MiTek

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

RE: 4175502 - COLLINS-BRAUN RES.

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

Site Information:
Customer Info: JOYCE COLLINS - WILLIAM BRAUN Project Name: Collins-Braun Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: 471 SW Stewart Loop, 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: 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 22 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T34727659	CJ01	8/14/24	15	T34727673	T06	8/14/24
2	T34727660	CJ01A	8/14/24	16	T34727674	T07	8/14/24
3	T34727661	CJ03	8/14/24	17	T34727675	T08	8/14/24
4	T34727662	CJ03A	8/14/24	18	T34727676	T09	8/14/24
5	T34727663	CJ05A	8/14/24	19	T34727677	T10	8/14/24
6	T34727664	EJ01	8/14/24	20	T34727678	T11	8/14/24
7	T34727665	EJ02	8/14/24	21	T34727679	T12	8/14/24
8	T34727666	HJ08	8/14/24	22	T34727680	T13	8/14/24
9	T34727667	HJ10	8/14/24				
10	T34727668	T01	8/14/24				
11	T34727669	T02	8/14/24				
12	T34727670	T03	8/14/24				
13	T34727671	T04	8/14/24				
14	T34727672	T05	8/14/24				

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

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

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

August 14,2024

Velez, Joaquin 1 of 1

Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	CJ01	Jack-Open	8	1	T34727659
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:23 2024 Page 1
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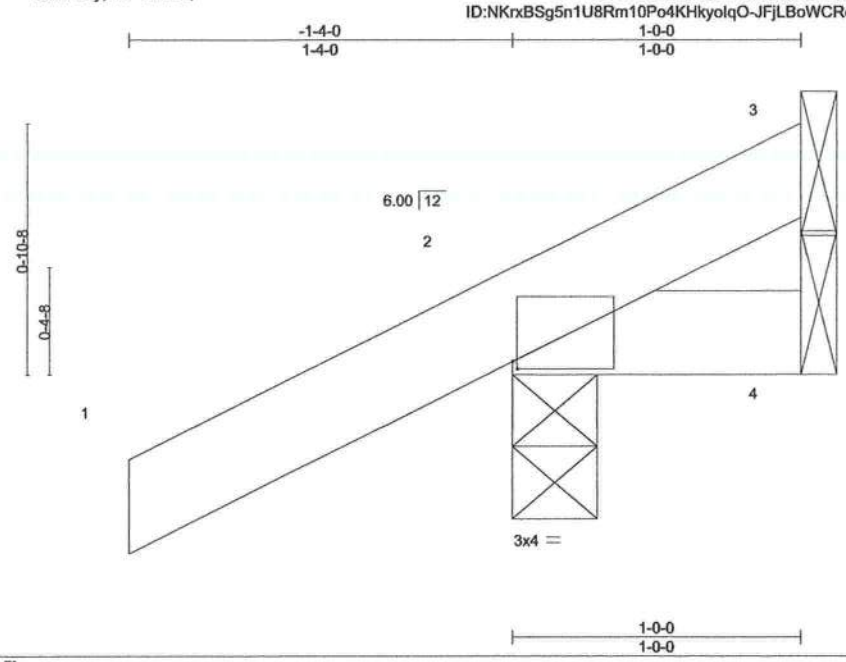

Plate Offsets (X,Y)-- [2:0-0-3,0-0-5]

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	0.19	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MP							Weight: 6 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=53(LC 12)
Max Uplift 3=-5(LC 9), 2=-94(LC 12), 4=-12(LC 1)
Max Grav 3=7(LC 16), 2=157(LC 1), 4=21(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 C; 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 5 lb uplift at joint 3, 94 lb uplift at joint 2 and 12 lb uplift at joint 4.

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16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

August 14,2024

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Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.	T34727660
4175502	CJ01A	Jack-Open	8	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:24 2024 Page 1
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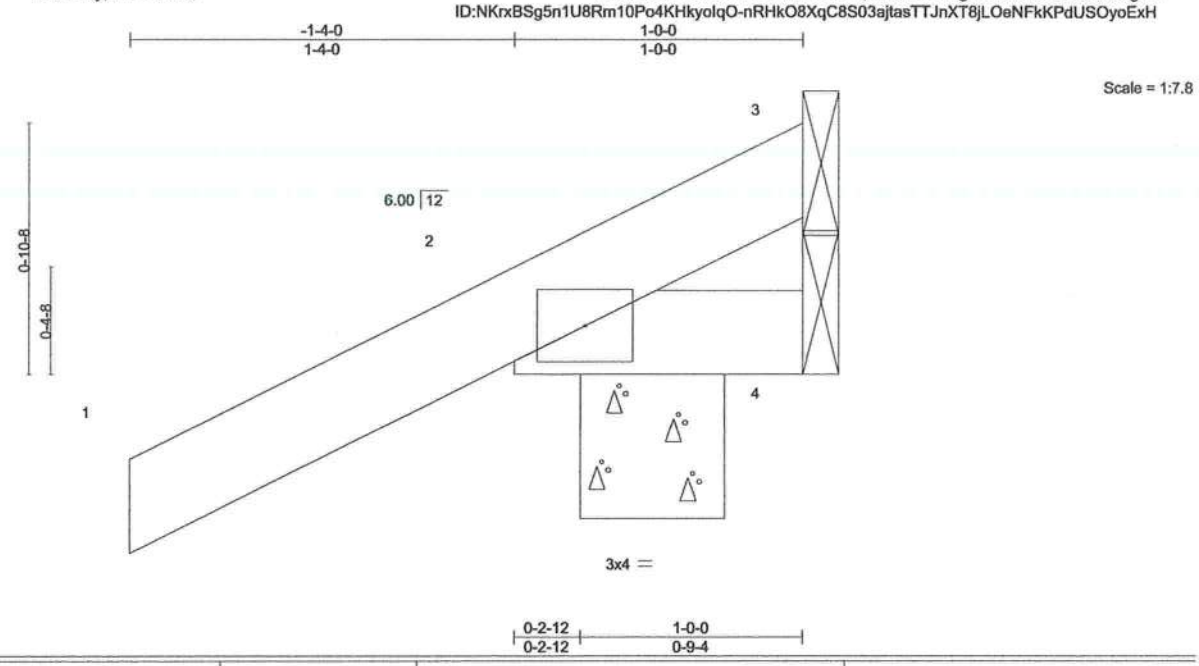

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MP							Weight: 6 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 2=0-6-0
Max Horz 2=53(LC 12)
Max Uplift 3=-2(LC 13), 4=-12(LC 1), 2=-94(LC 12)
Max Grav 3=9(LC 8), 4=21(LC 16), 2=157(LC 1)

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; cantilever left 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 2 lb uplift at joint 3, 12 lb uplift at joint 4 and 94 lb uplift at joint 2.

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Date:
August 14,2024

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Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	CJ03	Jack-Open	8	1	T34727661
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:24 2024 Page 1
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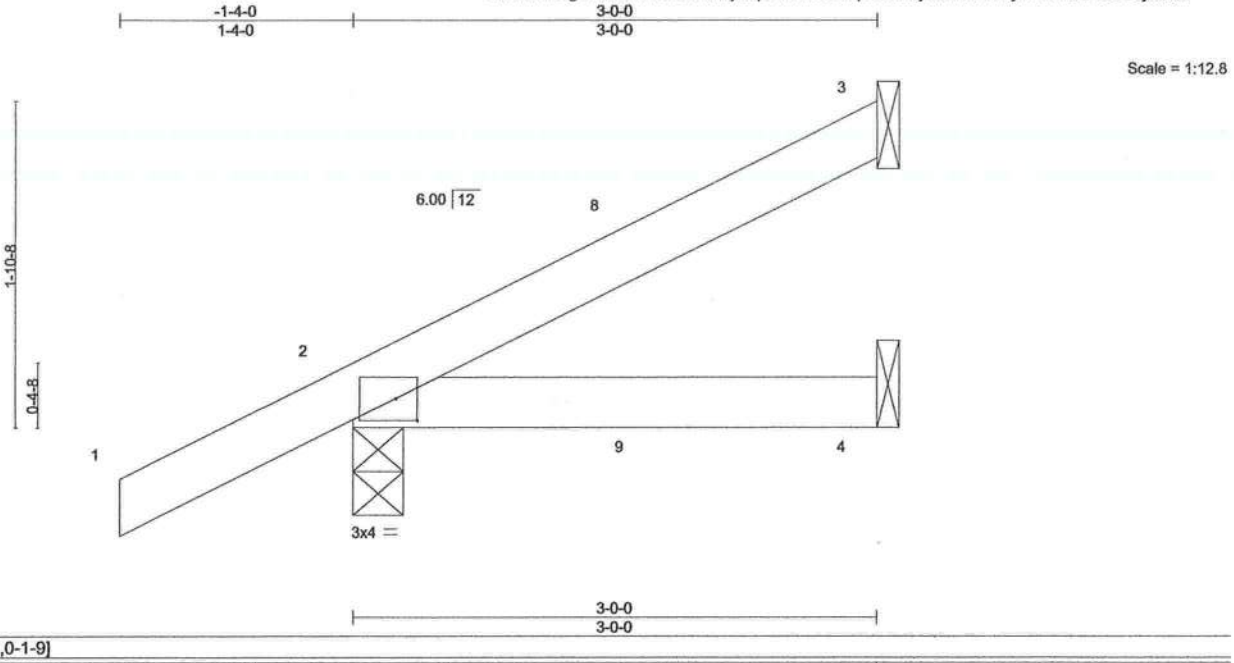

Plate Offsets (X,Y)-- [2:0-1-8,0-1-9]

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	0.19	Vert(LL)	0.01	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MP							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=102(LC 12)
Max Uplift 3=-57(LC 12), 2=-91(LC 12), 4=-27(LC 9)
Max Grav 3=62(LC 1), 2=197(LC 1), 4=50(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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 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 57 lb uplift at joint 3, 91 lb uplift at joint 2 and 27 lb uplift at joint 4.

