



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

RE: 3294502 - FREEMAN RES.

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Site Information:

Customer Info: KEN REDICK Project Name: Freeman Res. Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: 262 SW Freeman Glen, N/A
City: Columbia Cty State: FL

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

Name: License #:
Address:
City: State:

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

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

This package includes 5 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
1	T28776019	T01	9/14/22
2	T28776020	T01G	9/14/22
3	T28776021	T02	9/14/22
4	T28776022	T04	9/14/22
5	T28776023	T04G	9/14/22

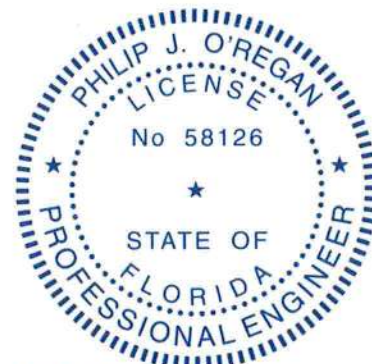


This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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, 2023.

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:

September 14, 2022

ORegan, Philip

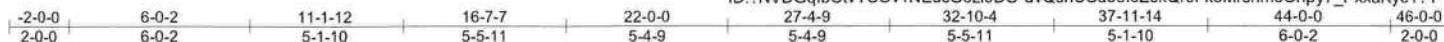
1 of 1

Job	Truss	Truss Type	Qty	Ply	FREEMAN RES.	T28776019
3294502	T01	Common	21	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Tue Sep 13 13:53:15 2022 Page 1

ID:7NVDGqIbCtVYSOv1NEucG6zi0DO-uvQsnUSd38I6ZekQr0FkeMrshm6Cnpy7_PxxaKye1?Y



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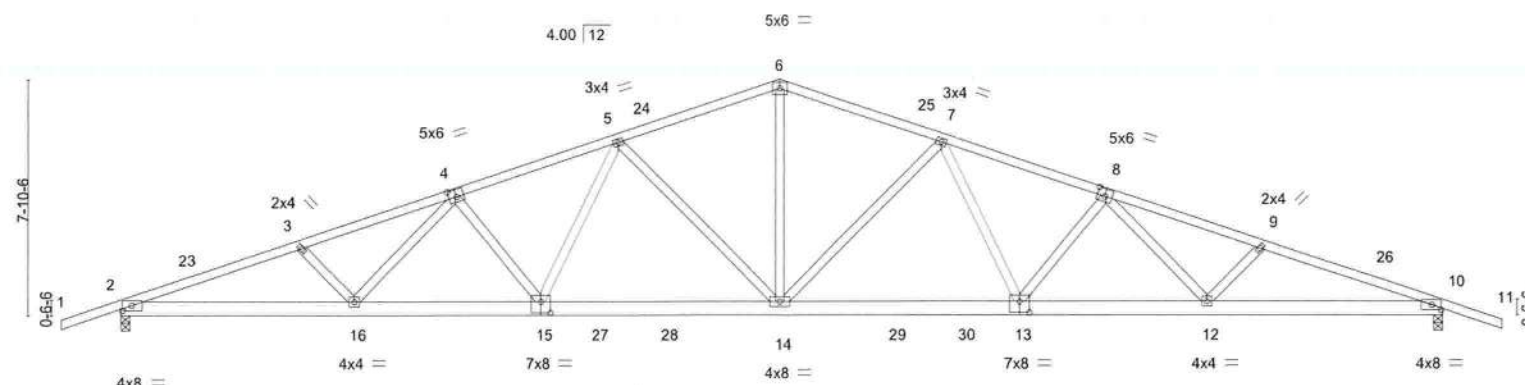


Plate Offsets (X,Y)--	7-9-8	14-0-0	22-0-0	30-0-0	36-2-8	44-0-0
	7-9-8	6-2-8	8-0-0	8-0-0	6-2-8	7-9-8

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 0.53	Vert(LL)	-0.41 13-14	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.87	Vert(CT)	-0.71 13-14	>740	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 1.00	Horz(CT)	0.16 10	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 264 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-6-12 oc bracing.

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=-119(LC 13)
Max Uplift 2=-450(LC 8), 10=-450(LC 9)
Max Grav 2=1861(LC 2), 10=1861(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4459/1070, 3-4=-4310/1029, 4-5=-3779/950, 5-6=-2845/770, 6-7=-2845/770,
7-8=-3779/950, 8-9=-4310/1029, 9-10=-4459/1070
BOT CHORD 2-16=-941/4187, 15-16=-820/3817, 14-15=-667/3243, 13-14=-677/3243, 12-13=-830/3817,
10-12=-951/4187
WEBS 6-14=-340/1552, 7-14=-857/294, 7-13=-139/735, 8-13=-477/199, 8-12=-71/397,
9-12=-256/151, 5-14=-857/294, 5-15=-138/735, 4-15=-477/199, 4-16=-70/397,
3-16=-256/151

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 2-4-13, Interior(1) 2-4-13 to 22-0-0, Exterior(2R) 22-0-0 to 26-4-13, Interior(1) 26-4-13 to 46-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=450, 10=450.

