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

RE: 3358905 - BLAKE - BULLARD

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

Site Information:

Customer Info: BLAKE CONSTRUCTION Project Name: Bullard Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: TBD, TBD
City: Columbia Cty State: FL

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

Name: License #:
Address:
City: State:

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

Design Code: 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 9 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	T29320180	CJ01	12/5/22
2	T29320181	CJ03	12/5/22
3	T29320182	CJ05	12/5/22
4	T29320183	EJ01	12/5/22
5	T29320184	HJ10	12/5/22
6	T29320185	T01	12/5/22
7	T29320186	T02	12/5/22
8	T29320187	T03	12/5/22
9	T29320188	T04	12/5/22

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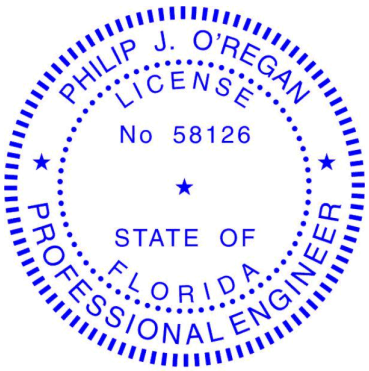
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Lake City, FL.

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

December 5,2022

Job	Truss	Truss Type	Qty	Ply	BLAKE - BULLARD
3358905	CJ01	Jack-Open	8	1	T29320180
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Dec 2 07:05:33 2022 Page 1
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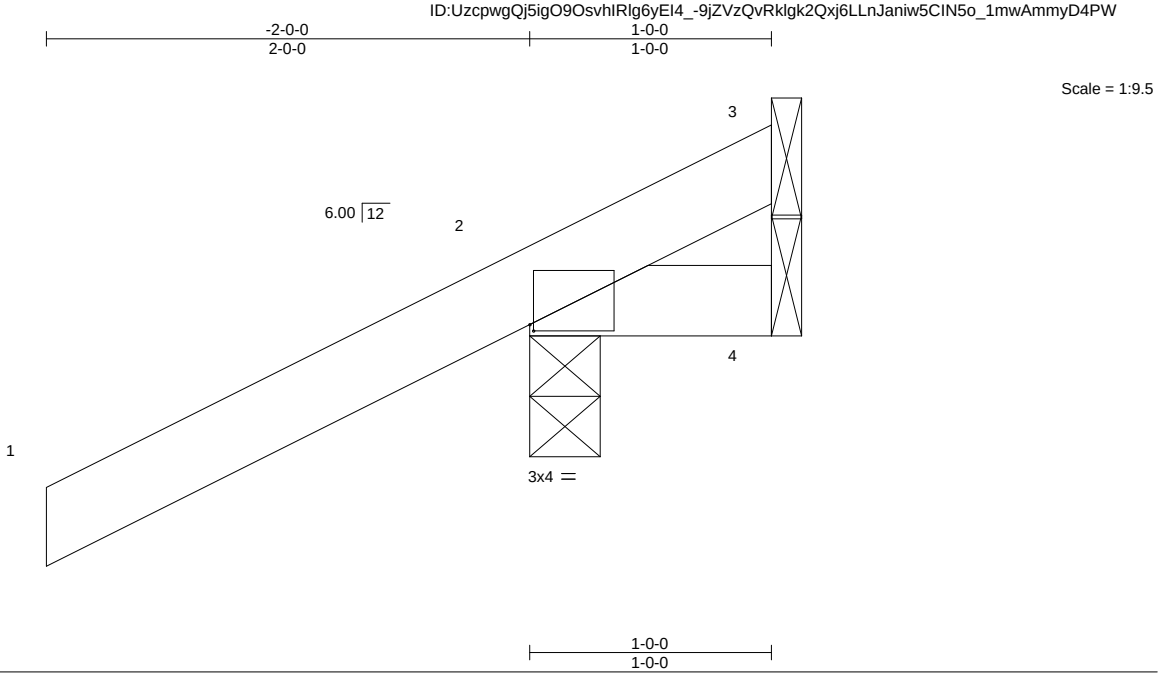

Plate Offsets (X,Y)-- [2:0-0-3,0-0-5]

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	0.25	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.06	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 FBC2020/TPI2014		Matrix-MP							Weight: 7 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=46(LC 12)
Max Uplift 3=-27(LC 1), 2=-102(LC 12), 4=-46(LC 1)
Max Grav 3=16(LC 16), 2=254(LC 1), 4=29(LC 16)

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

NOTES-
1) 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) zone;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 27 lb uplift at joint 3, 102 lb uplift at joint 2 and 46 lb uplift at joint 4.

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.