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16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

August 14,2024

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Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.	T34727662
4175502	CJ03A	Jack-Open	8	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:24 2024 Page 1
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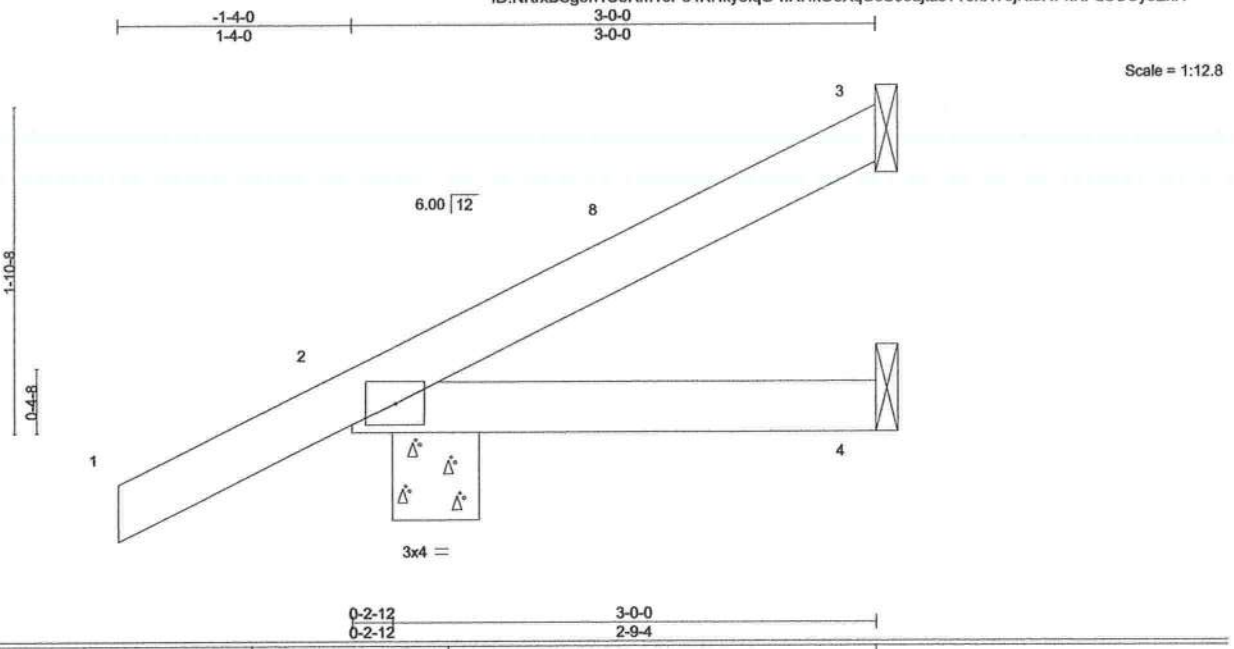

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	-0.00	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MP							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-6-0, 4=Mechanical
Max Horz 2=102(LC 12)
Max Uplift 3=-57(LC 12), 2=-91(LC 12), 4=-2(LC 12)
Max Grav 3=62(LC 1), 2=197(LC 1), 4=50(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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 2-11-4 zone; cantilever left 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 57 lb uplift at joint 3, 91 lb uplift at joint 2 and 2 lb uplift at joint 4.

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

August 14,2024

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Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES. T34727663
4175502	CJ05A	Jack-Open	8	1	Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:25 2024 Page 1
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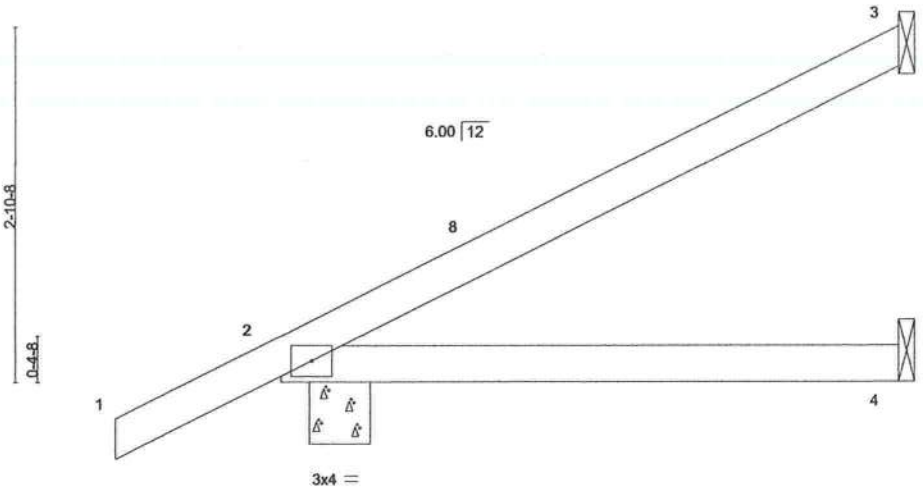

0-2-12 5-0-0
0-2-12 4-9-4

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.39	Vert(LL)	0.05	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.32	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MP							Weight: 18 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-6-0, 4=Mechanical
Max Horz 2=151(LC 12)
Max Uplift 3=-106(LC 12), 2=-108(LC 12), 4=-6(LC 12)
Max Grav 3=114(LC 1), 2=264(LC 1), 4=88(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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 4-11-4 zone; cantilever left 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 106 lb uplift at joint 3, 108 lb uplift at joint 2 and 6 lb uplift at joint 4.

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

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Chesterfield, MO 63017
Date:
August 14,2024

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Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.	T34727664
4175502	EJ01	Jack-Partial	18	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:25 2024 Page 1
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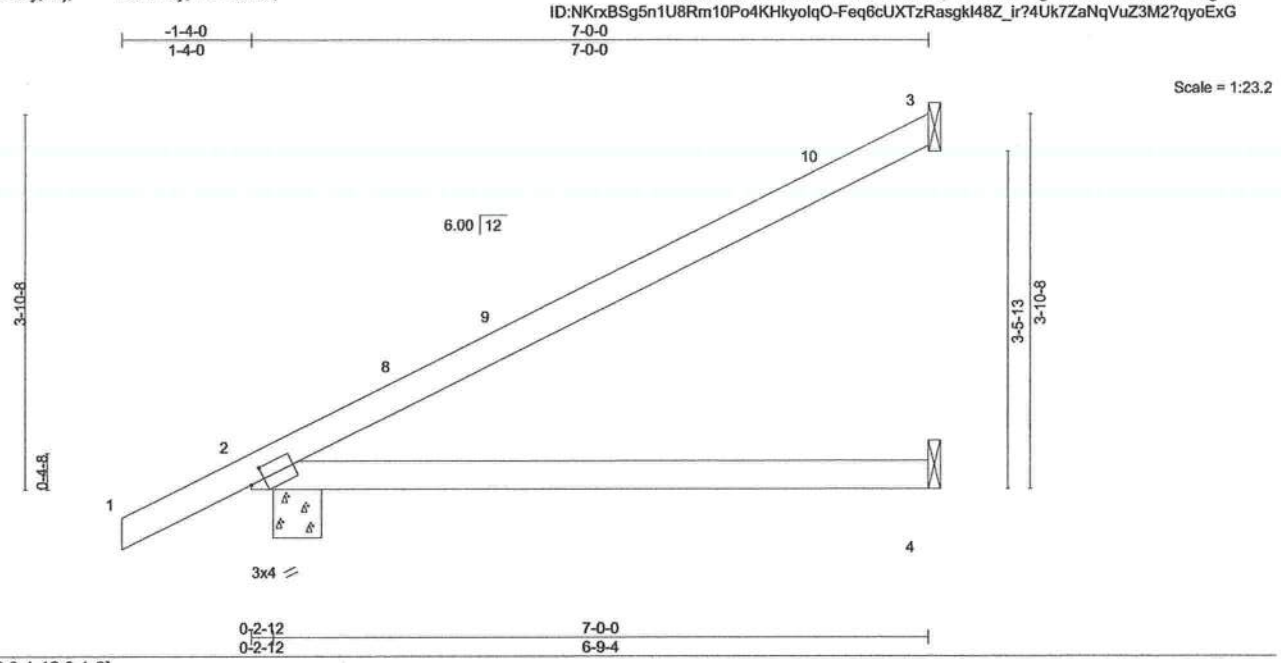

Plate Offsets (X,Y)-- [2:0-1-13,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.78	Vert(LL)	0.15	4-7	>545	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.56	Vert(CT)	-0.22	4-7	>383	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 24 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-6-0, 4=Mechanical
Max Horz 2=194(LC 12)
Max Uplift 3=-136(LC 12), 2=-132(LC 12), 4=-9(LC 12)
Max Grav 3=164(LC 1), 2=336(LC 1), 4=126(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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 6-11-4 zone; cantilever left 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 136 lb uplift at joint 3, 132 lb uplift at joint 2 and 9 lb uplift at joint 4.

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Joaquin Velez PE No.68182
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16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:
August 14,2024

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Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.	T34727665
4175502	EJ02	Jack-Partial	9	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:25 2024 Page 1
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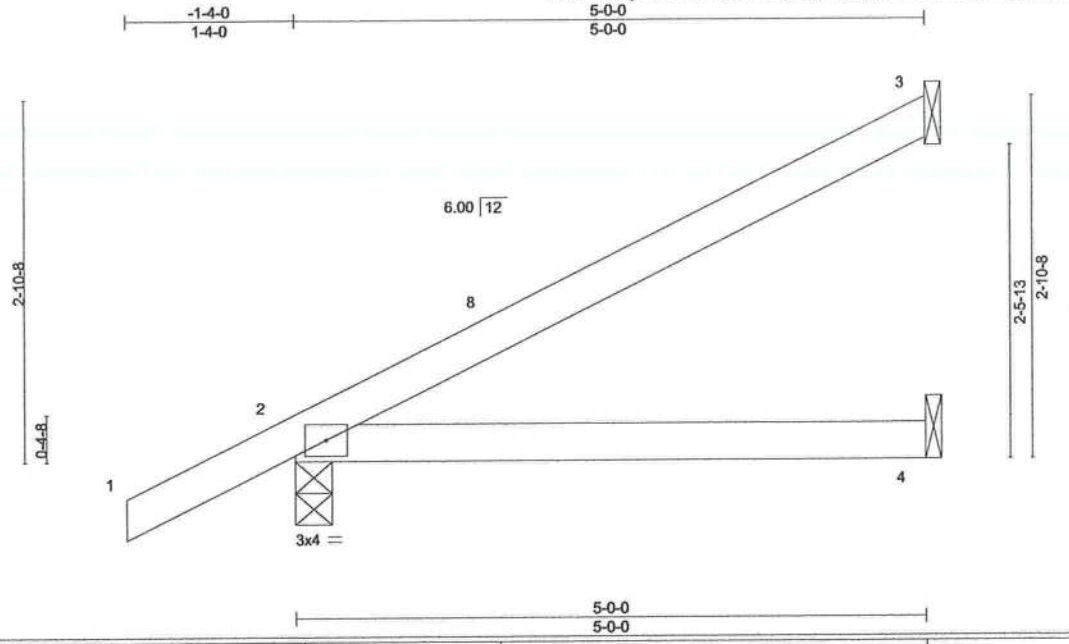

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.39	Vert(LL)	0.05	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.32	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MP							Weight: 18 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=151(LC 12)
Max Uplift 3=-106(LC 12), 2=-108(LC 12), 4=-6(LC 12)
Max Grav 3=114(LC 1), 2=264(LC 1), 4=88(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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 4-11-4 zone; porch 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 106 lb uplift at joint 3, 108 lb uplift at joint 2 and 6 lb uplift at joint 4.

