428/1285}$ WEBS 3-14=-510/230, 4-14=-63/450, 4-13=-745/296, 5-13=-164/769, 5-11=-1030/403,

6-11=-51/319, 7-11=-283/1044, 7-10=-1359/395

### 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 2-1-3, Zone1 2-1-3 to 26-0-3, Zone2 26-0-3 to 31-1-5. Zone1 31-1-5 to 35-10-4 zone; cantilever 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=373, 10=368.

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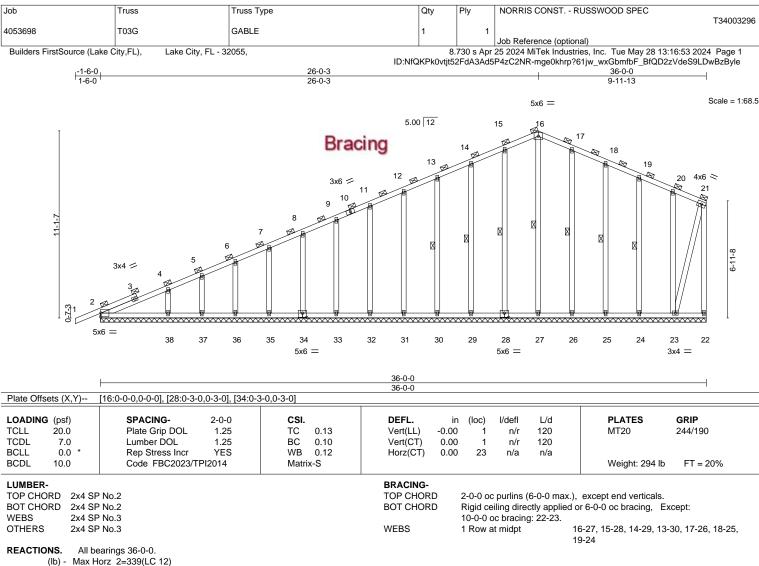
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May 29,2024









Max Uplift All uplift 100 lb or less at joint(s) 22, 2, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 26, 25, 24 except

38=-102(LC 12), 23=-109(LC 13)

All reactions 250 lb or less at joint(s) 22, 2, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 26, 25,

24, 23 except 38=261(LC 25)

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

TOP CHORD 2-4=-318/116, 4-5=-259/82

### 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) 22, 2, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 26, 25, 24 except (jt=lb) 38=102, 23=109.
- 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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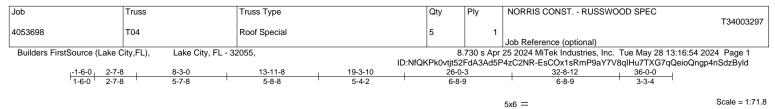
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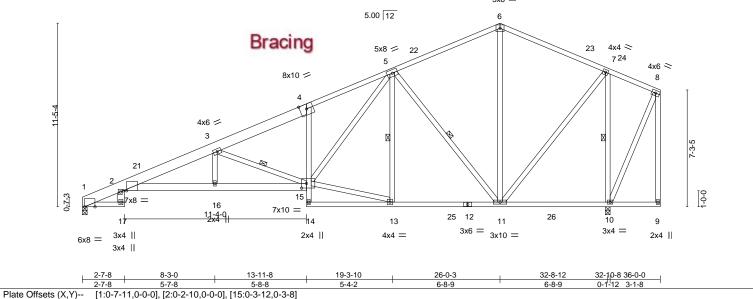
May 29,2024











DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

**BRACING-**

TOP CHORD

BOT CHORD

**WEBS** 

in (loc)

2-16

2-16

10

-0.24

-0.41

0.21

I/def

>999

>951

except end verticals.

1 Row at midpt

n/a

L/d

240

180

n/a

Rigid ceiling directly applied or 6-0-0 oc bracing.