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

December 5,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	BLAKE - BULLARD
3358905	CJ03	Jack-Open	8	1	T29320181
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Dec 2 07:05:35 2022 Page 1
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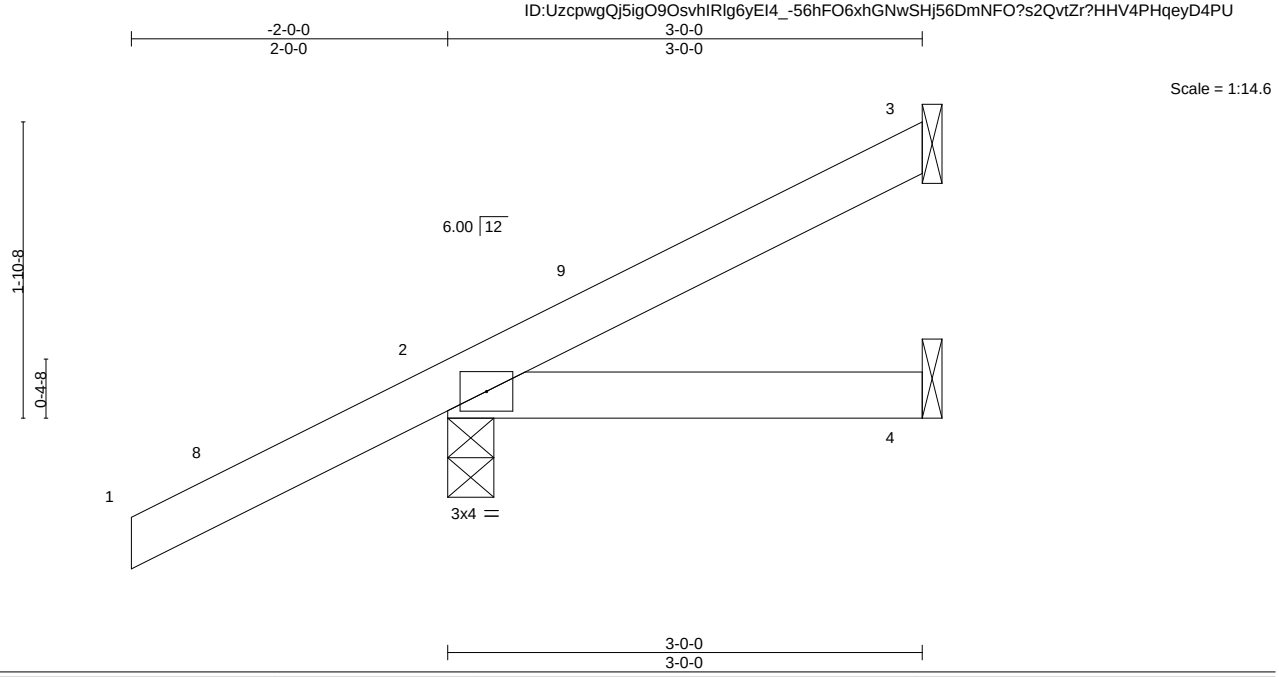

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.25	Vert(LL)	-0.00	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 13 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=80(LC 12)
Max Uplift 3=-31(LC 12), 2=-76(LC 12)
Max Grav 3=52(LC 1), 2=253(LC 1), 4=48(LC 3)

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

NOTES-
1) 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 2-11-4 zone;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 31 lb uplift at joint 3 and 76 lb uplift at joint 2.

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

December 5,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	BLAKE - BULLARD
3358905	CJ05	Jack-Open	8	1	T29320182

Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Dec 2 07:05:35 2022 Page 1
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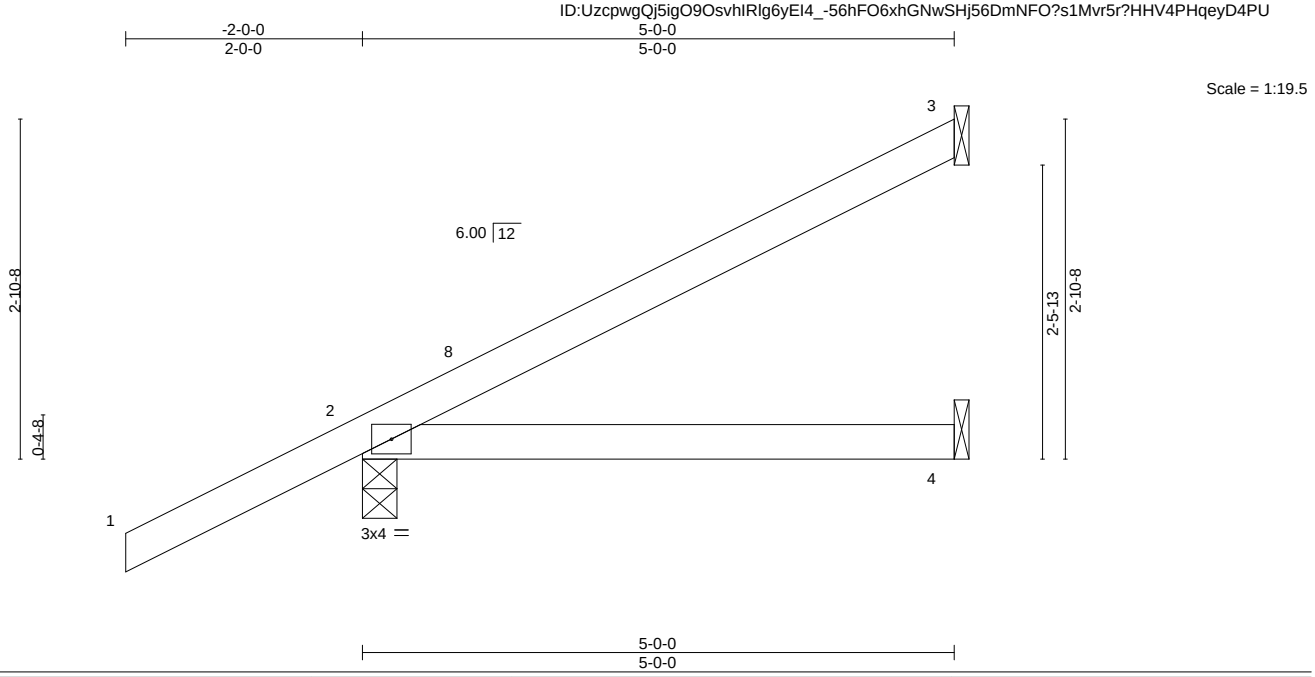

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.26	Vert(LL)	0.03	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 19 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=114(LC 12)
Max Uplift 3=-64(LC 12), 2=-80(LC 12)
Max Grav 3=108(LC 1), 2=313(LC 1), 4=87(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; 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 4-11-4 zone;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 64 lb uplift at joint 3 and 80 lb uplift at joint 2.

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

December 5,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	BLAKE - BULLARD
3358905	EJ01	Jack-Partial	14	1	T29320183
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Dec 2 07:05:36 2022 Page 1
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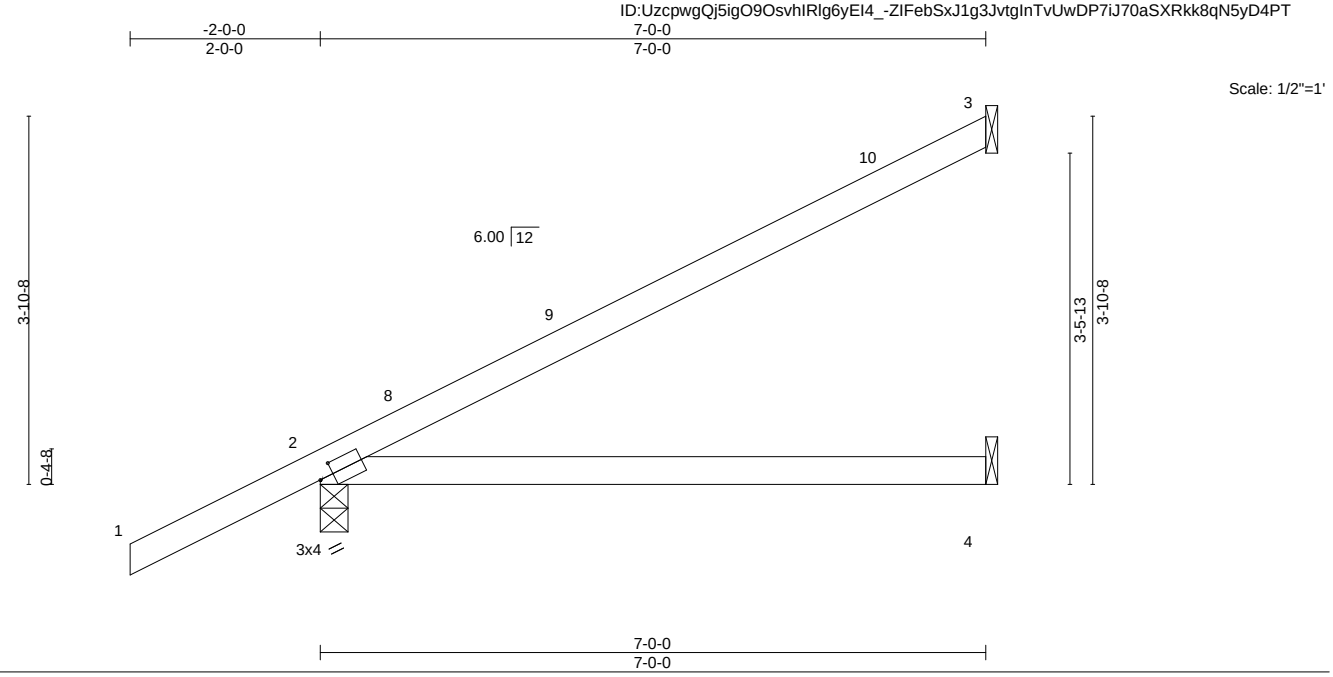