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August 14,2024

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Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.	T34727666
4175502	HJ08	Diagonal Hip Girder	4	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:26 2024 Page 1
ID:NKrxBSg5n1U8Rm10Po4KHkyoIqO-jqOUpqY5klijlutGiGVxOCcl8Wwf6GP1oj6bXGyoExF

-1-10-10 / 1-10-10 | 3-8-3 / 3-8-3 | 7-0-2 / 3-3-15

Scale = 1:17.3

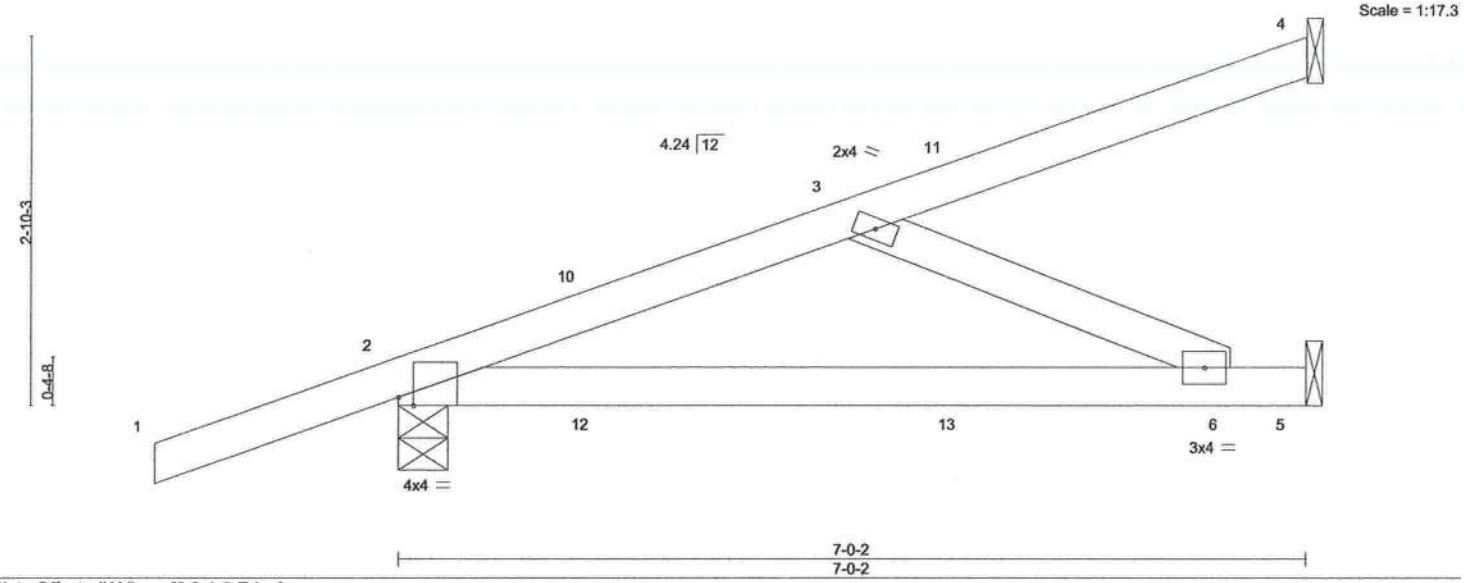

Plate Offsets (X,Y)-- [2:0-1-6,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.42	Vert(LL)	0.12	6-9	>721	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.50	Vert(CT)	-0.15	6-9	>543	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 29 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-4-9, 5=Mechanical
Max Horz 2=166(LC 4)
Max Uplift 4=-73(LC 25), 2=-327(LC 4), 5=-154(LC 4)
Max Grav 4=84(LC 21), 2=285(LC 1), 5=177(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 2-6=-263/224
WEBS 3-6=-245/288

NOTES-
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; 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 73 lb uplift at joint 4, 327 lb uplift at joint 2 and 154 lb uplift at joint 5.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 82 lb down and 59 lb up at 1-6-1, 82 lb down and 59 lb up at 1-6-1, and 29 lb down and 61 lb up at 4-4-0, and 29 lb down and 61 lb up at 4-4-0 on top chord, and 52 lb down and 42 lb up at 1-6-1, 52 lb down and 42 lb up at 1-6-1, and 20 lb down and 36 lb up at 4-4-0, and 20 lb down and 36 lb up at 4-4-0 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
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 5-7=-20
Concentrated Loads (lb)
Vert: 10=116(F=58, B=58) 13=-10(F=-5, B=-5)

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August 14,2024

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Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.	T34727667
4175502	HJ10	Diagonal Hip Girder	4	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:27 2024 Page 1
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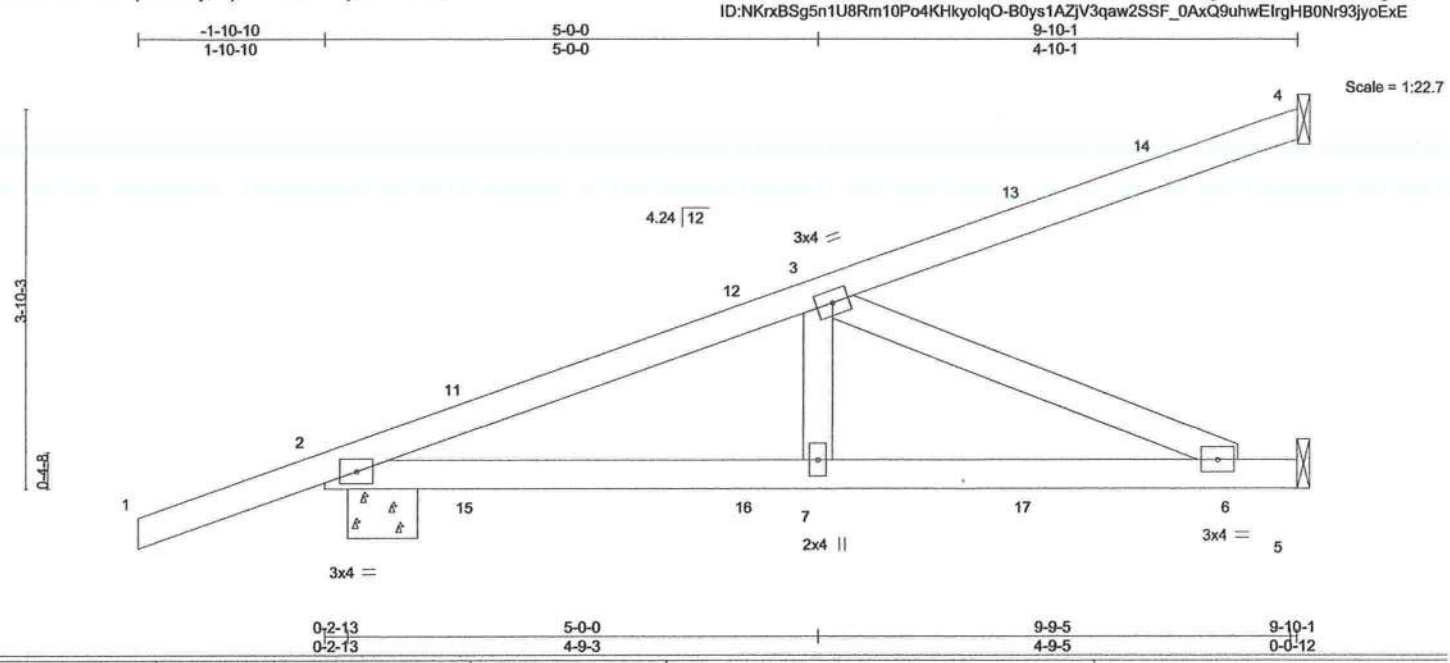

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.49	Vert(LL)	0.07	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.11	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.30	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 42 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-2-7 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-8-8, 5=Mechanical
Max Horz 2=209(LC 4)
Max Uplift 4=-114(LC 4), 2=-216(LC 4), 5=-149(LC 8)
Max Grav 4=138(LC 1), 2=417(LC 1), 5=301(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-655/340
BOT CHORD 2-7=-387/623, 6-7=-387/623
WEBS 3-7=-21/304, 3-6=-679/422

NOTES-
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; cantilever left 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 114 lb uplift at joint 4, 216 lb uplift at joint 2 and 149 lb uplift at joint 5.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 85 lb down and 59 lb up at 1-6-1, 85 lb down and 59 lb up at 1-6-1, 29 lb down and 61 lb up at 4-4-0, 29 lb down and 61 lb up at 4-4-0, and 52 lb down and 114 lb up at 7-1-15, and 52 lb down and 114 lb up at 7-1-15 on top chord, and 19 lb down and 34 lb up at 1-6-1, 19 lb down and 34 lb up at 1-6-1, 23 lb down and 10 lb up at 4-4-0, 23 lb down and 10 lb up at 4-4-0, and 41 lb down and 22 lb up at 7-1-15, and 41 lb down and 22 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
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 5-8=-20
Concentrated Loads (lb)
Vert: 11=116(F=58, B=58) 13=-75(F=-37, B=-37) 16=-10(F=-5, B=-5) 17=-62(F=-31, B=-31)

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Date:

August 14,2024

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Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	T01	Hip Girder	2	1	T34727668
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:28 2024 Page 1
ID:NKrxBSg5n1U8Rm10Po4KHkyoIqO-fDWEEVaLGMyRXC0fphXPTdhymKfLa3YKF1bib9yoExD

-1-4-0	3-10-15	7-0-0	11-0-14	15-0-0	18-11-2	23-0-0	26-1-1	30-0-0	31-4-0
1-4-0	3-10-15	3-1-1	4-0-14	3-11-2	3-11-2	4-0-14	3-1-1	3-10-15	1-4-0

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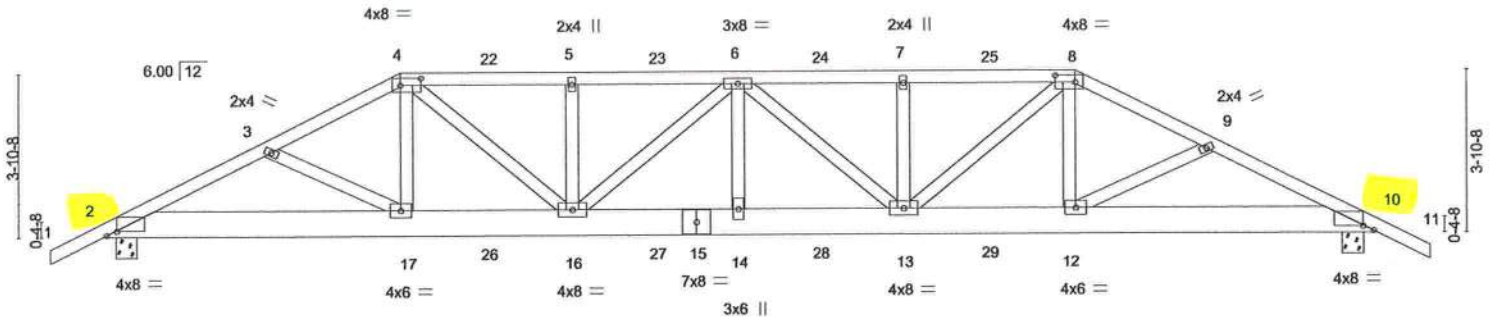

0-2-12	7-0-0	11-0-14	15-0-0	18-11-2	23-0-0	29-9-4	30-0-0
0-2-12	6-9-4	4-0-14	3-11-2	3-11-2	4-0-14	6-9-4	0-2-12

Plate Offsets (X,Y)-- [2:0-2-15,0-1-4], [4:0-5-12,0-2-0], [8:0-5-12,0-2-0], [10:0-2-15,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.92	Vert(LL)	0.35	14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.30	Vert(CT)	-0.48	14	>743	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.56	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 205 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-9-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-11-13 oc bracing.