Structural wood sheathing directly applied or 3-7-8 oc purlins,

**PLATES** 

Weight: 280 lb

MT20

3-15, 5-13, 5-11, 7-10

GRIP

244/190

FT = 20%

LUMBER-

LOADING (psf)

20.0

7.0

0.0

10.0

**TCLL** 

TCDL

**BCLL** 

BCDL

2x4 SP No.2 \*Except\* TOP CHORD

1-4: 2x8 SP 2400F 2.0E **BOT CHORD** 2x4 SP No.2 \*Except\*

2-17: 2x6 SP No.2, 2-15: 2x6 SP M 26, 4-14: 2x4 SP No.3

Code FBC2023/TPI2014

**WEBS** 2x4 SP No.3

REACTIONS. (size) 1=0-3-8, 10=0-3-8

Max Horz 1=333(LC 12)

Max Uplift 1=-333(LC 12), 10=-367(LC 12) Max Grav 1=1301(LC 2), 10=1632(LC 2)

SPACING-

Plate Grip DOL

Rep Stress Incr

Lumber DOL

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

TOP CHORD 2-19=-609/3, 2-3=-3617/1037, 3-4=-2339/651, 4-5=-2292/726, 5-6=-755/244,

6-7=-754/264

BOT CHORD 2-16=-1249/3420, 15-16=-1249/3420, 11-13=-427/1280

**WEBS**  $3-16=-41/428,\ 3-15=-1449/558,\ 13-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-16=-41/428,\ 3-15=-1449/558,\ 13-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-15=-1449/558,\ 13-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-15=-1449/558,\ 13-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-15=-1449/558,\ 13-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-15=-389/1175,\ 5-15=-515/1355,\ 5-11=-1027/403,\ 3-15=-389/1175,\ 3-1$ 

1.25

1.25

YES

6-11=-51/318, 7-11=-282/1040, 7-10=-1354/394

### 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 0-1-10 to 3-8-13, Zone1 3-8-13 to 26-0-3, Zone2 26-0-3 to 31-1-5, Zone1 31-1-5 to 35-10-4 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

CSI.

TC

BC

WB

Matrix-MS

0.54

0.59

0.73

- 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=333, 10=367.

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19-3-10

6-1-10

ID:NfQKPk0vtjt52FdA3Ad5P4zC2NR-i3mm8Nt3XjHRAH4KO0o7gg3N8DgVRH6wvTqK\_3zBylc 32-8-12 38-10-6 43-8-0 6-8-9 6-1-10 4-9-10

Structural wood sheathing directly applied or 2-2-0 oc purlins,

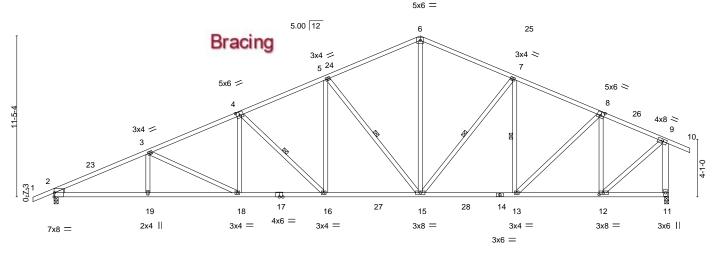
4-16, 5-15, 7-15, 7-13

Rigid ceiling directly applied or 1-4-12 oc bracing.

except end verticals.

1 Row at midpt

Scale = 1:81.8



13-2-0 19-3-10 26-0-3 32-8-12 38-10-6 43-8-0 6-8-0 6-6-0 6-1-10 6-1-10 4-9-10 6-8-9 6-8-9 Plate Offsets (X,Y)--[4:0-3-0,0-3-0], [8:0-3-0,0-3-0], [12:0-3-8,0-1-8]

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 0.78	Vert(LL) -0.29 18-19 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 1.00	Vert(CT) -0.50 18-19 >999 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.63	Horz(CT) 0.14 11 n/a n/a	
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MS		Weight: 284 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