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

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

September 14, 2022

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	FREEMAN RES.	T28776020
3294502	T01G	Common Supported Gable	2	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Tue Sep 13 13:53:18 2022 Page 1
ID:7NVDGqlbCtvYSOv1NEucG6zi0DO-IU6?QWUWM3hhQ5S?W9oRF_TRV_Ko_OiZhN9cBfye17V
44-0-0 46-0-0
22-0-0 2-0-0

Scale = 1:80.8

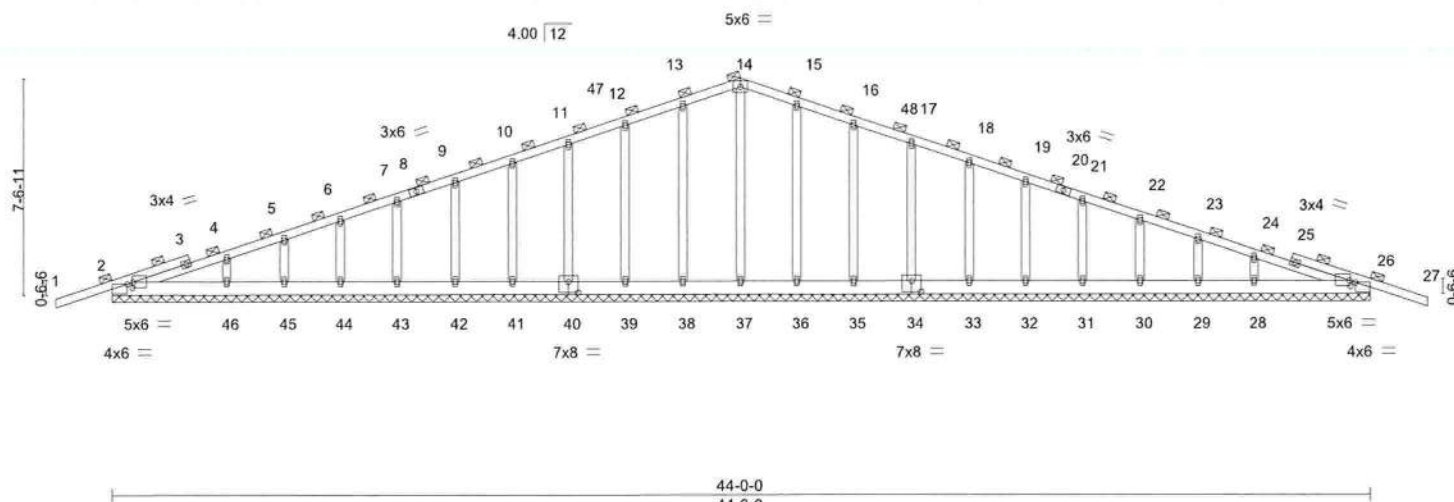


Plate Offsets (X,Y)-- [2:0-0-4,0-2-5], [2:0-2-7,Edge], [26:0-2-7,Edge], [26:0-0-4,0-2-5], [34:0-4-0,0-4-8], [40:0-4-0,0-4-8]

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 0.24	Vert(LL)	-0.01	27	n/r	120	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.05	Vert(CT)	-0.02	27	n/r	120	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.01	26	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S						
								Weight: 288 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 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 44-0-0.
(lb) - Max Horz 2=-114(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 38, 39, 40, 41, 42, 43, 44, 45, 46, 36, 35, 34, 33, 32, 31, 30,
29, 28 except 2=-105(LC 8), 26=-114(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 36, 35, 34, 33, 32,
31, 30, 29, 28 except 2=268(LC 1), 26=268(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -2-0-0 to 2-4-13, Exterior(2N) 2-4-13 to 22-0-0, Corner(3R) 22-0-0 to 26-4-13, Exterior(2N) 26-4-13 to 46-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 38, 39, 40, 41, 42, 43, 44, 45, 46, 36, 35, 34, 33, 32, 31, 30, 29, 28 except (jt=lb) 2=105, 26=114.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

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

September 14,2022

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	FREEMAN RES.	T28776021
3294502	T02	Common	11	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Tue Sep 13 13:53:20 2022 Page 1