REACTIONS. (size) 2=0-6-0, 10=0-6-0
Max Horz 2=-90(LC 9)
Max Uplift 2=-1199(LC 8), 10=-1221(LC 9)
Max Grav 2=2259(LC 1), 10=2292(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4588/2470, 3-4=-4426/2386, 4-5=-5044/2759, 5-6=-5044/2759, 6-7=-5077/2763, 7-8=-5077/2763, 8-9=-4500/2433, 9-10=-4661/2517
BOT CHORD 2-17=-2203/4069, 16-17=-2070/3962, 14-16=-2916/5528, 13-14=-2916/5528, 12-13=-2048/4027, 10-12=-2155/4135
WEBS 4-17=-297/735, 4-16=-853/1461, 5-16=-451/372, 6-16=-680/415, 6-14=-106/446, 6-13=-627/365, 7-13=-450/372, 8-13=-802/1409, 8-12=-295/735

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; cantilever left and right exposed ; 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 1199 lb uplift at joint 2 and 1221 lb uplift at joint 10.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 129 lb down and 137 lb up at 7-0-0, 110 lb down and 137 lb up at 9-0-12, 110 lb down and 137 lb up at 11-0-12, 110 lb down and 137 lb up at 13-0-12, 110 lb down and 126 lb up at 15-0-0, 110 lb down and 137 lb up at 16-11-4, 110 lb down and 137 lb up at 18-11-4, and 110 lb down and 137 lb up at 20-11-4, and 219 lb down and 250 lb up at 23-0-0 on top chord, and 337 lb down and 206 lb up at 7-0-0, 86 lb down and 29 lb up at 9-0-12, 86 lb down and 29 lb up at 11-0-12, 86 lb down and 29 lb up at 13-0-12, 86 lb down and 29 lb up at 15-0-0, 86 lb down and 29 lb up at 16-11-4, 86 lb down and 29 lb up at 18-11-4, and 86 lb down and 29 lb up at 20-11-4, and 337 lb down and 206 lb up at 22-11-4 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

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August 14,2024

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-8=-54, 8-11=-54, 2-10=-20
   Concentrated Loads (lb)
   Vert: 4=-110(F) 8=-172(F) 17=-337(F) 16=-65(F) 5=-110(F) 14=-65(F) 6=-110(F) 7=-110(F) 13=-65(F) 12=-337(F) 22=-110(F) 23=-110(F) 24=-110(F) 25=-110(F) 26=-65(F) 27=-65(F) 28=-65(F) 29=-65(F)

Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	T02	Hip	2	1	T34727669

Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:28 2024 Page 1
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-1-4-0	4-8-15	9-0-0	15-0-0	21-0-0	25-3-1	30-0-0	31-4-0
1-4-0	4-8-15	4-3-1	6-0-0	6-0-0	4-3-1	4-8-15	1-4-0

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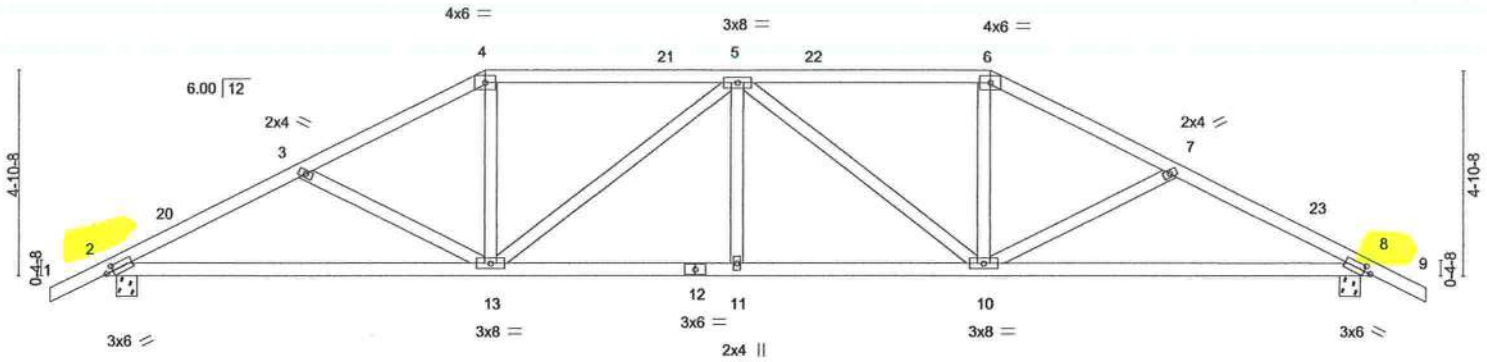

0-2-12	9-0-0	15-0-0	21-0-0	29-9-4	30-0-0
0-2-12	8-9-4	6-0-0	6-0-0	8-9-4	0-2-12

Plate Offsets (X,Y)-- [2:0-1-15,0-1-8], [8:0-1-15,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.40	Vert(LL)	-0.15	10-19	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.33	10-19	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 152 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-9-8 oc bracing.

REACTIONS. (size) 2=0-6-0, 8=0-6-0
Max Horz 2=-112(LC 13)
Max Uplift 2=-489(LC 12), 8=-489(LC 13)
Max Grav 2=1182(LC 1), 8=1182(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2048/831, 3-4=-1788/695, 4-5=-1564/671, 5-6=-1564/671, 6-7=-1788/695, 7-8=-2048/831
BOT CHORD 2-13=-756/1805, 11-13=-621/1854, 10-11=-621/1854, 8-10=-645/1805
WEBS 3-13=-294/259, 4-13=-158/525, 5-13=-461/257, 5-10=-461/257, 6-10=-157/525, 7-10=-294/260

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 9-0-0, Zone2 9-0-0 to 13-2-15, Zone1 13-2-15 to 21-0-0, Zone2 21-0-0 to 25-5-0, Zone1 25-5-0 to 31-4-0 zone; cantilever 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 489 lb uplift at joint 2 and 489 lb uplift at joint 8.

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Chesterfield, MO 63017
Date:
August 14,2024

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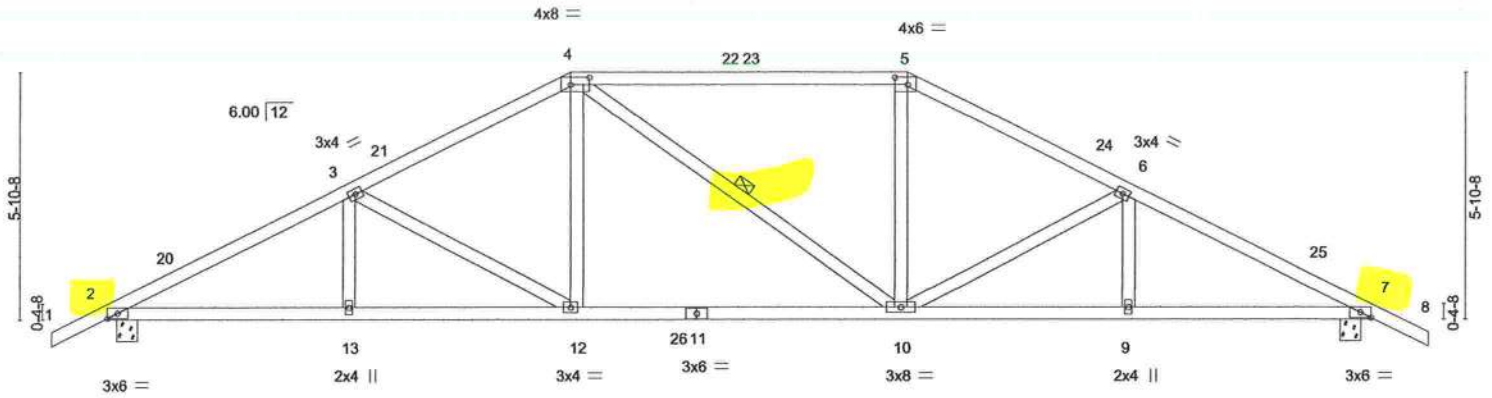
Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	T03	Hip	2	1	T34727670

Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:29 2024 Page 1
ID:NKrxBSg5n1U8Rm10Po4KHkyolqO-7P4dRrbz1g4l9MbrNP2e0rE9lktyJZDUUhKF8byoExC

-1-4-0	5-8-15	11-0-0	19-0-0	24-3-1	30-0-0	31-4-0
1-4-0	5-8-15	5-3-1	8-0-0	5-3-1	5-8-15	1-4-0

Scale = 1:53.2



0-2-12	5-8-15	11-0-0	19-0-0	24-3-1	29-9-4	30-0-0
0-2-12	5-6-3	5-3-1	8-0-0	5-3-1	5-6-3	0-2-12

Plate Offsets (X,Y)-- [4:0-5-4,0-2-0], [5:0-3-8,0-2-0], [7:0-2-15,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.80	Vert(LL)	-0.18	10-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.72	Vert(CT)	-0.33	10-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.08	7	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 152 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
4-5: 2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-10-9 oc bracing.
WEBS 1 Row at midpt 4-10

REACTIONS. (size) 2=0-6-0, 7=0-6-0
Max Horz 2=133(LC 16)
Max Uplift 2=-483(LC 12), 7=-488(LC 13)
Max Grav 2=1265(LC 2), 7=1259(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2230/781, 3-4=-1791/665, 4-5=-1554/648, 5-6=-1775/665, 6-7=-2217/793
BOT CHORD 2-13=-721/1953, 12-13=-721/1953, 10-12=-451/1568, 9-10=-600/1941, 7-9=-600/1941
WEBS 3-12=-475/310, 4-12=-105/506, 5-10=-91/479, 6-10=-477/310

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 11-0-0, Zone2 11-0-0 to 15-2-15, Zone1 15-2-15 to 19-0-0, Zone2 19-0-0 to 23-2-15, Zone1 23-2-15 to 31-4-0 zone; cantilever 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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 483 lb uplift at joint 2 and 488 lb uplift at joint 7.

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Date:

August 14,2024

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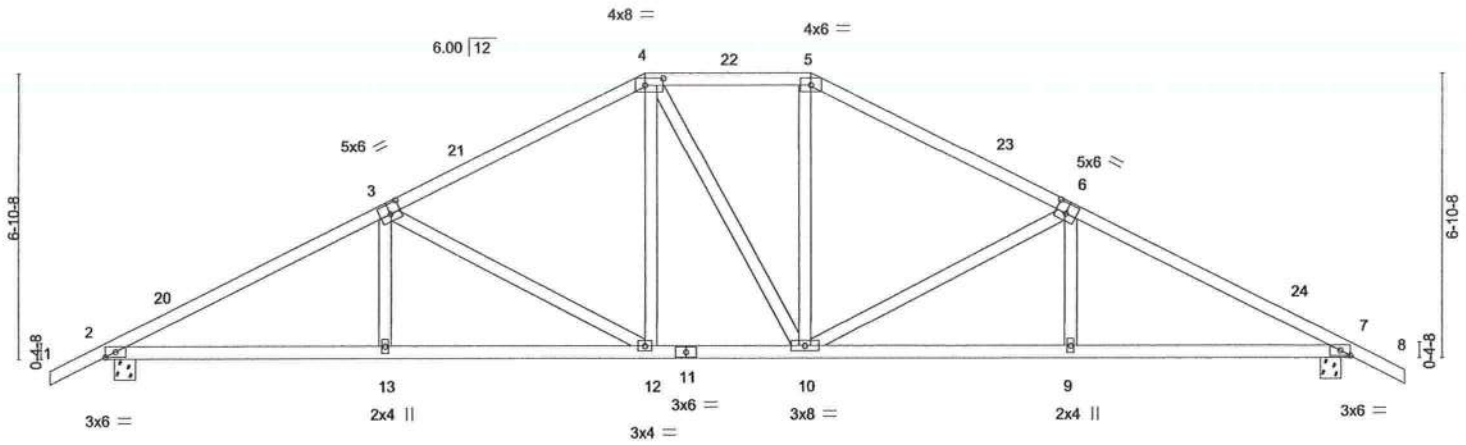
Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	T04	Hip	2	1	T34727671
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:29 2024 Page 1
ID:NKrxBSg5n1U8Rm10Po4KHkyoIqO-7P4dRrbz1g4l9MbrNP2e0rEFukwEJVLUUhKF8byoExC

-1-4-0	6-8-15	13-0-0	17-0-0	23-3-1	30-0-0	31-4-0
1-4-0	6-8-15	6-3-1	4-0-0	6-3-1	6-8-15	1-4-0

Scale = 1:54.1



0-2-12	6-8-15	13-0-0	17-0-0	23-3-1	29-9-4	30-0-0
0-2-12	6-6-3	6-3-1	4-0-0	6-3-1	6-6-3	0-2-12

Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [4:0-5-4,0-2-0], [6:0-3-0,0-3-0], [7:0-2-15,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.45	Vert(LL)	0.10	13-16	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.57	Vert(CT)	-0.20	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.08	7	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 158 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-10-0 oc bracing.