TOP CHORD 2x4 SP No 2

**BOT CHORD** 2x4 SP No.2 \*Except\* 2-17: 2x4 SP No.1

**WEBS** 2x4 SP No.3 \*Except\*

9-11: 2x6 SP No.2

WEDGE

Left: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 11=0-3-8

Max Horz 2=198(LC 16)

6-8-0

6-8-0

13-2-0

6-6-0

Max Uplift 2=-482(LC 12), 11=-422(LC 13) Max Grav 2=1825(LC 2), 11=1857(LC 2)

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

TOP CHORD  $2\text{-}3\text{=-}3577/890,\ 3\text{-}4\text{=-}3151/792,\ 4\text{-}5\text{=-}2581/670,\ 5\text{-}6\text{=-}1907/519,\ 6\text{-}7\text{=-}1907/540,}$ 

7-8=-1968/468, 8-9=-1430/324, 9-11=-1787/451

**BOT CHORD** 2-19=-926/3237, 18-19=-926/3237, 16-18=-737/2866, 15-16=-524/2334, 13-15=-326/1773,

12-13=-274/1282

**WEBS** 3-18=-434/209, 4-18=-57/429, 4-16=-730/292, 5-16=-160/755, 5-15=-1014/399, 6-15=-264/1144, 7-13=-274/125, 8-13=-125/673, 8-12=-889/245, 9-12=-324/1667

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 2-10-6, Zone1 2-10-6 to 26-0-3, Zone2 26-0-3 to 32-2-5, Zone1 32-2-5 to 45-2-0 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.
- \* 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=482, 11=422.

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May 29,2024



NOTES-

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

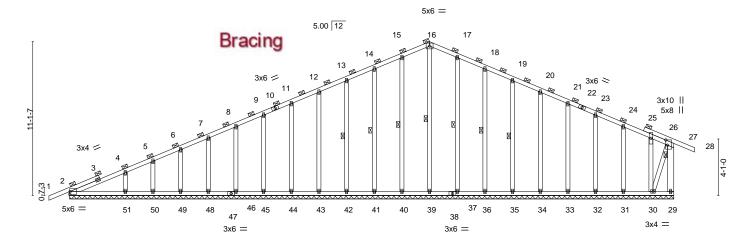


Job Truss Truss Type Qty Ply NORRIS CONST. - RUSSWOOD SPEC T34003299 4053698 T05G **GABLE** Job Reference (optional) 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 28 13:16:56 2024 Page 1

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

ID:NfQKPk0vtjt52FdA3Ad5P4zC2NR-AFJ9Mjuhl1PInRfWxjKMCuciGdElAsS487ZuXWzBylb 43-8-0 26-0-3 26-0-3

Scale = 1:83.3



43-8-0 43-8-0

**BRACING-**

TOP CHORD

**BOT CHORD** 

WFBS

2-0-0 oc purlins (6-0-0 max.), except end verticals.

19-35

Rigid ceiling directly applied or 6-0-0 oc bracing.

1 Row at midpt

Plate Off	rsets (X,Y)	[27:0-4-8,0-1-8]										
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.18	Vert(LL)	-0.01	28	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	-0.01	28	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	29	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2	2014	Matri	x-S						Weight: 348 lb	FT = 20%

LUMBER-

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

2x6 SP No.2 \*Except\* 27-30: 2x4 SP No.3

**OTHERS** 2x4 SP No.3

REACTIONS. All bearings 43-8-0.