Plate Offsets (X,Y)-- [2:0-1-13,0-1-8]

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	0.60	Vert(LL)	0.10	4-7	>876	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.51	Vert(CT)	-0.21	4-7	>393	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 26 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=0-3-8, 4=Mechanical
Max Horz 2=144(LC 12)
Max Uplift 3=-84(LC 12), 2=-90(LC 12)
Max Grav 3=160(LC 1), 2=380(LC 1), 4=125(LC 3)

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

NOTES-
1) 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 6-11-4 zone;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 84 lb uplift at joint 3 and 90 lb uplift at joint 2.

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

December 5,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	BLAKE - BULLARD
3358905	HJ10	Diagonal Hip Girder	4	1	T29320184

Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Dec 2 07:05:38 2022 Page 1

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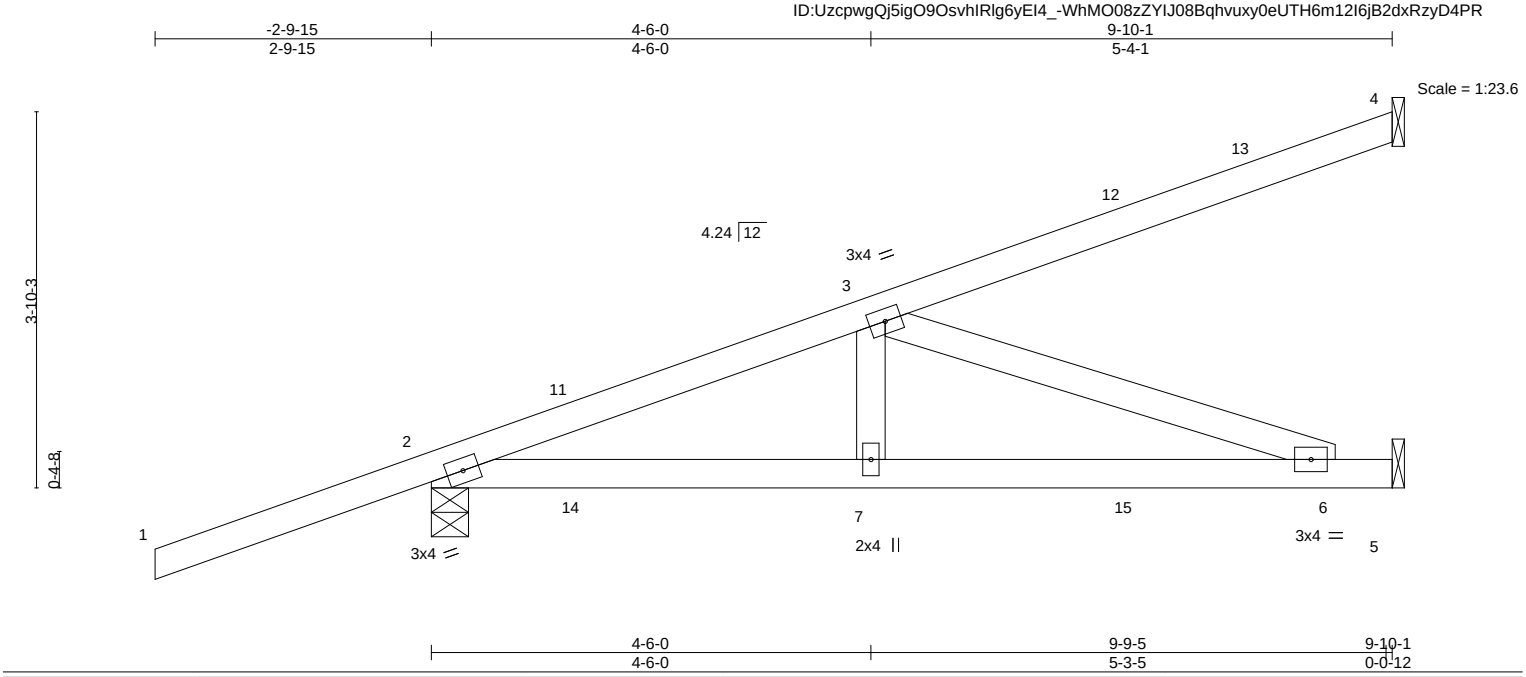