REACTIONS. (size) 2=0-6-0, 7=0-6-0
Max Horz 2=-155(LC 13)
Max Uplift 2=-481(LC 12), 7=-481(LC 13)
Max Grav 2=1182(LC 1), 7=1182(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2030/758, 3-4=-1478/624, 4-5=-1253/614, 5-6=-1479/624, 6-7=-2030/759
BOT CHORD 2-13=-710/1756, 12-13=-711/1753, 10-12=-372/1252, 9-10=-578/1753, 7-9=-578/1756
WEBS 3-13=0/281, 3-12=-584/390, 4-12=-153/394, 5-10=-143/394, 6-10=-583/391, 6-9=0/280

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 13-0-0, Zone3 13-0-0 to 17-0-0, Zone2 17-0-0 to 21-2-15, Zone1 21-2-15 to 31-4-0 zone; cantilever 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 481 lb uplift at joint 2 and 481 lb uplift at joint 7.

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Date:
August 14,2024

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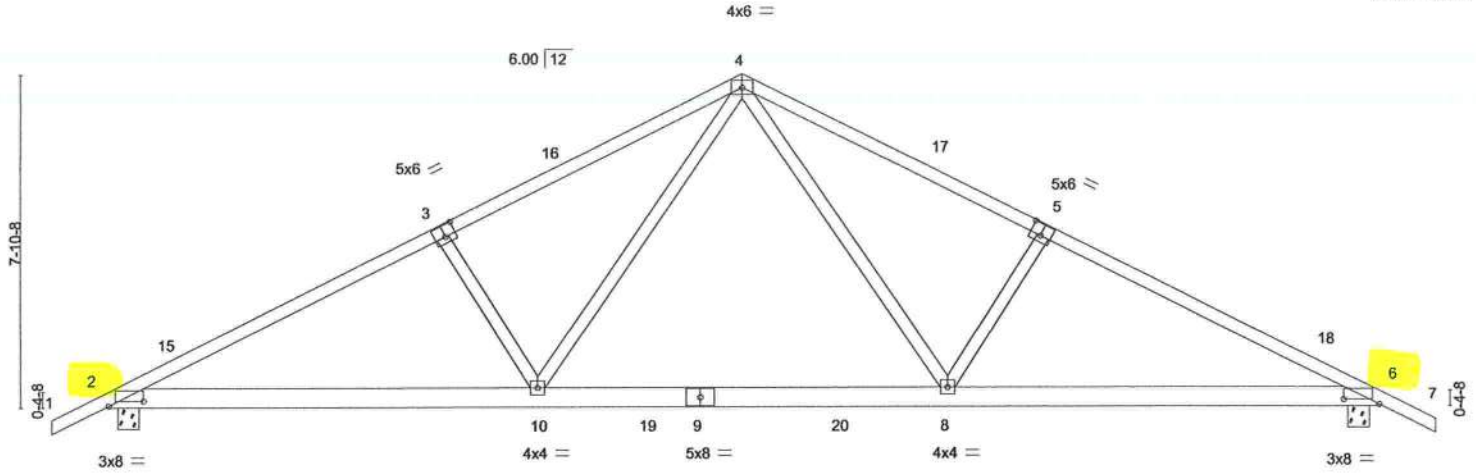
Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES. T34727672
4175502	T05	Common	19	1	Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:30 2024 Page 1
ID:NKrxBSg5n1U8Rm10Po4KHkyoIqO-cbe?fBbbo_C9nVA1x6atY2nIM8Ak2vhdjK4pg2yoExB

-1-4-0	7-11-0	15-0-0	22-1-0	30-0-0	31-4-0
1-4-0	7-11-0	7-1-0	7-1-0	7-11-0	1-4-0

Scale = 1:53.0



0-2-12	10-1-15	19-10-1	29-9-4	30-0-0
0-2-12	9-11-3	9-8-1	9-11-3	0-2-12

Plate Offsets (X,Y)-- [2:0-9-15,0-1-6], [3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [6:0-9-15,0-1-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.91	Vert(LL)	0.25	8-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.94	Vert(CT)	-0.43	8-10	>832	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.77	Horz(CT)	0.07	6	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 163 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.
BOT CHORD Rigid ceiling directly applied or 7-2-15 oc bracing.

REACTIONS. (size) 2=0-6-0, 6=0-6-0
Max Horz 2=176(LC 16)
Max Uplift 2=-592(LC 12), 6=-592(LC 13)
Max Grav 2=1487(LC 2), 6=1487(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2646/1135, 3-4=-2489/1146, 4-5=-2489/1146, 5-6=-2646/1135
BOT CHORD 2-10=-941/2339, 8-10=-492/1560, 6-8=-902/2314
WEBS 4-8=-508/1146, 5-8=-390/380, 4-10=-508/1146, 3-10=-390/380

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 15-0-0, Zone2 15-0-0 to 19-2-15, Zone1 19-2-15 to 31-4-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 592 lb uplift at joint 2 and 592 lb uplift at joint 6.
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, 2-10=-20, 8-10=-70(F=-50), 6-8=-20

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Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	T06	Common	2	1	T34727673
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:30 2024 Page 1
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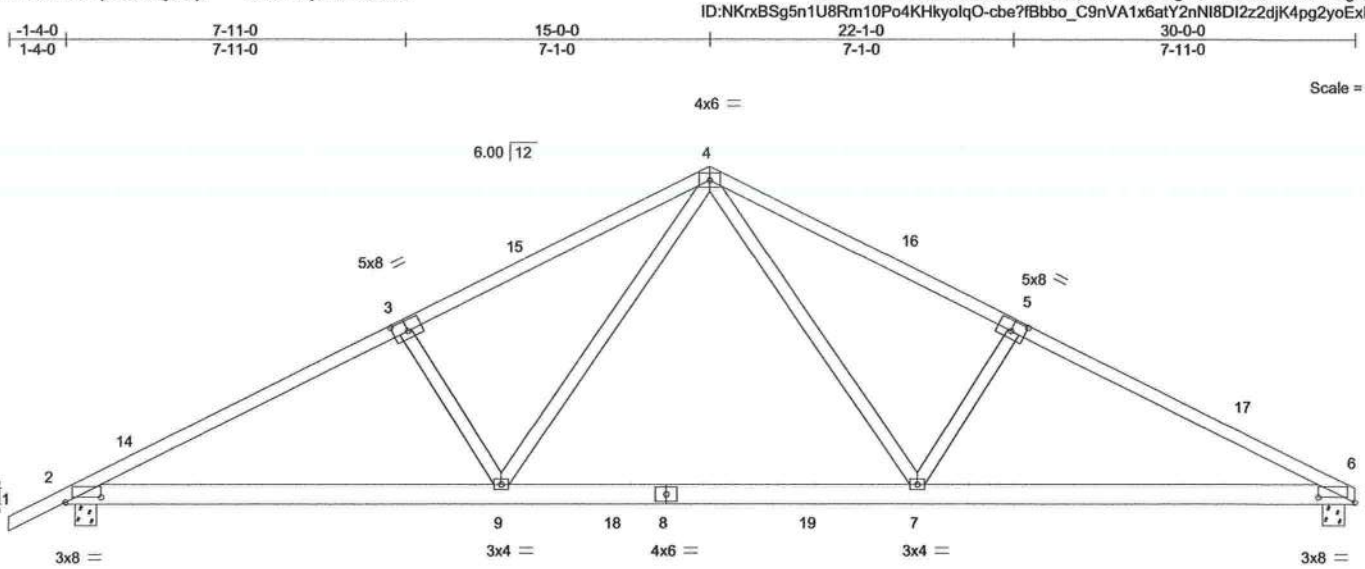

Plate Offsets (X,Y)-- [2:0-9-15,0-1-6], [3:0-4-0,0-3-0], [5:0-4-0,0-3-0], [6:0-9-15,0-1-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.60	Vert(LL)	-0.16	7-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.71	Vert(CT)	-0.30	7-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 161 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 3-4-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-5-7 oc bracing.

REACTIONS. (size) 6=0-6-0, 2=0-6-0
Max Horz 2=190(LC 16)
Max Uplift 6=-429(LC 13), 2=-477(LC 12)
Max Grav 6=1218(LC 2), 2=1279(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2125/760, 3-4=-1982/769, 4-5=-1987/796, 5-6=-2131/786
BOT CHORD 2-9=-705/1863, 7-9=-319/1241, 6-7=-585/1868
WEBS 4-7=-367/869, 5-7=-401/386, 4-9=-359/861, 3-9=-399/384

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 15-0-0, Zone2 15-0-0 to 19-2-15, Zone1 19-2-15 to 30-0-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 429 lb uplift at joint 6 and 477 lb uplift at joint 2.

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Date:
August 14,2024

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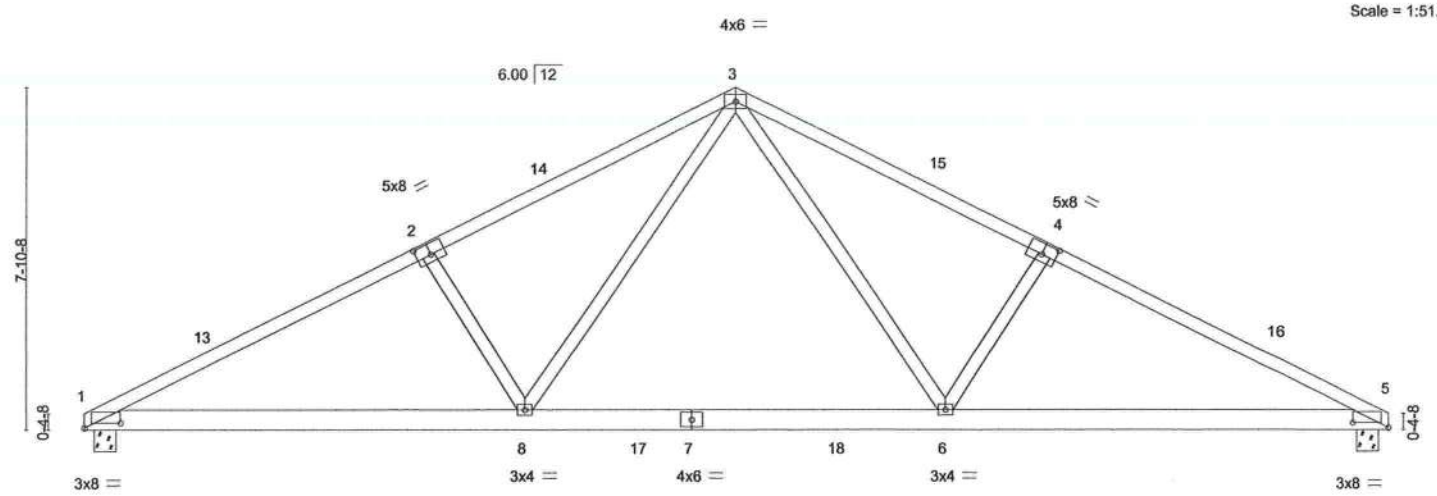
Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	T07	Common	2	1	T34727674

Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:31 2024 Page 1
ID:NKrxBSg5n1U8Rm10Po4KHkyolqO-4nCNsXcDYHK0OflEUq565GJY2XZWnPImx_pMCUyoExA

7-11-0	15-0-0	22-1-0	30-0-0
7-11-0	7-1-0	7-1-0	7-11-0

Scale = 1:51.6



0-2-12	10-1-15	19-10-1	29-9-4	30-0-0
0-2-12	9-11-3	9-8-1	9-11-3	0-2-12

Plate Offsets (X,Y)-- [1:0-9-15,0-1-6], [2:0-4-0,0-3-0], [4:0-4-0,0-3-0], [5:0-9-15,0-1-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.60	Vert(LL)	-0.16	8-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.71	Vert(CT)	-0.30	8-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 158 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 3-4-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-4-1 oc bracing.