Max Horz 2=194(LC 16) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 29, 2, 40, 41, 42, 43, 44, 45, 46, 48, 49, 50, 37, 36, 35, 34,

33, 32, 31 except 51=-102(LC 12), 30=-209(LC 13)

All reactions 250 lb or less at joint(s) 29, 2, 39, 40, 41, 42, 43, 44, 45, 46, 48, 49, 50, 37, 36, Max Grav 35, 34, 33, 32, 31, 30 except 51=261(LC 25)

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

TOP CHORD 13-14=-114/268, 14-15=-126/309, 15-16=-137/344, 16-17=-137/344, 17-18=-126/309,

18-19=-114/268

### 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 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 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) 29, 2, 40, 41, 42, 43, 44, 45, 46, 48, 49, 50, 37, 36, 35, 34, 33, 32, 31 except (jt=lb) 51=102, 30=209.
- 11) 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 Lee, Julius, 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.

16-39, 15-40, 14-41, 13-42, 17-37, 18-36,

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

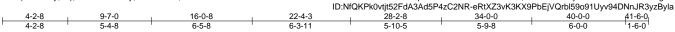
May 29,2024



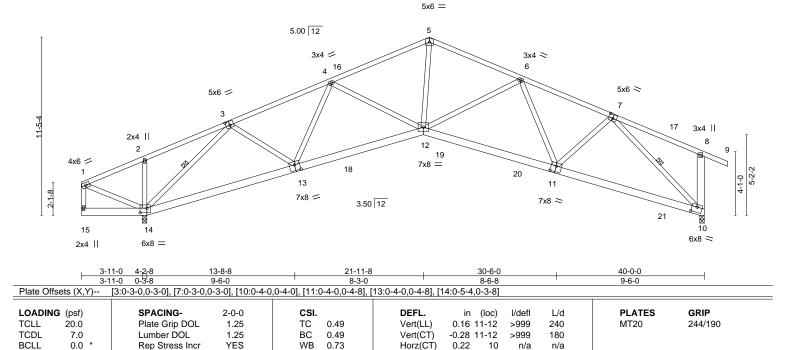
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.







Scale = 1:74.0



**BRACING-**

TOP CHORD

BOT CHORD

WEBS

LUMBER-

BCDL

TOP CHORD 2x4 SP No.2 2x6 SP No.2

**BOT CHORD** 2x4 SP No.3 \*Except\* WFBS

10.0

8-10: 2x6 SP No.2

REACTIONS. (size) 14=0-3-8, 10=0-3-8 Max Horz 14=135(LC 16)

Max Uplift 14=-690(LC 8), 10=-551(LC 8) Max Grav 14=1631(LC 1), 10=1394(LC 1)

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

Code FBC2023/TPI2014

TOP CHORD 3-4=-2095/1046, 4-5=-2244/1081, 5-6=-2140/1047, 6-7=-2000/991, 8-10=-266/197 BOT CHORD 13-14=-679/1388. 12-13=-940/2147. 11-12=-840/2037. 10-11=-651/1434

**WEBS**  $2\text{-}14\text{=-}272/181,\ 3\text{-}14\text{=-}2094/908,\ 3\text{-}13\text{=-}310/689,\ 4\text{-}13\text{=-}442/130,\ 5\text{-}12\text{=-}677/1341,}$ 

6-11=-406/129, 7-11=-266/598, 7-10=-1941/864

### 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 4-0-12, Zone1 4-0-12 to 22-4-3, Zone2 22-4-3 to 28-2-8, Zone1 28-2-8 to 41-6-0 zone; cantilever left exposed; end vertical right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-MS

- 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) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=690, 10=551.

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Weight: 268 lb

Structural wood sheathing directly applied or 3-5-3 oc purlins,

3-14, 7-10

Rigid ceiling directly applied or 7-7-5 oc bracing.

except end verticals.