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.60	Vert(LL)	-0.06	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.66	Vert(CT)	-0.15	6-7	>807	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.32	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 44 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=160(LC 4)
Max Uplift 4=-79(LC 4), 2=-168(LC 4), 5=-42(LC 8)
Max Grav 4=152(LC 1), 2=463(LC 1), 5=264(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-676/145
BOT CHORD 2-7=-183/583, 6-7=-183/583
WEBS 3-7=0/258, 3-6=-618/193

NOTES-

1) 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; 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 79 lb uplift at joint 4, 168 lb uplift at joint 2 and 42 lb uplift at joint 5.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 56 lb down and 103 lb up at 1-6-1, 56 lb down and 103 lb up at 1-6-1, 62 lb down and 33 lb up at 4-4-0, 62 lb down and 33 lb up at 4-4-0, and 41 lb down and 75 lb up at 7-1-15, and 41 lb down and 75 lb up at 7-1-15 on top chord, and 21 lb down and 74 lb up at 1-6-1, 21 lb down and 74 lb up at 1-6-1, 24 lb down and 2 lb up at 4-4-0, 24 lb down and 2 lb up at 4-4-0, and 42 lb down at 7-1-15, and 42 lb down 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: 7=5(F=2, B=2) 11=50(F=25, B=25) 12=-64(F=-32, B=-32) 14=70(F=35, B=35) 15=-49(F=-24, B=-24)

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

December 5,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	BLAKE - BULLARD
3358905	T01	Hip Girder	2	1	T29320185
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Dec 2 07:05:40 2022 Page 1
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-2-0-0	3-11-15	7-0-0	12-2-0	17-4-0	20-4-1	24-4-0	26-4-0
2-0-0	3-11-15	3-0-1	5-2-0	5-2-0	3-0-1	3-11-15	2-0-0

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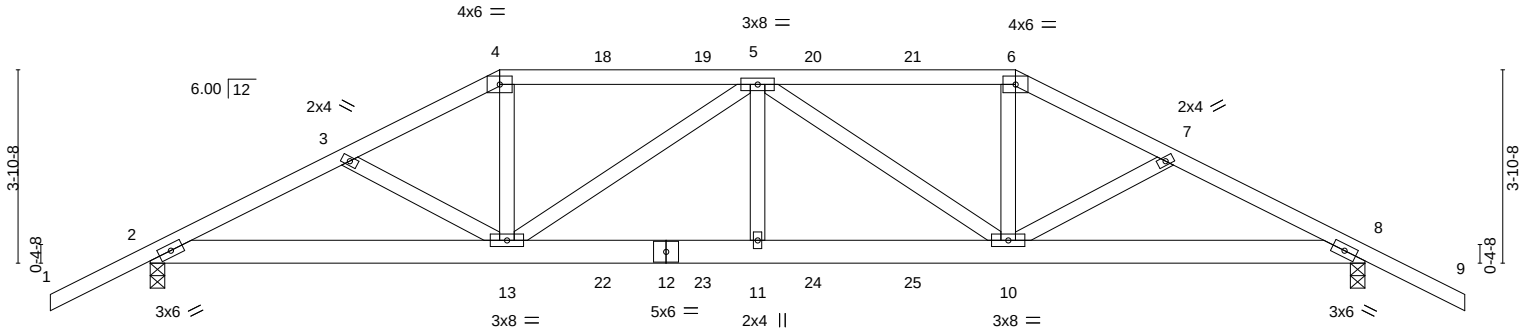

7-0-0	12-2-0	17-4-0	24-4-0
7-0-0	5-2-0	5-2-0	7-0-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.76	Vert(LL)	-0.15	11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.73	Vert(CT)	-0.29	11	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 144 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 2-6-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-10-5 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=67(LC 31)
Max Uplift 2=-477(LC 8), 8=-489(LC 9)
Max Grav 2=1836(LC 1), 8=1868(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3476/880, 3-4=-3311/837, 4-5=-2984/780, 5-6=-3045/802, 6-7=-3382/863, 7-8=-3546/906
BOT CHORD 2-13=-777/3072, 11-13=-891/3746, 10-11=-891/3746, 8-10=-733/3135
WEBS 4-13=-178/1080, 5-13=-985/309, 5-11=0/468, 5-10=-897/254, 6-10=-148/1037

