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

RE: 3574425 - IC CONST - URRUTIA RES.

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

Site Information:

Customer Info: IC CONSTRUCTION Project Name: Urrutia Res. Model: Custom
Lot/Block: 1 Subdivision: Lakewood Estates
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: 55.0 psf

This package includes 35 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	T30878293	EJ01	6/23/23	15	T30878307	T07	6/23/23
2	T30878294	EJ02	6/23/23	16	T30878308	T07G	6/23/23
3	T30878295	PB01	6/23/23	17	T30878309	T08G	6/23/23
4	T30878296	PB01G	6/23/23	18	T30878310	T09	6/23/23
5	T30878297	PB02	6/23/23	19	T30878311	T09G	6/23/23
6	T30878298	PB02G	6/23/23	20	T30878312	T10	6/23/23
7	T30878299	T01	6/23/23	21	T30878313	T10G	6/23/23
8	T30878300	T01G	6/23/23	22	T30878314	T11	6/23/23
9	T30878301	T02	6/23/23	23	T30878315	T12	6/23/23
10	T30878302	T03	6/23/23	24	T30878316	T13	6/23/23
11	T30878303	T04	6/23/23	25	T30878317	T17	6/23/23
12	T30878304	T04G	6/23/23	26	T30878318	T17G	6/23/23
13	T30878305	T05	6/23/23	27	T30878319	T18	6/23/23
14	T30878306	T06	6/23/23	28	T30878320	T19	6/23/23

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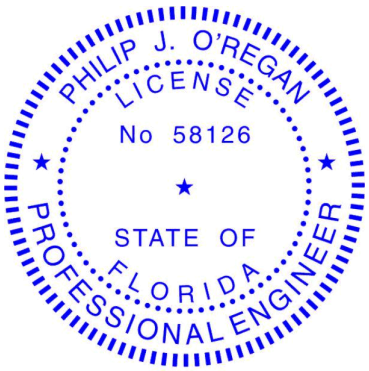
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Lake City, FL.

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



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

June 23,2023

RE: 3574425 - IC CONST - URRUTIA RES.

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

Site Information:

Customer Info: IC CONSTRUCTION Project Name: Urrutia Res. Model: Custom
Lot/Block: 1 Subdivision: Lakewood Estates
Address: TBD, TBD
City: Columbia Cty State: FL

No.	Seal#	Truss Name	Date
29	T30878321	TF01	6/23/23
30	T30878322	TF01G	6/23/23
31	T30878323	TF02	6/23/23
32	T30878324	TF03	6/23/23
33	T30878325	TF04	6/23/23
34	T30878326	TF05	6/23/23
35	T30878327	TG01	6/23/23

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878293
3574425	EJ01	Monopitch	10	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:03 2023 Page 1

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Scale = 1:18.1

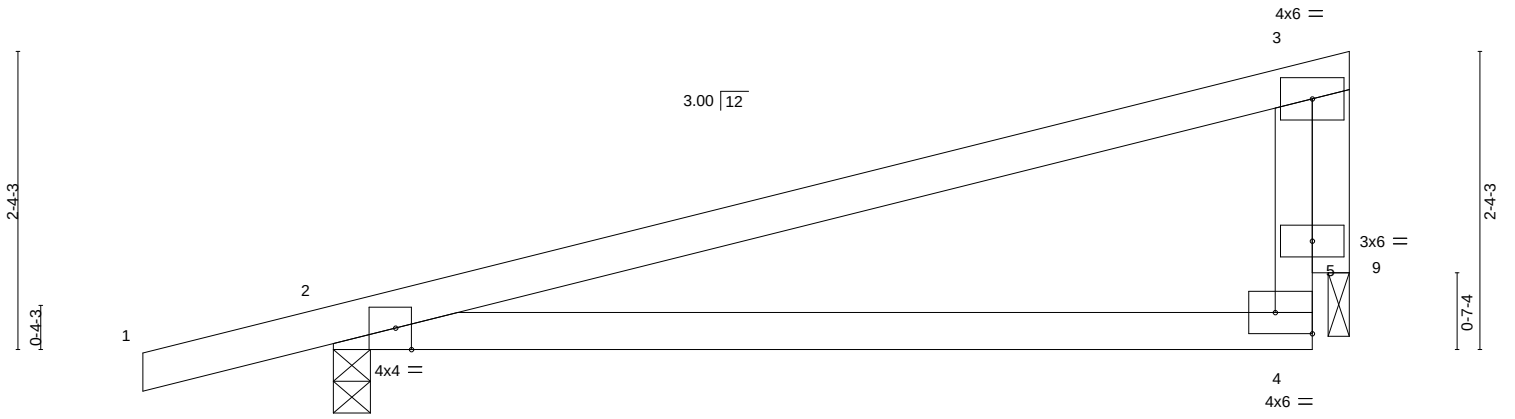

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [4:Edge,0-2-0]

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	0.59	Vert(LL)	0.29	4-8	>329	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.64	Vert(CT)	0.25	4-8	>385	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MR							Weight: 31 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-6-8 oc bracing.