1 Row at midpt

FT = 20%

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May 29,2024



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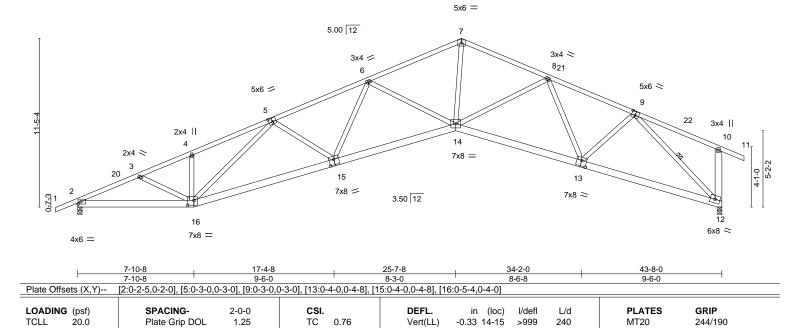


Job Truss Truss Type Qty Ply NORRIS CONST. - RUSSWOOD SPEC T34003301 4053698 T07 2 Roof Special Job Reference (optional) 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 28 13:16:57 2024 Page 1

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

ID:NfQKPk0vtjt52FdA3Ad5P4zC2NR-eRtXZ3vK3KX9PbEjVQrbl59kr1Q3v5\_DNnJR3yzByla <u>7-10-8</u> 19-8-8 31-10-8 37-8-0 43-8-0 3-7-10 6-5-8 6-3-11 5-10-5 5-9-8 6-0-0

Scale = 1:78.1



Vert(CT)

Horz(CT)

**BRACING-**

TOP CHORD

**BOT CHORD** 

WFBS

-0.63 14-15

12

1 Row at midpt

0.36

>828

n/a

180

n/a

Rigid ceiling directly applied or 7-1-9 oc bracing.

Structural wood sheathing directly applied, except end verticals.

9-12

Weight: 283 lb

FT = 20%

LUMBER-

TCDL

**BCLL** 

BCDL

TOP CHORD 2x4 SP No.2 2x6 SP No.2

**BOT CHORD** 2x4 SP No.3 \*Except\* WFBS 10-12: 2x6 SP No.2

7.0

0.0

10.0

REACTIONS. (size) 2=0-3-8, 12=0-3-8

Max Horz 2=199(LC 16)

Max Uplift 2=-482(LC 12), 12=-422(LC 13) Max Grav 2=1688(LC 1), 12=1701(LC 1)

Lumber DOL

Rep Stress Incr

Code FBC2023/TPI2014

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

TOP CHORD 2-3=-3383/948, 3-4=-3246/893, 4-5=-3273/971, 5-6=-3946/1086, 6-7=-3280/819,

1.25

YES

BC

WB

Matrix-MS

0.74

0.99

7-8=-3121/802. 8-9=-2621/618. 10-12=-270/192

BOT CHORD 2-16=-999/3058, 15-16=-1081/3716, 14-15=-923/3673, 13-14=-568/2738,

12-13=-438/1829

**WEBS** 4-16=-276/176, 5-16=-831/204, 6-15=-75/339, 6-14=-713/375, 7-14=-496/2116,

8-14=-69/394, 8-13=-689/207, 9-13=-122/860, 9-12=-2499/565

### 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 2-10-6, Zone1 2-10-6 to 26-0-3, Zone2 26-0-3 to 32-2-5, Zone1 32-2-5 to 45-2-0 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.
- 6) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=482, 12=422.

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May 29,2024



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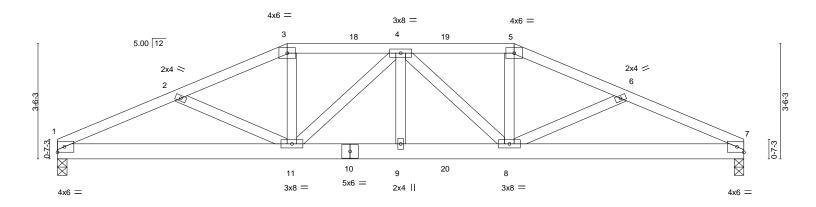
Job Truss Truss Type Qty Ply NORRIS CONST. - RUSSWOOD SPEC T34003302 4053698 T08 Hip Girder Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 28 13:16:58 2024 Page 1 ID:NfQKPk0vtjt52FdA3Ad5P4zC2NR-6eRvnPvyqef?1lpv38MqHJhyoRmLejzNbR2\_bOzBylZ 13-11-0 17-1-15 20-11-0 10-5-8