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; 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 477 lb uplift at joint 2 and 489 lb uplift at joint 8.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 125 lb down and 88 lb up at 7-0-0, 106 lb down and 88 lb up at 9-0-12, 106 lb down and 88 lb up at 11-0-12, 106 lb down and 81 lb up at 12-2-0, 106 lb down and 88 lb up at 13-3-4, and 106 lb down and 88 lb up at 15-3-4, and 229 lb down and 174 lb up at 17-4-0 on top chord, and 293 lb down and 70 lb up at 7-0-0, 85 lb down at 9-0-12, 85 lb down at 11-0-12, 85 lb down at 12-2-0, 85 lb down at 13-3-4, and 85 lb down at 15-3-4, and 293 lb down and 70 lb up at 17-3-4 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: 1-4=-54, 4-6=-54, 6-9=-54, 2-8=-20

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Date:

December 5,2022

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

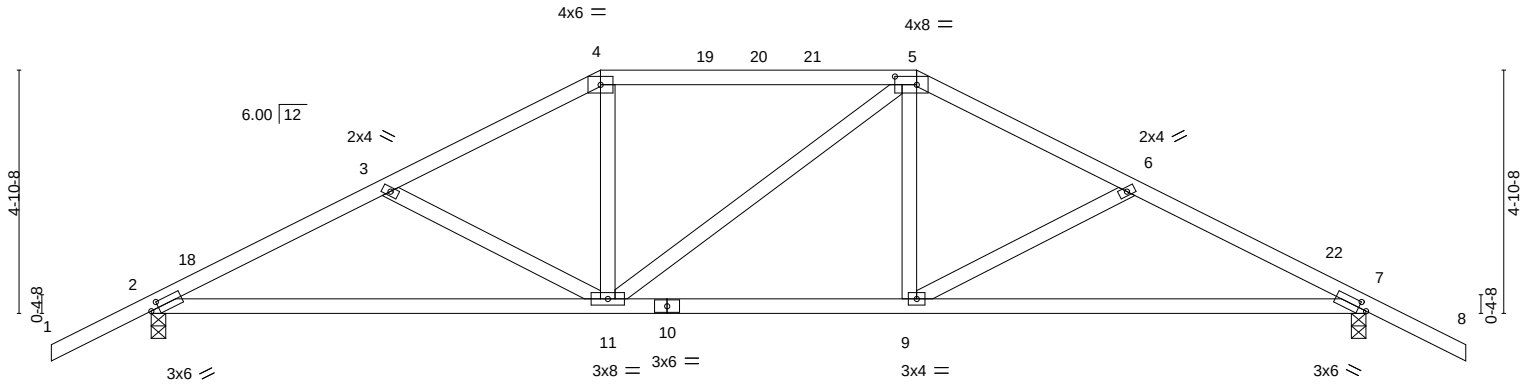
Vert: 4=-106(F) 6=-182(F) 13=-282(F) 11=-61(F) 5=-106(F) 10=-282(F) 18=-106(F) 19=-106(F) 20=-106(F) 21=-106(F) 22=-61(F) 23=-61(F) 24=-61(F) 25=-61(F)

Job	Truss	Truss Type	Qty	Ply	BLAKE - BULLARD
3358905	T02	Hip	2	1	T29320186
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Dec 2 07:05:41 2022 Page 1
ID:UzcpwgQj5igO9OsvhIRlg6yEl4_-wG2We9?SrDhb?eYGa0UfdG6_FKn6FgbAt?sb2lyD4PO

-2-0-0 4-9-8 9-0-0 15-4-0 19-6-8 24-4-0 26-4-0
2-0-0 4-9-8 4-2-8 6-4-0 4-2-8 4-9-8 2-0-0

Scale = 1:46.2



9-0-0 15-4-0 24-4-0
9-0-0 6-4-0 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	0.55	Vert(LL)	-0.15	9-17	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.32	9-17	>908	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 120 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 4-4-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=-82(LC 13)
Max Uplift 2=-236(LC 12), 7=-236(LC 13)
Max Grav 2=1008(LC 1), 7=1008(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1561/348, 3-4=-1311/291, 4-5=-1133/289, 5-6=-1311/291, 6-7=-1561/348
BOT CHORD 2-11=-306/1368, 9-11=-134/1133, 7-9=-245/1368
WEBS 3-11=-277/156, 4-11=-25/362, 5-9=-29/362, 6-9=-277/157

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 13-2-15, Interior(1) 13-2-15 to 15-4-0, Exterior(2R) 15-4-0 to 19-8-7, Interior(1) 19-8-7 to 26-4-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) 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 236 lb uplift at joint 2 and 236 lb uplift at joint 7.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