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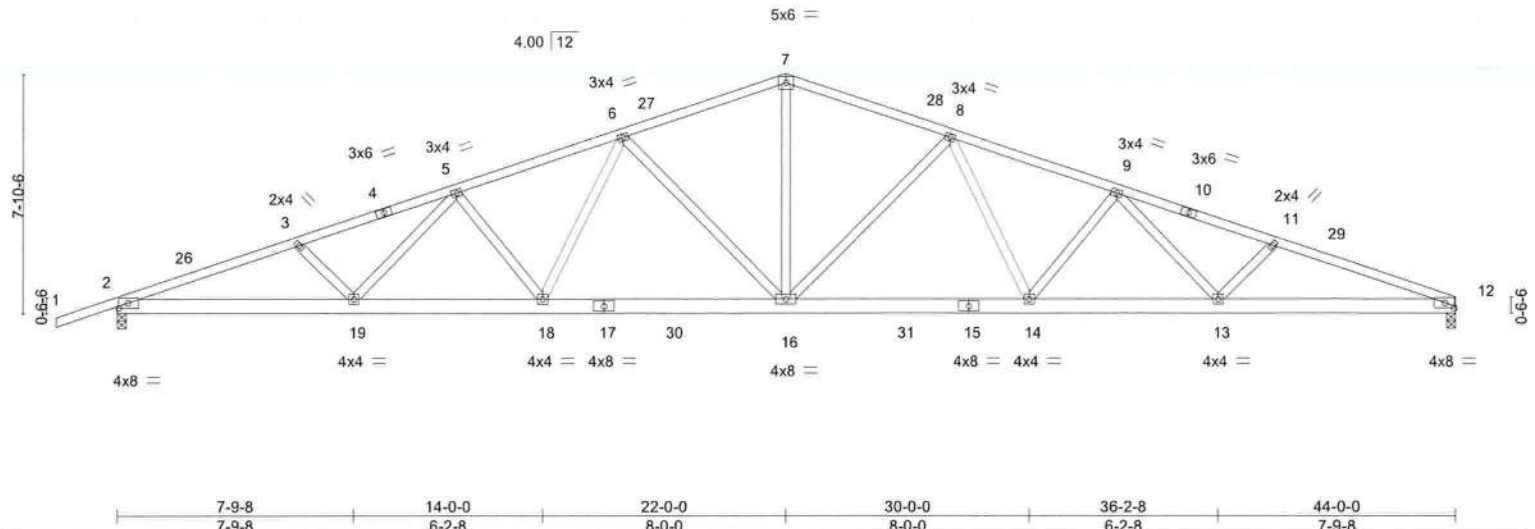


Plate Offsets (X,Y)-- [2:0-3-12,0-2-0], [12:0-3-12,0-2-0]		7-9-8		14-0-0		22-0-0		30-0-0		36-2-8		44-0-0	
		7-9-8		6-2-8		8-0-0		8-0-0		6-2-8		7-9-8	
LOADING (psf)	SPACING-	2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d	
TCLL 20.0	Plate Grip DOL	1.25		TC 0.53		Vert(LL)		-0.41 14-16		>999		240	
TCDL 7.0	Lumber DOL	1.25		BC 0.87		Vert(CT)		-0.71 14-16		>739		180	
BCLL 0.0 *	Rep Stress Incr	YES		WB 1.00		Horz(CT)		0.16 12		n/a		n/a	
BCDL 10.0	Code FBC2020/TPI2014			Matrix-MS									
												Weight: 261 lb	
												FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-5-4 oc purlins.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 7-4-11 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS.	
(size)	2=0-3-8, 12=0-3-8
Max Horz	2=129(LC 16)
Max Uplift	2=-450(LC 8), 12=-373(LC 9)
Max Grav	2=1861(LC 2), 12=1769(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-4460/1078, 3-5=-4311/1037, 5-6=-3780/959, 6-7=-2847/773, 7-8=-2847/779, 8-9=-3786/964, 9-11=-4342/1061, 11-12=-4493/1105
BOT CHORD	2-19=-986/4189, 18-19=-864/3817, 16-18=-712/3244, 14-16=-700/3248, 13-14=-863/3830, 12-13=-1001/4221
WEBS	7-16=-346/1553, 8-16=-860/296, 8-14=-142/739, 9-14=-491/205, 9-13=-83/422, 11-13=-264/154, 6-16=-855/294, 6-18=-139/734, 5-18=-477/199, 5-19=-70/398, 3-19=-257/151

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 2-4-13, Interior(1) 2-4-13 to 22-0-0, Exterior(2R) 22-0-0 to 26-4-13, Interior(1) 26-4-13 to 44-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber 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=450, 12=373.