3-5-8

3-5-8

Scale = 1:35.1

3-9-1



	7-0-0 7-0-0	10-5-8 3-5-8	13-11-0 3-5-8	7-0-0	
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr NO Code FBC2023/TPI2014	CSI. TC 0.56 BC 0.74 WB 0.31 Matrix-MS	DEFL.         in (loc)           Vert(LL)         0.16         9           Vert(CT)         -0.23         9           Horz(CT)         0.06         7	/defl L/d   PLATES   >999 240   MT20   >999 180   n/a n/a   Weight: 1	244/190

LUMBER-TOP CHORD BOT CHORD

WFBS

2x4 SP No.2 2x6 SP No.2

2x4 SP No.3

BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 2-10-12 oc purlins.

Rigid ceiling directly applied or 5-7-13 oc bracing.

3-2-15

REACTIONS. (size) 1=0-3-8, 7=0-3-8

Max Horz 1=49(LC 8)

Max Uplift 1=-739(LC 8), 7=-745(LC 9) Max Grav 1=1503(LC 1), 7=1527(LC 1)

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

1-2=-3140/1624, 2-3=-3000/1586, 3-4=-2787/1509, 4-5=-2838/1521, 5-6=-3058/1600, TOP CHORD

3-2-15

6-7=-3197/1639

BOT CHORD 1-11=-1495/2841, 9-11=-1673/3210, 8-9=-1673/3210, 7-8=-1459/2892 WFBS 3-11=-423/804, 4-11=-642/385, 4-9=-212/325, 4-8=-560/329, 5-8=-380/749

### 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; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=739, 7=745.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 127 lb down and 95 lb up at 7-0-0, 109 lb down and 95 lb up at 9-0-12, 109 lb down and 87 lb up at 10-5-8, and 109 lb down and 95 lb up at 11-10-4, and 234 lb down and 188 lb up at 13-11-0 on top chord, and 333 lb down and 289 lb up at 7-0-0, 84 lb down and 69 lb up at 9-0-12, 84 lb down and 69 lb up at 10-5-8, and 84 lb down and 69 lb up at 11-10-4, and 333 lb down and 289 lb up at 13-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) 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: 1-3=-54, 3-5=-54, 5-7=-54, 12-15=-20

Vert: 3=-109(B) 5=-187(B) 10=-65(B) 11=-333(B) 9=-65(B) 4=-109(B) 8=-333(B) 18=-109(B) 19=-109(B) 20=-65(B)

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May 29,2024



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2-11-0

4-4-8

Scale = 1:35.0

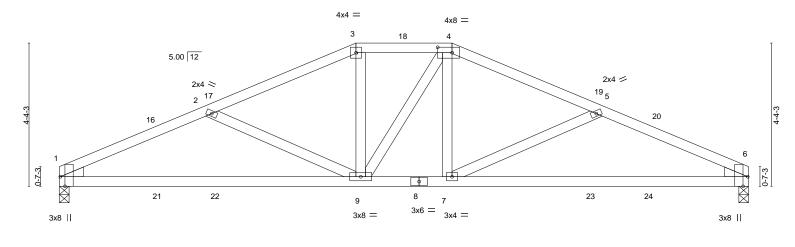


Plate Off	sets (X,Y)	[1:0-3-8,Edge], [4:0-5-4,0	-2-0], [6:0-3-8,	Edge]								
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.24	Vert(LL)	0.13	7-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	ВС	0.65	Vert(CT)	-0.25	7-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code FBC2023/T	PI2014	Matri	x-MS						Weight: 99 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

2-11-0

LUMBER-

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

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

REACTIONS. (size) 1=0-3-8, 6=0-3-8

Max Horz 1=63(LC 12)