REACTIONS. (size) 1=0-6-0, 5=0-6-0
Max Horz 1=161(LC 12)
Max Uplift 1=-430(LC 12), 5=-430(LC 13)
Max Grav 1=1219(LC 2), 5=1219(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2133/787, 2-3=-1989/798, 3-4=-1989/798, 4-5=-2133/787
BOT CHORD 1-8=-713/1871, 6-8=-322/1244, 5-6=-596/1871
WEBS 3-6=-366/868, 4-6=-401/386, 3-8=-366/868, 2-8=-401/386

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 C; 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 15-0-0, Zone2 15-0-0 to 19-2-15, Zone1 19-2-15 to 30-0-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 430 lb uplift at joint 1 and 430 lb uplift at joint 5.

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16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

August 14,2024

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	T08	Scissor	7	1	T34727675
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:31 2024 Page 1
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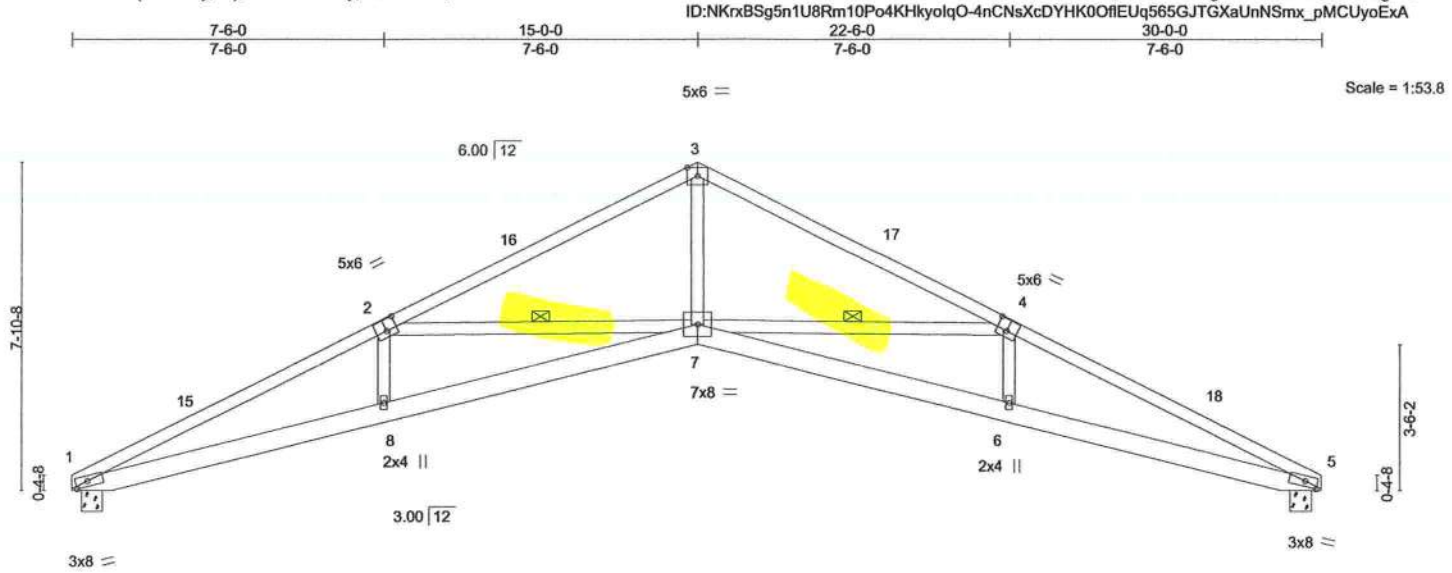

Plate Offsets (X,Y)-- [1:0-3-8,0-1-8], [2:0-3-0,0-3-4], [4:0-3-0,0-3-4], [5:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.90	Vert(LL)	0.27	7-8	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.51	7-8	>706	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.33	5	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 155 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 6-4-10 oc bracing.
WEBS 1 Row at midpt 4-7, 2-7

REACTIONS. (size) 1=0-6-0, 5=0-6-0
Max Horz 1=161(LC 16)
Max Uplift 1=-429(LC 12), 5=-429(LC 13)
Max Grav 1=1110(LC 1), 5=1110(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3475/1371, 2-3=-2510/909, 3-4=-2510/907, 4-5=-3474/1291
BOT CHORD 1-8=-1322/3130, 7-8=-1328/3153, 6-7=-1089/3153, 5-6=-1080/3130
WEBS 3-7=-534/1770, 4-7=-955/693, 2-7=-955/675

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 C; 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 15-0-0, Zone2 15-0-0 to 19-2-15, Zone1 19-2-15 to 30-0-0 zone; cantilever 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) Bearing at joint(s) 1, 5 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 429 lb uplift at joint 1 and 429 lb uplift at joint 5.

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Date:

August 14,2024

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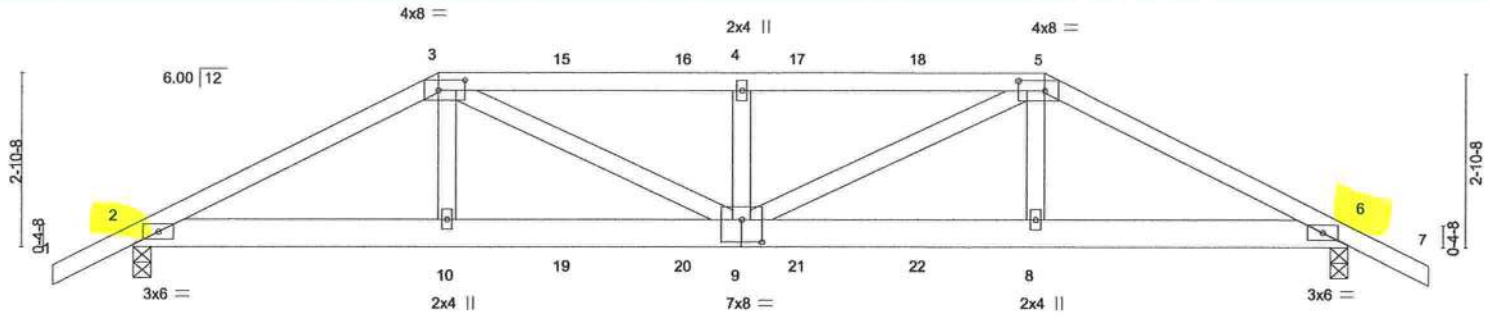
Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	T09	Hip Girder	1	1	T34727676
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:32 2024 Page 1
ID:NKrxBSg5n1U8Rm10Po4KHkyoIqO-Y_ml4tdsJbTt0pKQ2XcLeTsioxzQWwPwAeZvkwyoEx9

-1-4-0	5-0-0	10-0-0	15-0-0	20-0-0	21-4-0
1-4-0	5-0-0	5-0-0	5-0-0	5-0-0	1-4-0

Scale = 1:36.9



5-0-0	10-0-0	15-0-0	20-0-0
5-0-0	5-0-0	5-0-0	5-0-0

Plate Offsets (X,Y)-- [3:0-5-4,0-2-0], [5:0-5-4,0-2-0], [9:0-4-0,0-4-8]

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	0.66	Vert(LL)	0.18	9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	-0.19	9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.31	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 108 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 3-1-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-1-3 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-68(LC 13)
Max Uplift 2=-838(LC 5), 6=-852(LC 4)
Max Grav 2=1225(LC 1), 6=1230(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2246/1644, 3-4=-2613/1969, 4-5=-2613/1969, 5-6=-2258/1676
BOT CHORD 2-10=-1438/1963, 9-10=-1453/1983, 8-9=-1447/1993, 6-8=-1433/1973
WEBS 3-10=-255/440, 3-9=-564/769, 4-9=-475/420, 5-9=-521/742, 5-8=-255/440

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; 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 838 lb uplift at joint 2 and 852 lb uplift at joint 6.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 79 lb down and 106 lb up at 5-0-0, 60 lb down and 106 lb up at 7-0-12, 60 lb down and 105 lb up at 9-0-12, 60 lb down and 105 lb up at 10-11-4, and 60 lb down and 106 lb up at 12-11-4, and 118 lb down and 180 lb up at 15-0-0 on top chord, and 190 lb down and 213 lb up at 5-0-0, 48 lb down and 22 lb up at 7-0-12, 48 lb down and 22 lb up at 9-0-12, 48 lb down and 22 lb up at 10-11-4, and 48 lb down and 22 lb up at 12-11-4, and 190 lb down and 213 lb up at 14-11-4 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, 2-6=-20

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Date:
August 14,2024

Continued on page 2

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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-60(F) 5=-71(F) 10=-153(F) 8=-153(F) 15=-60(F) 16=-60(F) 17=-60(F) 18=-60(F) 19=-39(F) 20=-39(F) 21=-39(F) 22=-39(F)

Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	T10	Hip	1	1	T34727677
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:33 2024 Page 1
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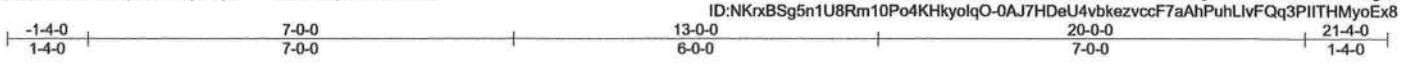