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

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

September 14,2022



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	FREEMAN RES.	T28776022
3294502	T04	Common	4	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Tue Sep 13 13:53:21 2022 Page 1
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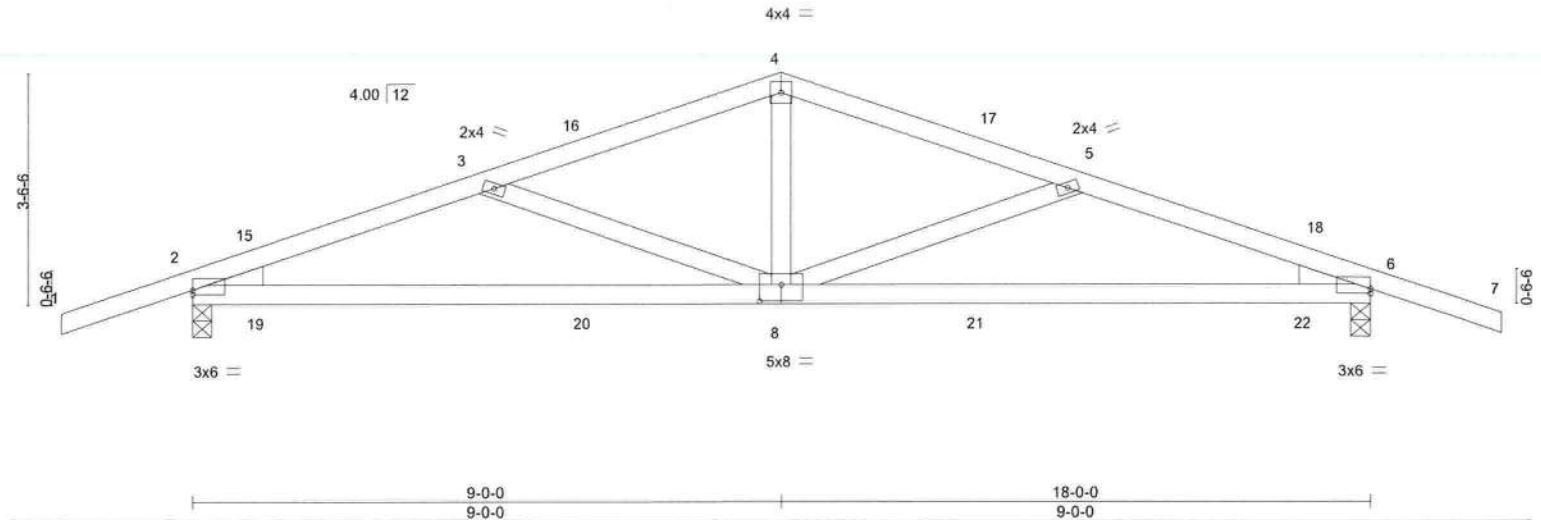


Plate Offsets (X,Y)-- [2:0-0-0,0-0-13], [6:Edge,0-0-13], [8:0-4-0,0-3-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.	DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC 0.34	Vert(LL)	0.23	8-14	>944	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC 0.73	Vert(CT)	-0.21	8-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS						Weight: 82 lb	FT = 20%

LUMBER-

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

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-9-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-7-9 oc bracing.

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=-55(LC 13)
Max Uplift 2=-378(LC 8), 6=-378(LC 9)
Max Grav 2=774(LC 1), 6=774(LC 1)

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

TOP CHORD 2-3=-1341/1367, 3-4=-1032/1201, 4-5=-1032/1201, 5-6=-1341/1367
BOT CHORD 2-8=-1245/1228, 6-8=-1253/1228
WEBS 4-8=-614/444, 5-8=-336/239, 3-8=-336/239

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 9-0-0, Exterior(2R) 9-0-0 to 12-0-0, Interior(1) 12-0-0 to 20-0-0 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) 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=378, 6=378.

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

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
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Date:

September 14,2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	FREEMAN RES.	T28776023
3294502	T04G	GABLE	1	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Tue Sep 13 13:53:22 2022 Page 1