Max Uplift 1=-343(LC 8), 6=-343(LC 9) Max Grav 1=774(LC 1), 6=774(LC 1)

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

9-0-0

TOP CHORD  $1-2 = -1406/685, \ 2-3 = -1133/592, \ 3-4 = -1007/573, \ 4-5 = -1132/591, \ 5-6 = -1406/685$ 

**BOT CHORD** 1-9=-605/1262, 7-9=-462/1007, 6-7=-602/1262

WEBS 2-9=-304/190, 3-9=-156/271, 4-7=-148/271, 5-7=-304/190

### 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 0-0-0 to 3-0-0, Zone1 3-0-0 to 9-0-0, Zone3 9-0-0 to 11-11-0, Zone2 11-11-0 to 16-1-15, Zone1 16-1-15 to 20-11-0 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
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=343, 6=343.

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9-0-0

Structural wood sheathing directly applied or 4-10-14 oc purlins.

Rigid ceiling directly applied or 7-4-12 oc bracing.

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May 29,2024

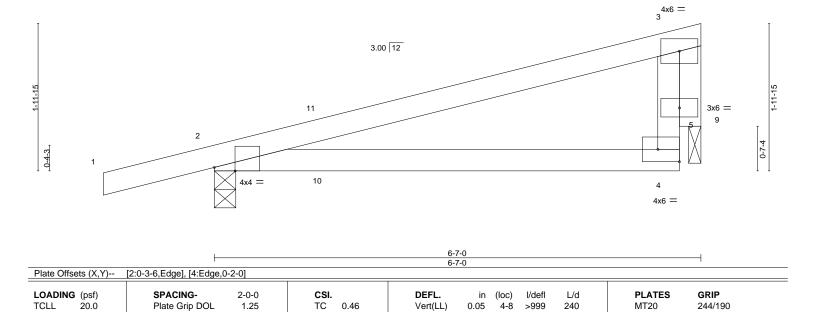


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Scale = 1:15.6



Vert(CT)

Horz(CT)

**BRACING-**

TOP CHORD

BOT CHORD

-0.06

0.00

4-8

>999

except end verticals.

n/a

180

n/a

Rigid ceiling directly applied or 10-0-0 oc bracing.

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Weight: 25 lb

FT = 20%

LUMBER-TOP CHORD

TCDL

**BCLL** 

BCDL

2x4 SP No.2

**BOT CHORD** 2x4 SP No.2 2x4 SP No.3 WFBS

7.0

0.0

10.0

**OTHERS** 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 9=0-2-0

Max Horz 2=79(LC 8)

1-6-0

Max Uplift 2=-203(LC 8), 9=-123(LC 8) Max Grav 2=330(LC 1), 9=206(LC 1)

Lumber DOL

Rep Stress Incr

Code FBC2023/TPI2014

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

### NOTES-

- 1) 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 6-1-12 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

вс

WB

Matrix-MR

0.28

0.32

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1.25

YES

- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=203, 9=123,

This item has been digitally signed and sealed by Lee, Julius, 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.

Julius Lee PE No.34869 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017

May 29,2024



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



Job Truss Truss Type Qty Ply NORRIS CONST. - RUSSWOOD SPEC T34003305 4053698 T10G Monopitch Supported Gable Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 28 13:17:00 2024 Page 1 ID:NfQKPk0vtjt52FdA3Ad5P4zC2NR-30ZfC5xCMFwjG2zIAZOINknLmEaY6fxg3IX5gHzByIX -1-6-0

Scale = 1:15.1

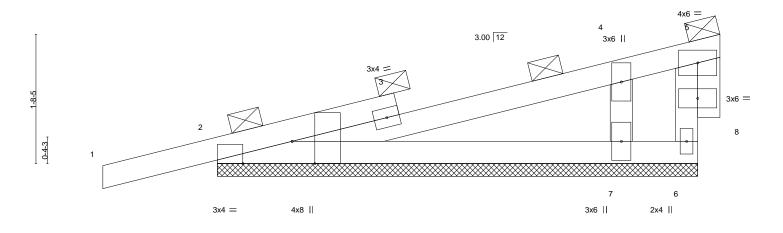


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-7-12,Edge]

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.24	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2023/TI	PI2014	Matri	x-P						Weight: 28 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

2-0-0 oc purlins (6-0-0 max.), except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing.