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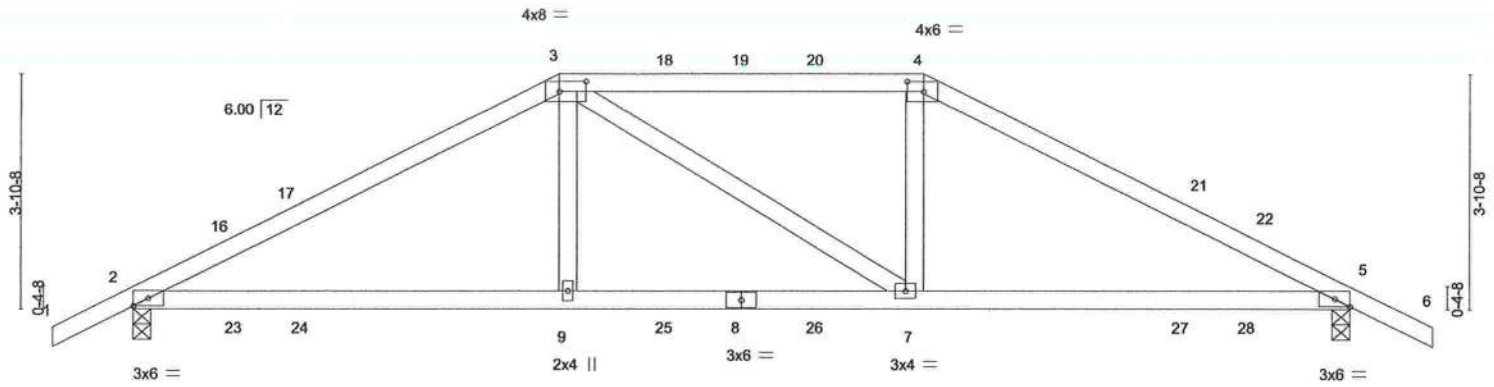

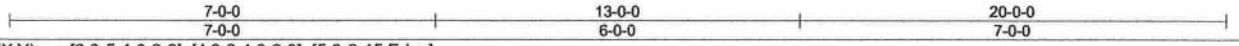

Plate Offsets (X,Y)-- [3:0-5-4,0-2-0], [4:0-3-4,0-2-0], [5:0-2-15,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.59	Vert(LL)	0.15	9-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	-0.16	9-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 86 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-3-5 oc bracing.

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=-90(LC 13)
Max Uplift 2=-451(LC 9), 5=-451(LC 8)
Max Grav 2=812(LC 1), 5=812(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1177/936, 3-4=-990/911, 4-5=-1177/936
BOT CHORD 2-9=-712/984, 7-9=-720/990, 5-7=-728/984
WEBS 3-9=-192/265, 4-7=-194/265

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 7-0-0, Zone2 7-0-0 to 11-2-15, Zone1 11-2-15 to 13-0-0, Zone2 13-0-0 to 17-2-15, Zone1 17-2-15 to 21-4-0 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 451 lb uplift at joint 2 and 451 lb uplift at joint 5.

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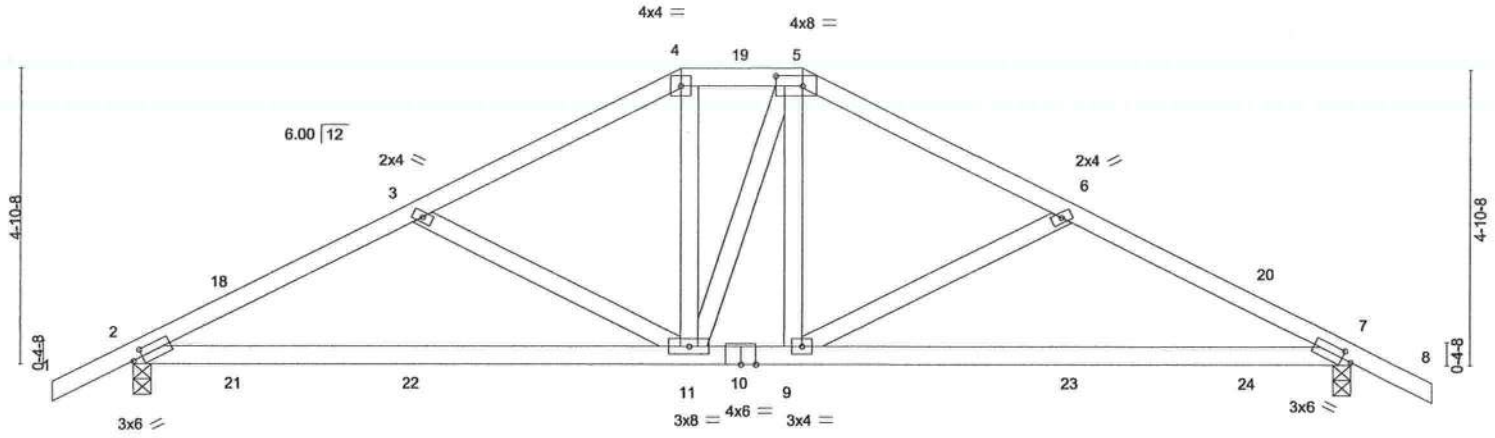
Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	T11	Hip	1	1	T34727678
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:33 2024 Page 1
ID:NKrxBSg5n1U8Rm10Po4KHkyoIqO-0AJ7HDeU4vbkezvccF7aAhPxELGhFPw3PIITHMyoEx8

-1-4-0	4-8-15	9-0-0	11-0-0	15-3-1	20-0-0	21-4-0
1-4-0	4-8-15	4-3-1	2-0-0	4-3-1	4-8-15	1-4-0

Scale = 1:36.9



9-0-0	11-0-0	20-0-0
9-0-0	2-0-0	9-0-0

Plate Offsets (X,Y)-- [2:0-1-15,0-1-8], [5:0-5-4,0-2-0], [7:0-1-15,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.42	Vert(LL)	0.19	9-17	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.67	Vert(CT)	-0.29	9-17	>820	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 101 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-8 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=-112(LC 13)
Max Uplift 2=-396(LC 9), 7=-396(LC 8)
Max Grav 2=812(LC 1), 7=812(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1249/983, 3-4=-973/825, 4-5=-821/782, 5-6=-971/824, 6-7=-1249/982
BOT CHORD 2-11=-806/1097, 9-11=-566/820, 7-9=-821/1097
WEBS 3-11=-322/295, 4-11=-278/284, 5-9=-275/283, 6-9=-323/297

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 9-0-0, Zone3 9-0-0 to 11-0-0, Zone2 11-0-0 to 15-5-0, Zone1 15-5-0 to 21-4-0 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 396 lb uplift at joint 2 and 396 lb uplift at joint 7.

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Date:

August 14,2024

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Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	T12	Common	1	1	T34727679
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:34 2024 Page 1
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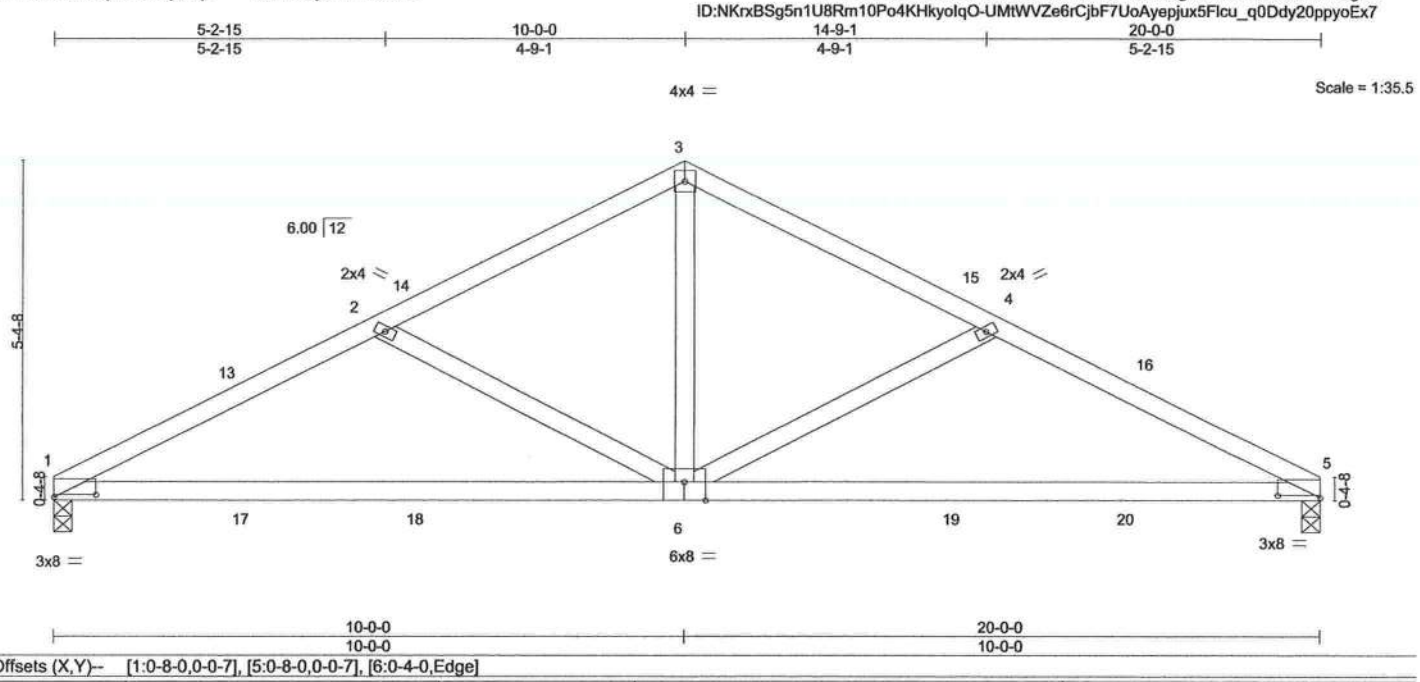


Plate Offsets (X,Y)-- [1:0-8-0,0-0-7], [5:0-8-0,0-0-7], [6:0-4-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.47	Vert(LL)	0.22	6-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.67	Vert(CT)	-0.30	6-12	>790	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 86 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-3-8 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-108(LC 13)
Max Uplift 1=-348(LC 9), 5=-348(LC 8)
Max Grav 1=740(LC 1), 5=740(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1244/1062, 2-3=-940/884, 3-4=-940/884, 4-5=-1244/1062
BOT CHORD 1-6=-892/1091, 5-6=-897/1091
WEBS 3-6=-612/572, 4-6=-365/352, 2-6=-365/352

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 C; 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 10-0-0, Zone2 10-0-0 to 14-2-15, Zone1 14-2-15 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 348 lb uplift at joint 1 and 348 lb uplift at joint 5.