ID: ?NVDGqlbCtvYSOv1NEucG6zi0DO-BFLWFX0QIB7ujmmml_tNQqe0cbY4wA_9b?7pKQye1?R



Scale = 1:36.4

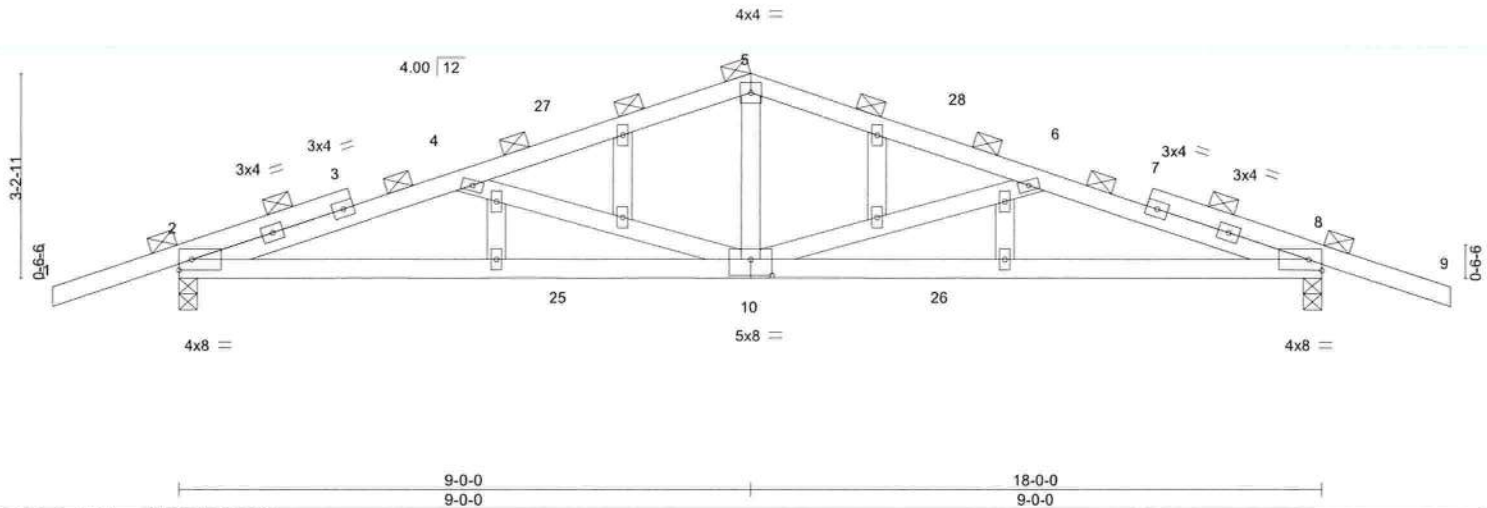


Plate Offsets (X,Y)-- [10:0-4-0-0-3-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0		TC 0.68	Vert(LL)	0.23 10-21	>926	240	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25		BC 0.66	Vert(CT)	0.19 10-21	>999	180		
BCLL 0.0 *	Lumber DOL 1.25		WB 0.21	Horz(CT)	0.03 8	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES		Matrix-MS					Weight: 94 lb	FT = 20%
	Code FBC2020/TPI2014								

LUMBER-
TOP CHORD 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 (4-5-15 max.).
BOT CHORD Rigid ceiling directly applied or 3-9-3 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=50(LC 16)
Max Uplift 2=-379(LC 8), 8=-379(LC 9)
Max Grav 2=771(LC 1), 8=771(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1516/1989, 4-5=-1097/1551, 5-6=-1097/1551, 6-8=-1516/1989
BOT CHORD 2-10=-1865/1438, 8-10=-1870/1438
WEBS 4-10=-469/555, 5-10=-797/476, 6-10=-469/555

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -2-0-0 to 1-1-8, Exterior(2N) 1-1-8 to 9-0-0, Corner(3R) 9-0-0 to 12-0-0, Exterior(2N) 12-0-0 to 20-0-0 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=379, 8=379.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

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

September 14,2022

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

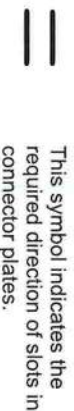
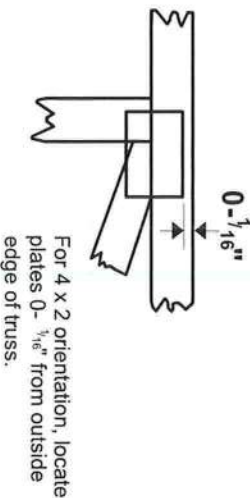
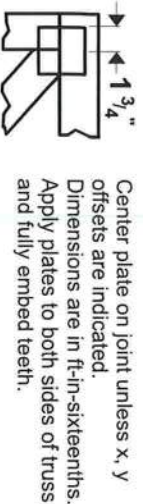
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

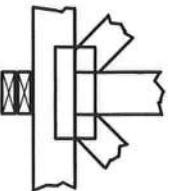
4 X 4

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

LATERAL BRACING LOCATION



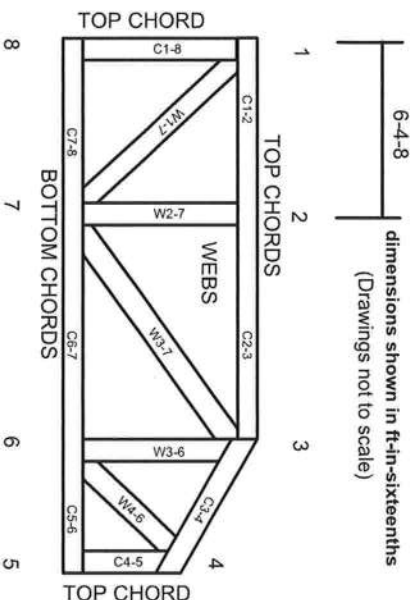
BEARING



Industry Standards:

- ANSI/TP11: National Design Specification for Metal Plate Connected Wood Truss Construction.
- DSB-89: Design Standard for Bracing.
- BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & 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-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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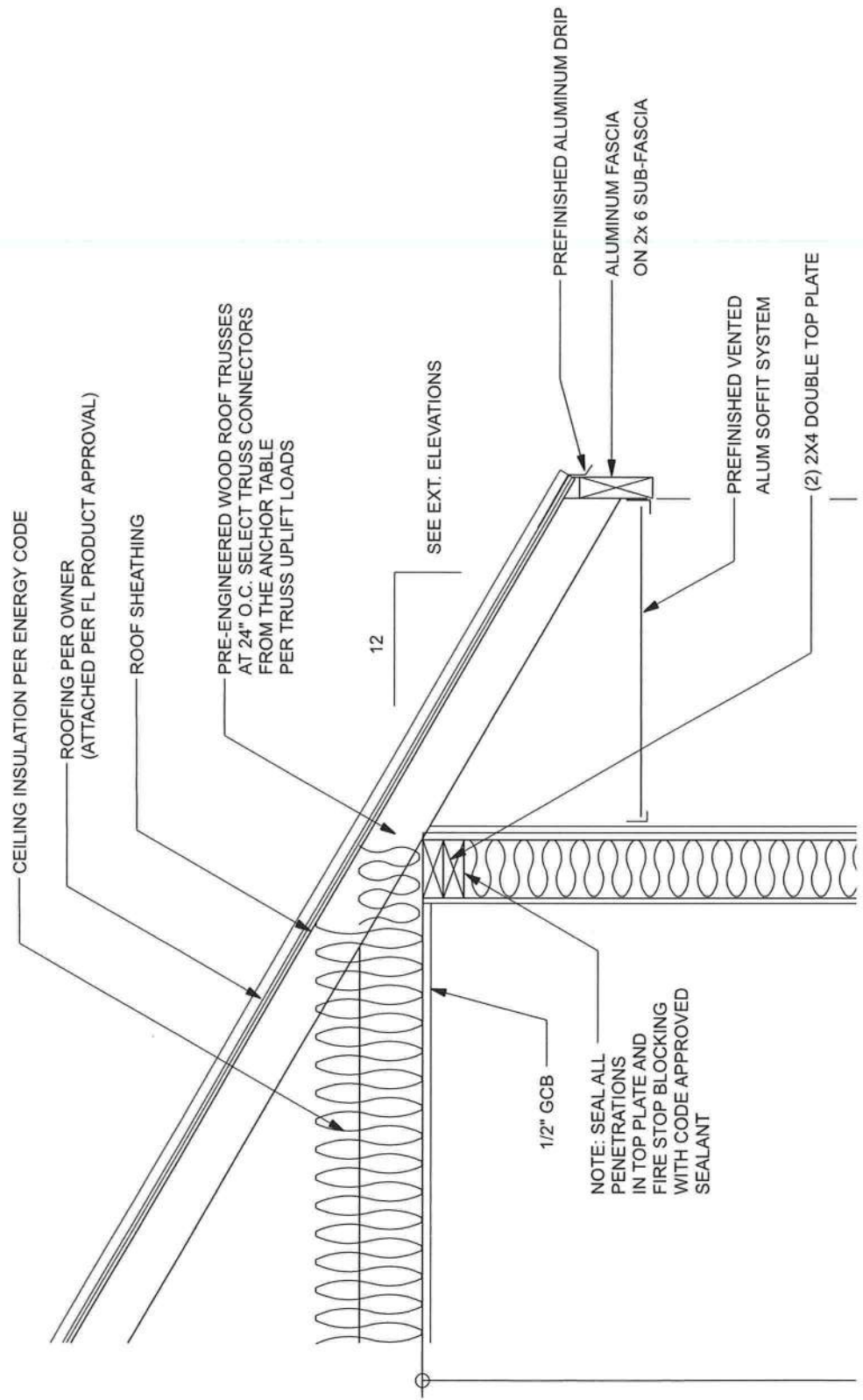
MITek Engineering Reference Sheet: MIL-7473 rev. 5/19/2020