REACTIONS. (size) 2=0-3-8, 9=0-2-0
Max Horz 2=82(LC 8)
Max Uplift 2=-197(LC 8), 9=-134(LC 8)
Max Grav 2=381(LC 1), 9=260(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-222/252, 4-5=-255/151, 3-5=-255/151
BOT CHORD 2-4=-299/188
WEBS 3-9=-279/437

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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 7-6-12 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 2 and 134 lb uplift at joint 9.

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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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878294
3574425	EJ02	Jack-Open	7	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:04 2023 Page 1

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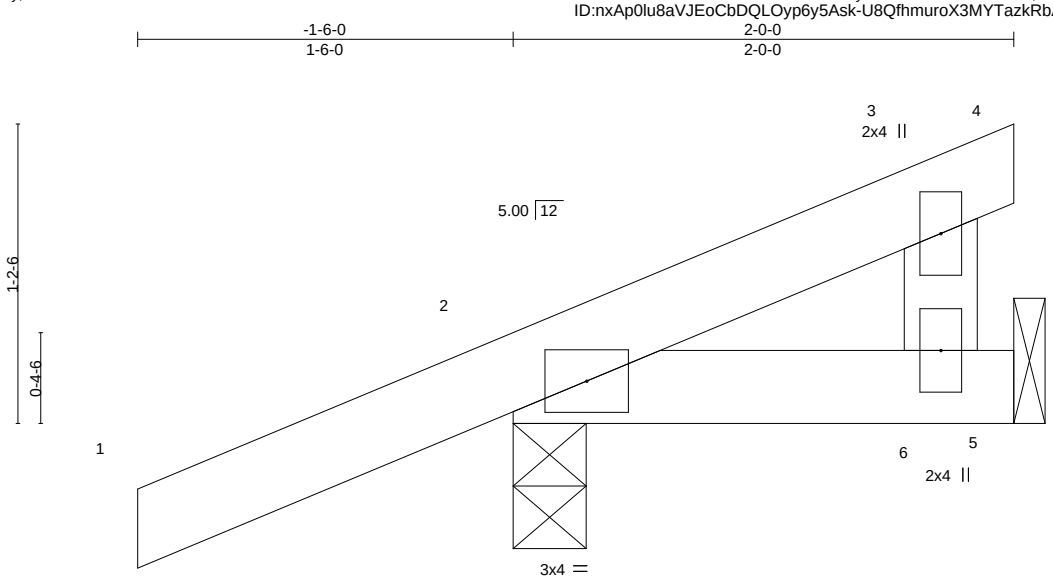

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.13	Vert(LL)	-0.00	9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	-0.00	9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 10 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 2-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 5=Mechanical
Max Horz 2=46(LC 12)
Max Uplift 2=-66(LC 8), 5=-11(LC 12)
Max Grav 2=184(LC 1), 5=46(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) 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 66 lb uplift at joint 2 and 11 lb uplift at joint 5.

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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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	PB01	PIGGYBACK	26	1	T30878295
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:04 2023 Page 1