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

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

August 14,2024

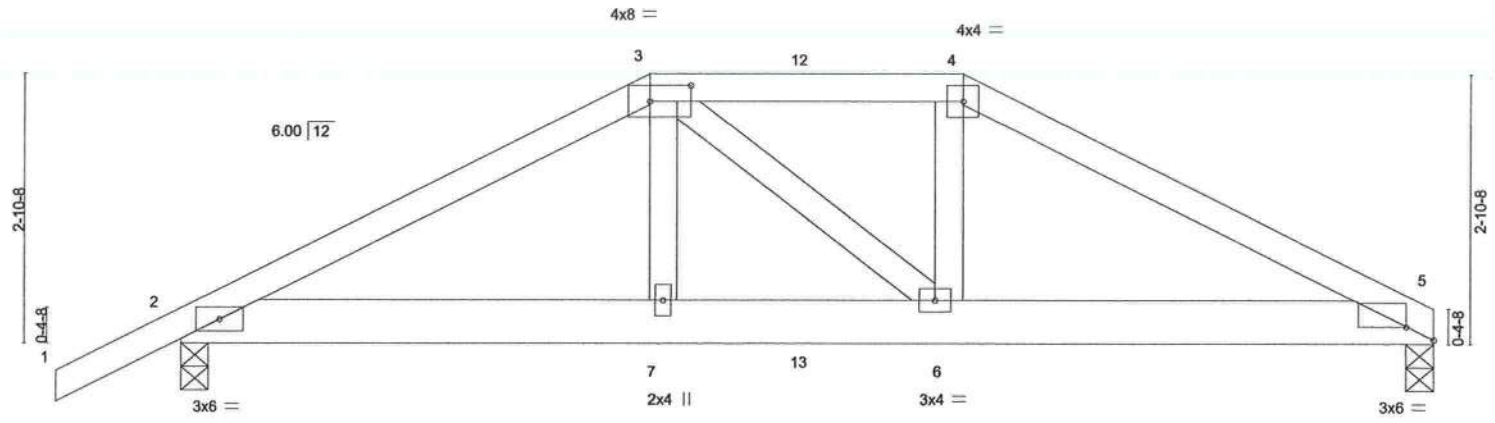
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	COLLINS-BRAUN RES.
4175502	T13	Hip Girder	1	1	T34727680
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Jul 24 2024 MiTek Industries, Inc. Tue Aug 13 13:51:34 2024 Page 1
ID:NKrxBSg5n1U8Rm10Po4KHkyolqO-UMtWVZe6rCjbF7UoAyepjux7TlhQ_sVDdy20ppyoEx7

-1-4-0 | 5-0-0 | 8-4-0 | 13-4-0
1-4-0 | 5-0-0 | 3-4-0 | 5-0-0

Scale: 1/2"=1'



5-0-0 | 8-4-0 | 13-4-0
5-0-0 | 3-4-0 | 5-0-0

Plate Offsets (X,Y)-- [3:0-5-4,0-2-0], [5:0-3-7,0-1-10]

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	0.33	Vert(LL)	0.05	6	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.38	Vert(CT)	-0.05	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 67 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 4-9-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-8-15 oc bracing.

REACTIONS. (size) 5=0-3-8, 2=0-3-8
Max Horz 2=83(LC 8)
Max Uplift 5=-536(LC 4), 2=-562(LC 8)
Max Grav 5=758(LC 1), 2=835(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1353/1001, 3-4=-1196/942, 4-5=-1369/1012
BOT CHORD 2-7=-883/1164, 6-7=-897/1180, 5-6=-876/1179
WEBS 3-7=-226/370, 4-6=-208/375

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; 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 536 lb uplift at joint 5 and 562 lb uplift at joint 2.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 79 lb down and 106 lb up at 5-0-0, and 60 lb down and 95 lb up at 6-8-0, and 118 lb down and 180 lb up at 8-4-0 on top chord, and 190 lb down and 213 lb up at 5-0-0, and 48 lb down and 22 lb up at 6-8-0, and 190 lb down and 213 lb up at 8-3-4 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, 3-4=-54, 4-5=-54, 2-5=-20
Concentrated Loads (lb)
Vert: 3=-60(B) 4=-71(B) 7=-153(B) 6=-153(B) 12=-60(B) 13=-39(B)

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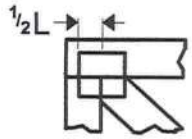
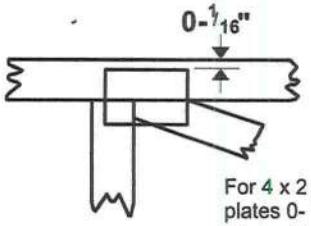
Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

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

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

PLATE SIZE

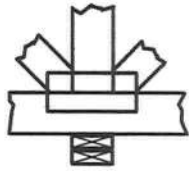
4 x 4

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

LATERAL BRACING LOCATION

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

BEARING

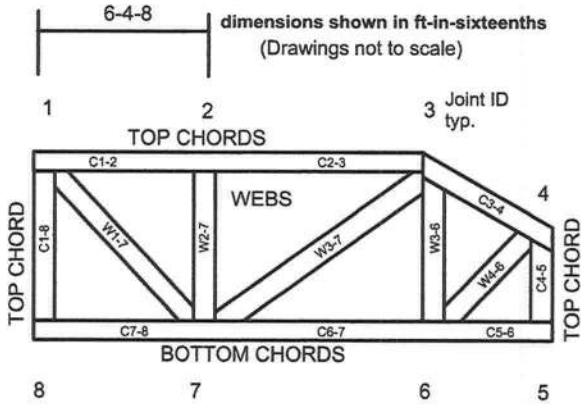


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

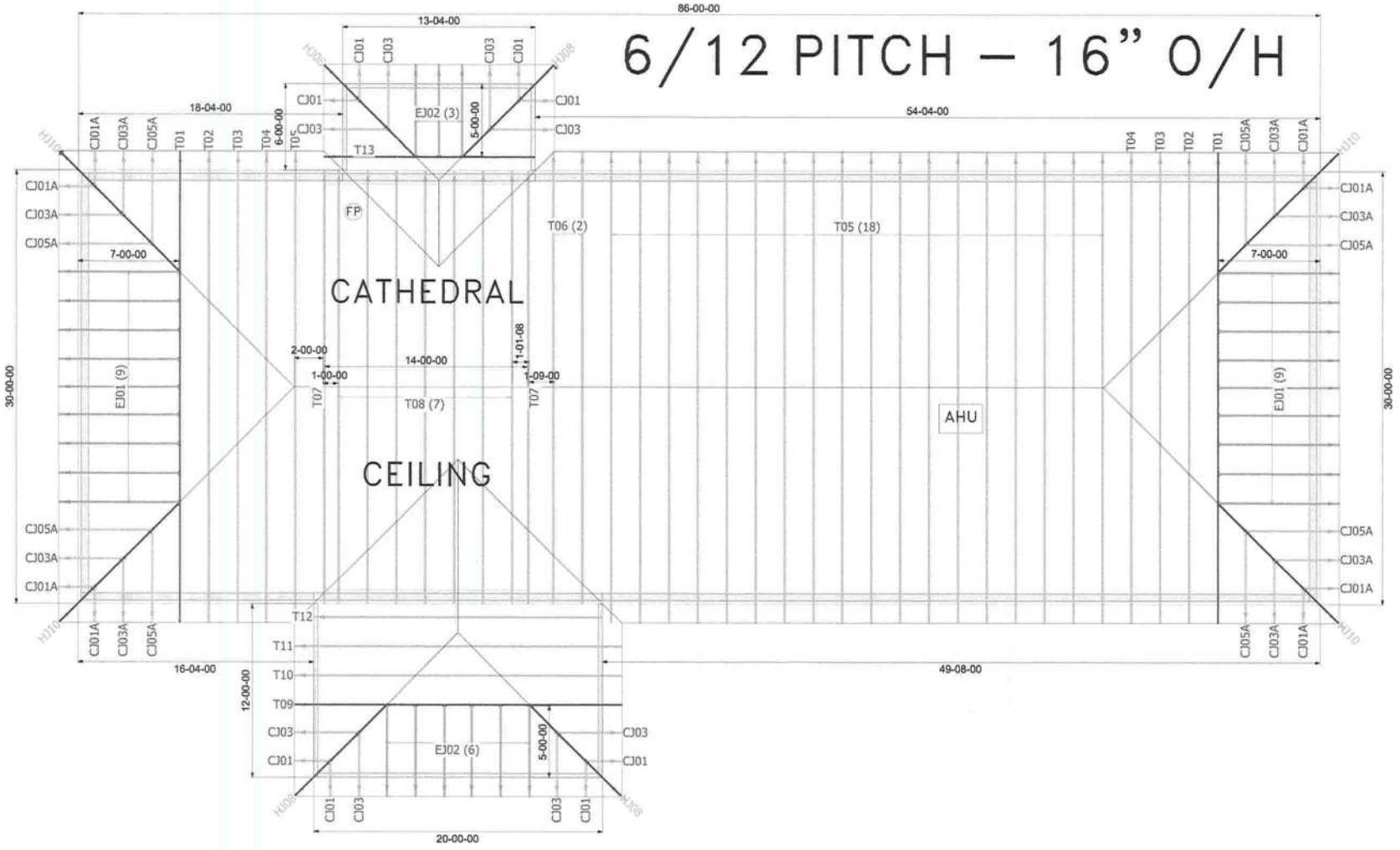
MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

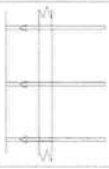
1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed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

6/12 PITCH – 16" O/H



MITEK PLATE APPROVAL #'S 2197.2–2197.4, BOISE EWP PRODUCT #'S LVL FL1644–R2, BCI JOISTS FL1392–R2

THE ARROW HEAD AT THE END OF THE TRUSS ON THE TRUSS PLACEMENT PLAN (LAYOUT) CORRESPONDS WITH THE LEFT SIDE OF THE INDIVIDUAL TRUSS DRAWING. USE THIS AS AN ORIENTATION GUIDE WHEN SETTING THE TRUSSES ON THE STRUCTURE.



General Notes:

- Per ANSI/TPI 1-2002 all " Truss to Wall" connections are the responsibility of the Building Designer, not the Truss Manufacturer.
- Use Manufacturer's specifications for all hanger connections unless noted otherwise.
- Trusses are to be 24" o.c. U.N.O.
- All hangers are to be Simpson or equivalent U.N.O.- Use 10d x 1 1/2" Nails in hanger connections to single ply girder trusses.
- Trusses are not designed to support brick U.N.O.
- Dimensions are Feet-Inches- Sixteenths

Notes:

No back charges will be accepted by Builders FirstSource unless approved in writing first. 850-835-4541

ACQ lumber is corrisive to truss plates. Any ACQ lumber that comes in contact with truss plates (i.e. scribed on tails) must have an approved barrier applied first.

Refer to BCSI-B1 Summary Sheet-Guide for handling, Installing and Bracing of Metal Plate Connected Wood Truss prior to and during truss installation.

It is the responsibility of the Contractor to ensure of the proper orientation of the truss placement plans as to the construction documents and field conditions of the structure orientation. If a reversed or flipped layout is required, it will be supplied at no extra cost by Builders FirstSource.

It is the responsibility of the Contractor to make sure the placement of trusses are adjusted for plumbing drops, can lights, ect.... so the trusses do not interfere with these type of items.

All common framed roof or floor systems must be designed as to NOT impose any loads on the floor trusses below. The floor trusses have not been designed to carry any additional loads from above.

This truss placement plan was not created by an engineer, but rather by the Builders FirstSource staff and is solely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the truss design drawings which may be sealed by the truss design engineer.

Gable end trusses require continuous bottom chord bearing. Refer to local codes for wall framing requirements.

Although all attempts have been made to do so, trusses may not be designed symmetrically. Please refer to the individual truss drawings and truss placement plans for proper orientation and placement.

Builders FIRSTSOURCE

Lake City
PHONE: 386-755-6894
FAX: 386-755-7973

Jacksonville
PHONE: 904-772-6100
FAX: 904-772-1973

Tallahassee
PHONE: 850-576-5177

Builder: COLLINS - BRAUN

Legal Address: Columbia Cty

Model: Custom

Date:	Drawn By:	Original Ref #:
8-13-24	KLH	4175502
Floor 1 Job#:	Floor 2 Job#:	Roof Job #:
N/A	N/A	4175502