December 5,2022

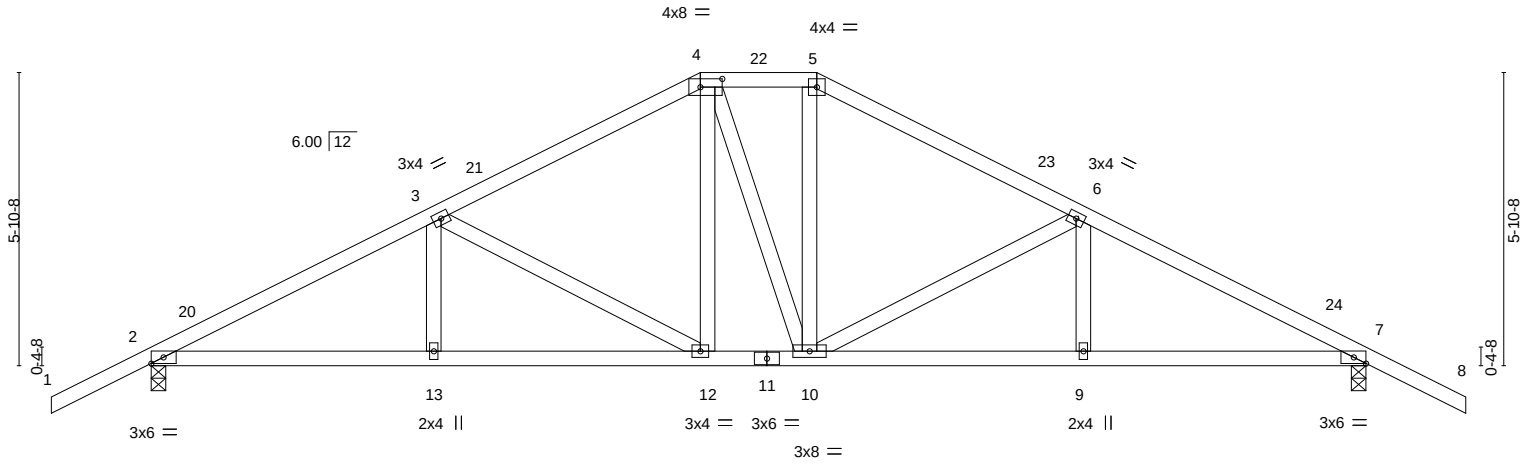
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	BLAKE - BULLARD
3358905	T03	Hip	2	1	T29320187
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Dec 2 07:05:43 2022 Page 1
ID:UzcpwgQj5igO9OsvhIRlg6yEl4_-sfAH3r1iNqxJEyiehRX7jhCOx7X2jXsTLJLi6ByD4PM

-2-0-0 2-0-0 | 5-7-15 5-7-15 | 11-0-0 5-4-1 | 13-4-0 2-4-0 | 18-8-1 5-4-1 | 24-4-0 5-7-15 | 26-4-0 2-0-0

Scale = 1:46.2



5-7-15 5-7-15 | 11-0-0 5-4-1 | 13-4-0 2-4-0 | 18-8-1 5-4-1 | 24-4-0 5-7-15

Plate Offsets (X,Y)-- [4:0-5-4,0-2-0], [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	0.28	Vert(LL)	-0.06	12-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.42	Vert(CT)	-0.13	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 133 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 4-6-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=97(LC 12)
Max Uplift 2=-232(LC 12), 7=-232(LC 13)
Max Grav 2=1008(LC 1), 7=1008(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1595/313, 3-4=-1148/267, 4-5=-970/270, 5-6=-1149/267, 6-7=-1594/314
BOT CHORD 2-13=-289/1375, 12-13=-289/1375, 10-12=-125/968, 9-10=-210/1374, 7-9=-210/1374
WEBS 3-12=-473/187, 4-12=-64/306, 5-10=-65/308, 6-10=-471/187

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 11-0-0, Exterior(2E) 11-0-0 to 13-4-0, Exterior(2R) 13-4-0 to 17-6-15, Interior(1) 17-6-15 to 26-4-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) 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 232 lb uplift at joint 2 and 232 lb uplift at joint 7.