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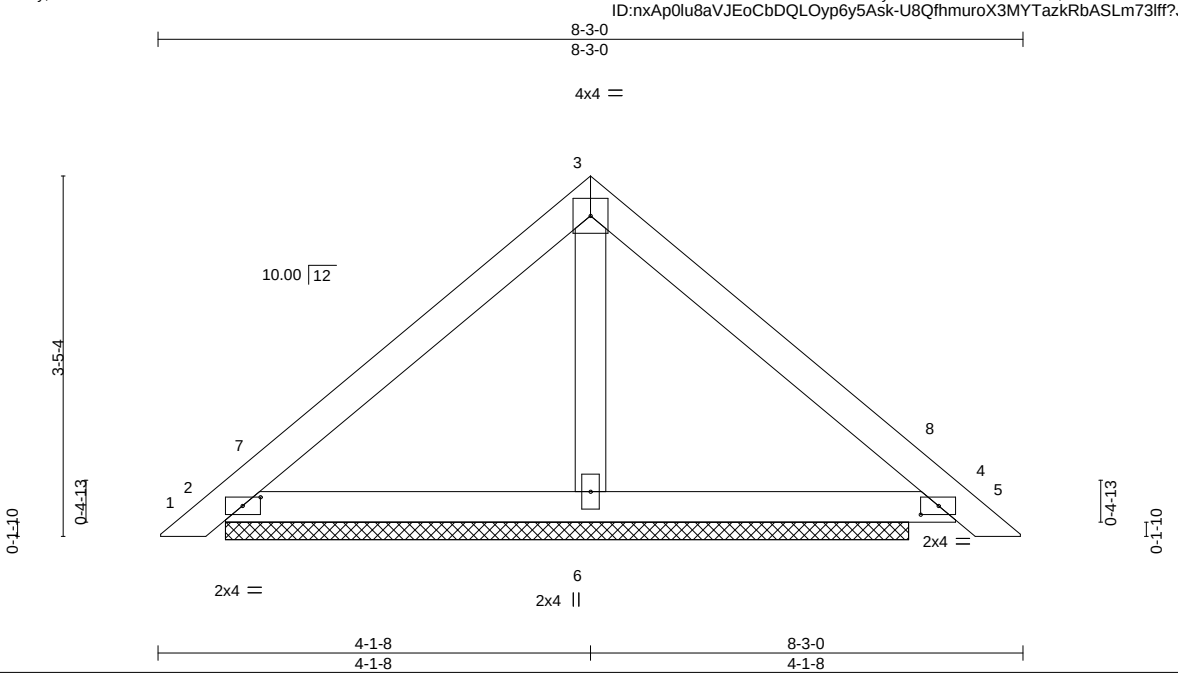

Plate Offsets (X,Y)-- [2:0-2-1,0-1-0], [4:0-2-1,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.17	Vert(LL)	-0.00	4-5	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.12	Vert(CT)	0.00	4-5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 30 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 8-3-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 2=6-6-3, 6=6-6-3
Max Horz 2=-71(LC 10)
Max Uplift 2=-87(LC 24), 6=-112(LC 13)
Max Grav 2=87(LC 23), 6=559(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-119/258, 3-4=-110/264
WEBS 3-6=-448/287

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) 0-2-14 to 3-2-14, Interior(1) 3-2-14 to 4-1-8, Exterior(2R) 4-1-8 to 7-1-8, Interior(1) 7-1-8 to 8-0-2 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 2 and 112 lb uplift at joint 6.
7) n/a
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878296
3574425	PB01G	GABLE	2	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:05 2023 Page 1

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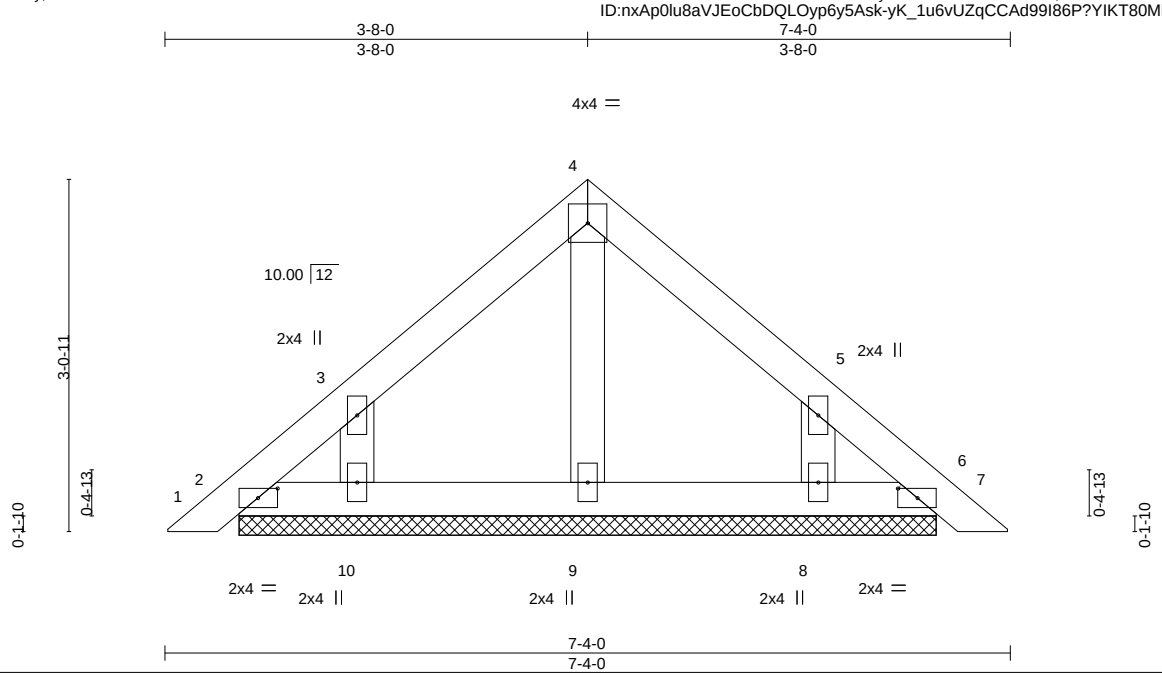