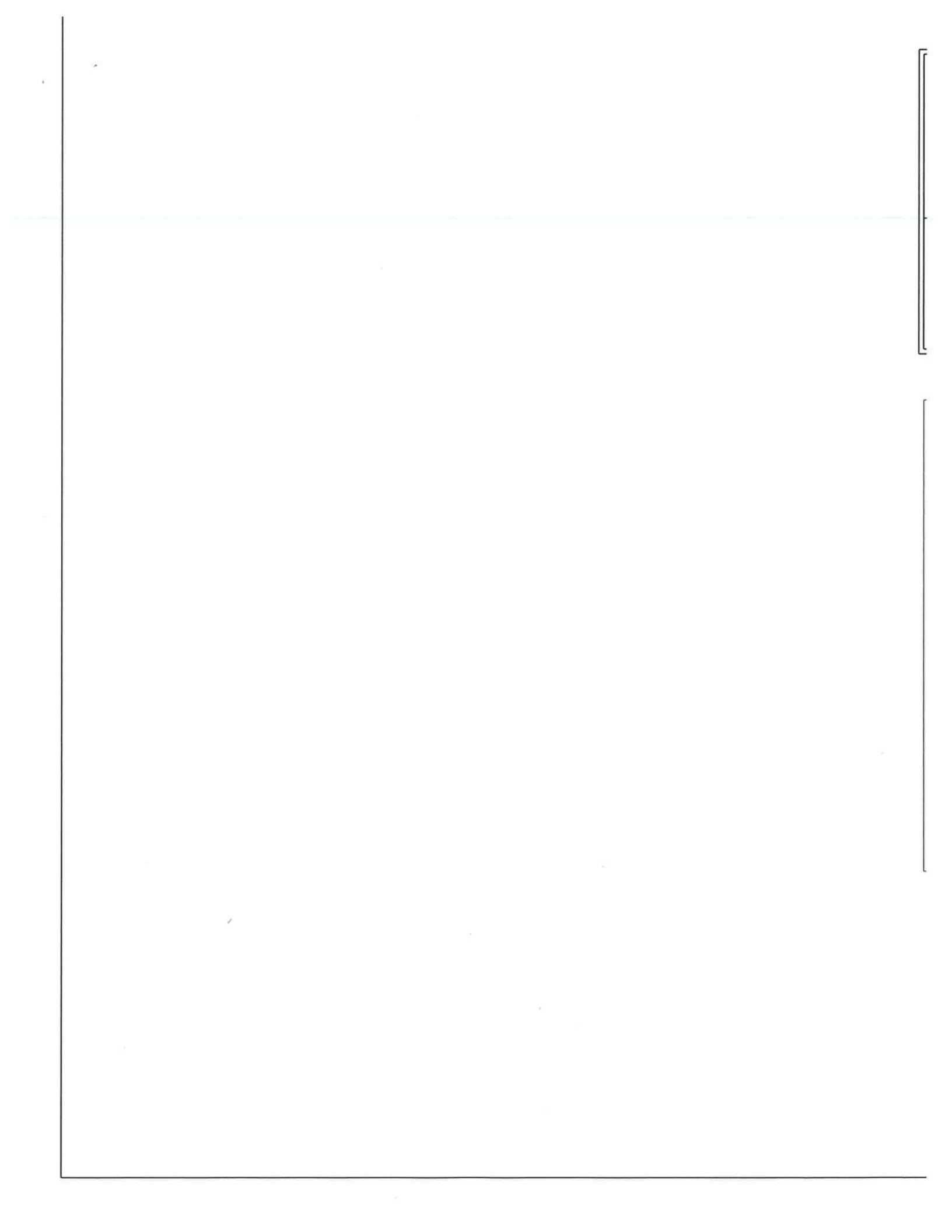


General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor 1 bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.





NAIL OSB TO
UPPER TOP PL
(IF POSSIBLE)

H2.5A
OR
SDWC15600
UP TO 505 #
UPLIFT

2X4 SPF #2
BLOCKING
& SHEATHING

1" MAX
GAP @
HORIZ
SPLICE

7/16" OSB

SHEATHING
ATTACHMENT
ONE STORY W

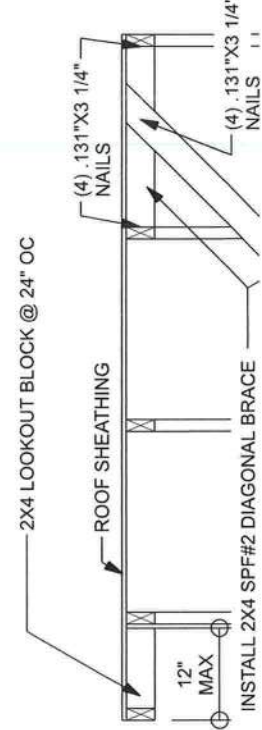
2X4 O
ATTACH
(4) .13

ROOF SHEATHING FASTENING TABLE (RAFTER / TRUSS SG = 0.49)

Wind Speed	Sheathing Thickness Plywood Or OSB	Required Nail	Nail spacing along panel edges	Nail spacing along intermediate supports in the panel field
120 mph Exp. B	7/16"	ASTM F1667 RSR-01 (2 3/8" x 0.113")	6" oc	12" oc
120 mph Exp. C	7/16"	ASTM F1667 RSR-01 (2 3/8" x 0.113")	6" oc	6" oc
120 mph Exp. D	19/32"	ASTM F1667 RSR-03 (2 1/2" x 0.131") or ASTM F1667 RSR-04 (3" x 0.120")	6" oc	6" oc
130 mph Exp. B	7/16"	ASTM F1667 RSR-01 (2 3/8" x 0.113")	6" oc	6" oc
130 mph Exp. C	15/32"	ASTM F1667 RSR-01 (2 3/8" x 0.113")	6" oc	6" oc
130 mph Exp. D	19/32"	ASTM F1667 RSR-03 (2 1/2" x 0.131") or ASTM F1667 RSR-04 (3" x 0.120")	6" oc	6" oc
140 mph Exp. B	7/16"	ASTM F1667 RSR-01 (2 3/8" x 0.113")	6" oc	6" oc
140 mph Exp. C	19/32"	ASTM F1667 RSR-03 (2 1/2" x 0.131") or ASTM F1667 RSR-04 (3" x 0.120")	6" oc	6" oc
140 mph Exp. D	19/32"	ASTM F1667 RSR-03 (2 1/2" x 0.131") or ASTM F1667 RSR-04 (3" x 0.120")	6" oc	6" oc
150 mph Exp. C	19/32"	ASTM F1667 RSR-03 (2 1/2" x 0.131") or ASTM F1667 RSR-04 (3" x 0.120")	6" oc	6" oc
150 mph Exp. D	19/32"	ASTM F1667 RSR-03 (2 1/2" x 0.131") or ASTM F1667 RSR-04 (3" x 0.120")	4" oc	4" oc

Note: For sheathing located a minimum of 4 feet from the perimeter edge of the roof, including 4 feet on each side of ridges and hips, nail spacing is permitted to be 6 inches on center along panel edges and 6 inches on center along intermediate supports in the panel field. Note: This table specifies the code minimum thickness of roof sheathing. The thickness of the sheathing may need to be increased based in the type of roofing material being used. See manufacturer Florida product approval.