LUMBER-TOP CHORD

2x4 SP No 2 2x4 SP No.2

**BOT CHORD** 2x4 SP No.3 WFBS **OTHERS** 2x4 SP No.3

REACTIONS.

(size) 2=6-3-8, 6=6-3-8, 7=6-3-8

1-6-0

Max Horz 2=68(LC 8)

Max Uplift 2=-125(LC 8), 6=-155(LC 1), 7=-134(LC 12) Max Grav 2=257(LC 1), 6=36(LC 12), 7=442(LC 1)

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

**WEBS** 4-7=-298/499

### NOTES-

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

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

May 29,2024



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



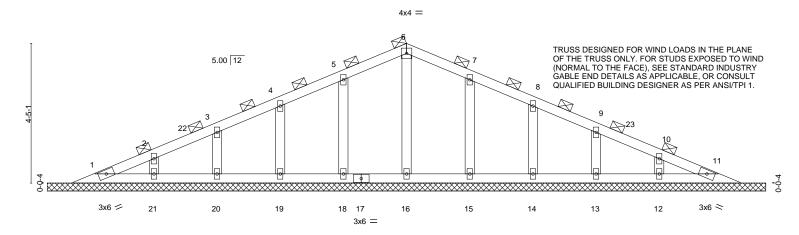
T34003306 V01 **GABLE** 4053698 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Tue May 28 13:17:01 2024 Page 1 ID:NfQKPk0vtjt52FdA3Ad5P4zC2NR-XD71PRyq7Z2auCXUkGvXvxJb6ey4r8?pHPHeCjzBylW 11-4-8

Qty

Ply

NORRIS CONST. - RUSSWOOD SPEC

Scale = 1:36.5



· · · · · · · · · · · · · · · · · · ·	1			T		22-9-0	T					
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.04	Vert(LL)	n/a	` -	n/a	999	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	ВС	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code FBC2023/T	PI2014	Matri	x-S	, ,					Weight: 90 lb	FT = 20%

22-9-0

LUMBER-TOP CHORD

Job

Truss

2x4 SP No.2 2x4 SP No.2

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

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 22-9-0.

Max Horz 1=69(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 18, 19, 20, 21, 15, 14, 13, 12 Max Grav All reactions 250 lb or less at joint(s) 1, 11, 16, 18, 19, 20, 21, 15, 14, 13, 12

Truss Type

11-4-8

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 1-6-3 to 4-6-3, Zone1 4-6-3 to 11-4-8, Zone2 11-4-8 to 15-4-8, Zone1 15-4-8 to 21-2-13 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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 18, 19, 20, 21, 15, 14, 13, 12
- 9) 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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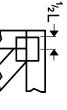


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

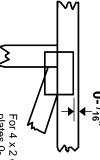


### Symbols

## 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-  $\frac{1}{16}$  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 × 4

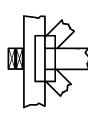
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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.

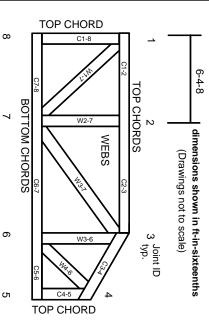
### Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction Design Standard for Bracing.

Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-22:

## **Numbering System**



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

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

# Product Code Approvals

ICC-ES Reports:

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

# Design General Notes

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

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

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## 

MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

# **General Safety Notes**

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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

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Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.

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- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- 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.
- The design does not take into account any dynamic or other loads other than those expressly stated.