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

December 5,2022

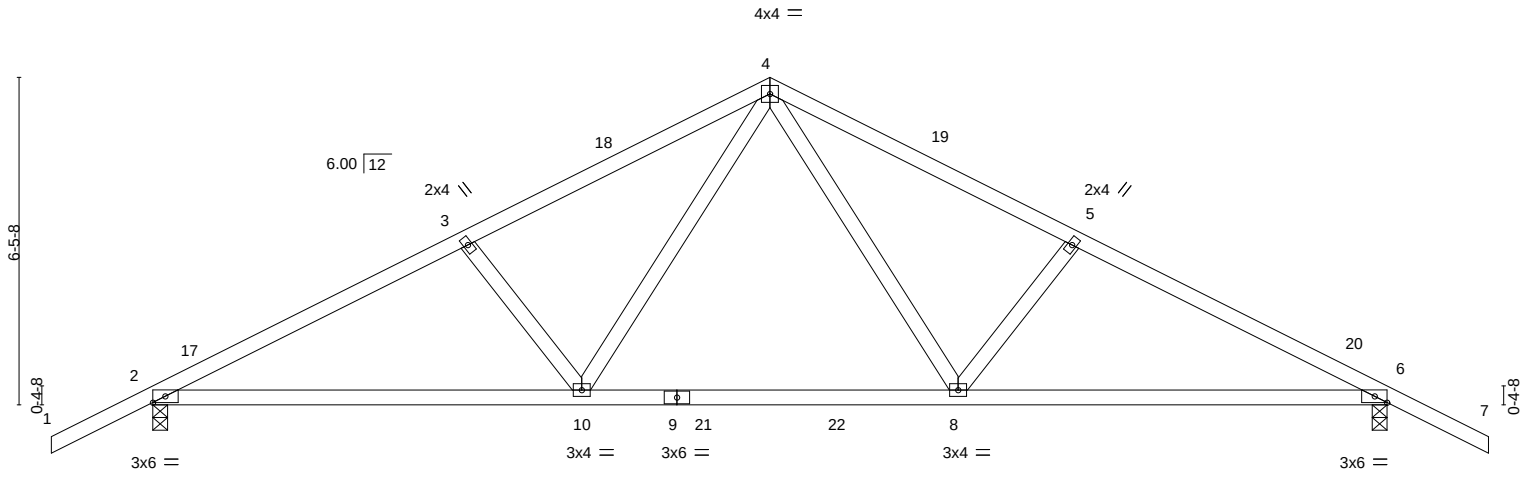
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	BLAKE - BULLARD
3358905	T04	Common	3	1	T29320188
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Fri Dec 2 07:05:44 2022 Page 1
ID:UzcpwgQj5igO9OsvhIRlg6yEl4_-KrkfGB1K883As6HrF82MFvkXxXoQS0pcZz4FfdyD4PL

-2-0-0 6-2-8 12-2-0 18-1-8 24-4-0 26-4-0
2-0-0 6-2-8 5-11-8 5-11-8 6-2-9 2-0-0

Scale = 1:45.4



8-5-8 15-10-8 24-4-0
8-5-8 7-5-1 8-5-8

Plate Offsets (X,Y)-- [6:0-2-15,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	0.39	Vert(LL)	-0.12	8-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.73	Vert(CT)	-0.24	8-16	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 115 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 4-2-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=105(LC 16)
Max Uplift 2=-230(LC 12), 6=-230(LC 13)
Max Grav 2=1069(LC 2), 6=1069(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1655/364, 3-4=-1505/356, 4-5=-1505/356, 5-6=-1655/364
BOT CHORD 2-10=-295/1455, 8-10=-104/969, 6-8=-244/1452
WEBS 4-8=-137/623, 5-8=-335/202, 4-10=-136/623, 3-10=-335/202

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 12-2-0, Exterior(2R) 12-2-0 to 15-2-0, Interior(1) 15-2-0 to 26-4-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 230 lb uplift at joint 2 and 230 lb uplift at joint 6.

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Date:

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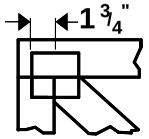
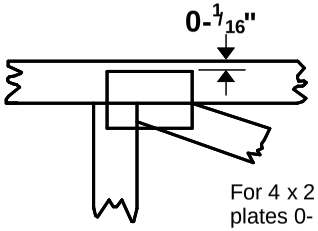
Chesterfield, MO 63017

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.

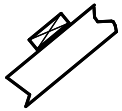
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

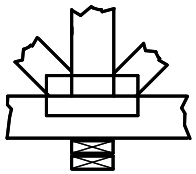
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

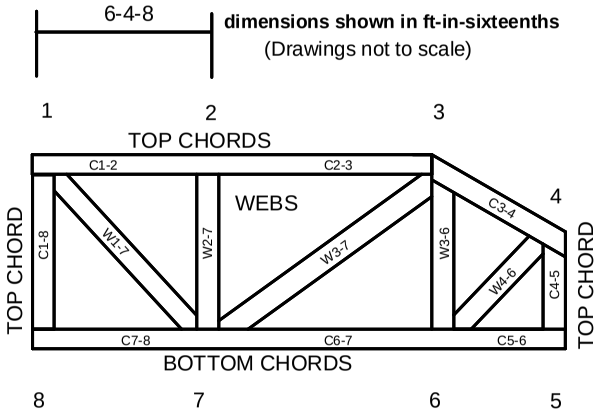


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek Engineering Reference Sheet: MII-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 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.