FOR OVERHANGES 12"-24" USE A DROPPED GABLE TRUSS WITH 2X4 OUTLOOKER @ 24" O.C. w/ H2.5a TO GABLE TRUSS AND (4) .131"x3.25" NAILS TO 2nd TRUSS (BLOCK BETWEEN OUTLOOKER)



ROOF SHEATHING SEE
ROOF SHEATHING FASTENING TABLE

PRE-ENGINEERED WOOD ROOF TRUSSES
AT 24" O.C. SELECT TRUSS CONNECTORS
FROM THE ANCHOR TABLE
PER TRUSS UPLIFT LOADS
(EITHER STRAPS OR SCREWS MAY BE USED)

(2) 2x4/6 SPF #2 DOUBLE TOP PLATE
TRUSS TO TOP PLATE
(4) .131"x3 1/4" TOE NAILS

24" MAX

NOTE:
SEAL ALL PENETRATIONS
IN TOP PLATE AND FIRE
STOP BLOCKING WITH CODE
APPROVED SEALANT

NOTE: IF TRUSS BEARING LOAD
EXCEEDS 425 PSI USE SYP #2
TOP PLATES; IF IT EXEDS 565 PSI
ADD ADDITIONAL BEARING BLOCKS OR
USE SIMPSON TBE BEARING ENHANCER

2x4/6 SPF#2 STUDS
SEE STUD TABLE

7/16" O.S.B. WALL SHEATHING
FULLY BLOCKED
8d COMMON NAILS
3" OC EDGE; 12" OC FIELD
SEE SHEATHING FOR
UPLIFT ATTACHMENT DETAILS

4" CONCRETE FLOOR SLAB REINFORCED

4/12



A series of horizontal lines for writing, consisting of a solid red top line, a dashed blue middle line, and a solid orange bottom line. There are 10 sets of these lines, each preceded by a small red triangle pointing to the right. A vertical dashed line runs down the left side of the writing area, and a small black triangle points to the right at the bottom of this line.

Builders First Source - Lake City

2525 East Duval St, Lake City FL 32055

Phone: 386-755-6894 Fax: 386-755-7973

Date:	9/13/2022		
Customer:	KEN REDICK	Phone #:	
Job Name:	Freeman Res.		
Jobsite Address:	Columbia City		
Pitch:	TC 4:12 / Flat Clg.	Loading:	Shingle
Top Chord:	2x4	Bearing:	4"
Overhangs:	24"	Spacing:	24"
Quoted By:	Kim Holloway		
Sales Rep:	Kim Holloway		

Details

ROOF TRUSSES ONLY

Includes hangers for truss to truss, truss to beam & truss to ledger connections only.

Price

Roof Trusses \$8,450.00

Pre-Tax Sub-Total \$8,450.00

Tax \$582.00

Total Including Tax \$9,032.00

No Additional Options

**MUST BE SIGNED
WITHIN 7 DAYS**

Bid does NOT include tie downs, nails or truss clips.

Note: Hip & Valley blocking, Overhang Blocking, Truss Bracing (Temporary or Permanent) Not Included.

PRICE IS SUBJECT TO CHANGE AT ANY TIME.

To place this order, please sign and fully complete all information below and then return this proposal to:

Email To: kim.holloway@bldr.com or fax to 214-231-9645

It is the customer's responsibility to have access to the jobsite/delivery address by tractor-trailer.

Cash Customers: A non-refundable 20% Deposit required for truss layout, balance due 2 weeks prior to fabrication. Once order is received in truss office, a truss layout and truss profiles will be provided.

Customer is responsible to notify Builders FirstSource Truss within 24 hours of delivery of any mold, mildew, termites, damaged trusses or missing material.

A \$100.00 fee will be assessed for replacement sealed engineering packages lost, misplaced, or damaged by customer

Please examine this quote, as we agree to furnish at the price herein specified only the articles named and described herein.

Order accepted by, or in production by BFS, its affiliates, subsidiaries, successors and/or assigns cannot be changed or cancelled except at the expense of purchaser.

Customers on Account: upon cancellation, a fee of 20% of the total purchase price will be charged for Placement Plan and/or Truss Profiles (does not apply to cash customers.)

BFS will not be liable for back charges unless approved by representative before the work creating any change is performed.

Price is not to be assumed as valid if plan is repeated at a later date; new quote must be requested for new project:

X

Customer Authorized Signature Above

Date

Customer Authorized Purchaser (Print Name Above)

Requested Delivery Date

Customer Contact for Delivery Scheduling (Print Name Above)

Phone #

Email Address

AGREED

BFS, subsidiaries and/or assigns agrees to furnish components as described above.

Kim Holloway

BFS Authorized by

9/13/2022

Date

PRICE IS SUBJECT TO CHANGE AT ANY TIME.

4/12



A set of horizontal orange lines for writing, with a vertical blue line on the left and a vertical dashed line on the right. A red line is at the bottom of the writing area.