Plate Offsets (X,Y)-- [2:0-2-1,0-1-0], [6:0-2-1,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.06	Vert(LL)	-0.00	6	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	-0.00	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-P							Weight: 29 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	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. All bearings 6-0-9.
(lb) - Max Horz 2=63(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; 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) 0-2-14 to 3-2-14, Interior(1) 3-2-14 to 3-8-0, Exterior(2R) 3-8-0 to 6-8-5, Interior(1) 6-8-5 to 7-1-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878297
3574425	PB02	Piggyback	21	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:06 2023 Page 1

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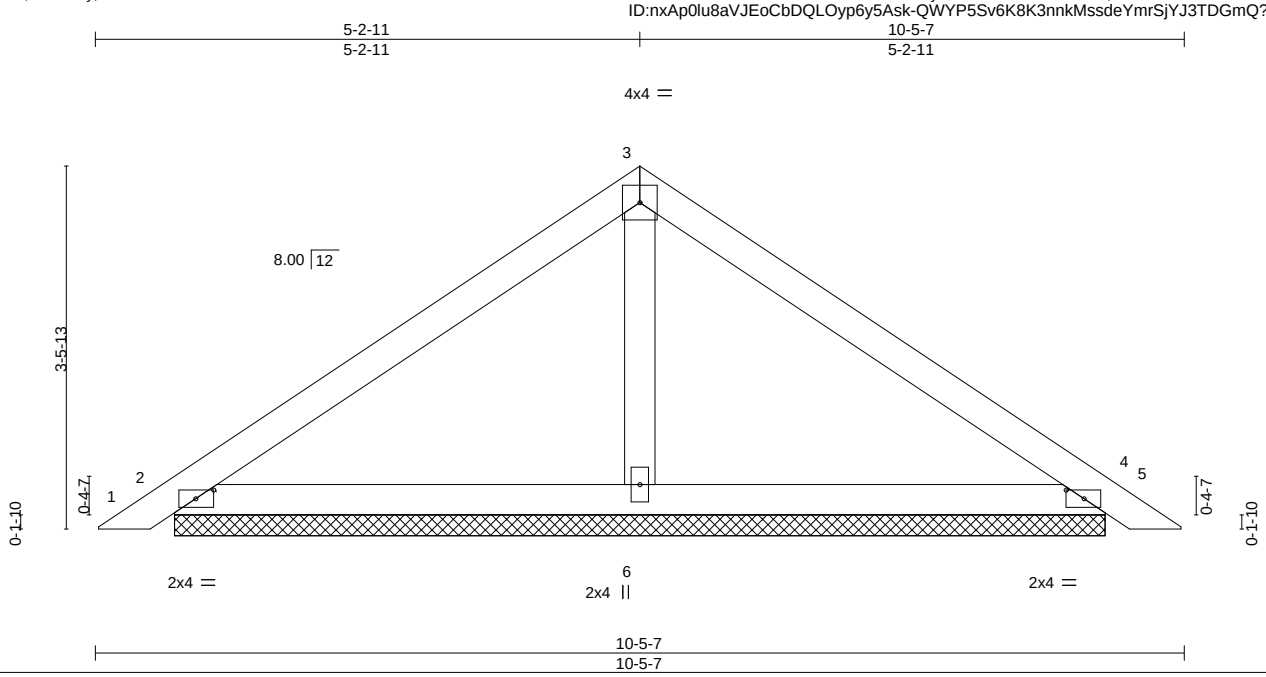

Plate Offsets (X,Y)-- [2:0-2-1,0-1-0], [4:0-2-1,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.22	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.19	Vert(CT)	0.01	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 36 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	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) 2=8-11-3, 4=8-11-3, 6=8-11-3
Max Horz 2=73(LC 11)
Max Uplift 2=-53(LC 12), 4=-63(LC 13), 6=-45(LC 12)
Max Grav 2=189(LC 1), 4=189(LC 1), 6=336(LC 1)

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; 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) 0-3-5 to 3-3-5, Interior(1) 3-3-5 to 5-2-11, Exterior(2R) 5-2-11 to 8-2-11, Interior(1) 8-2-11 to 10-2-1 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) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878298
3574425	PB02G	GABLE	1	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:06 2023 Page 1

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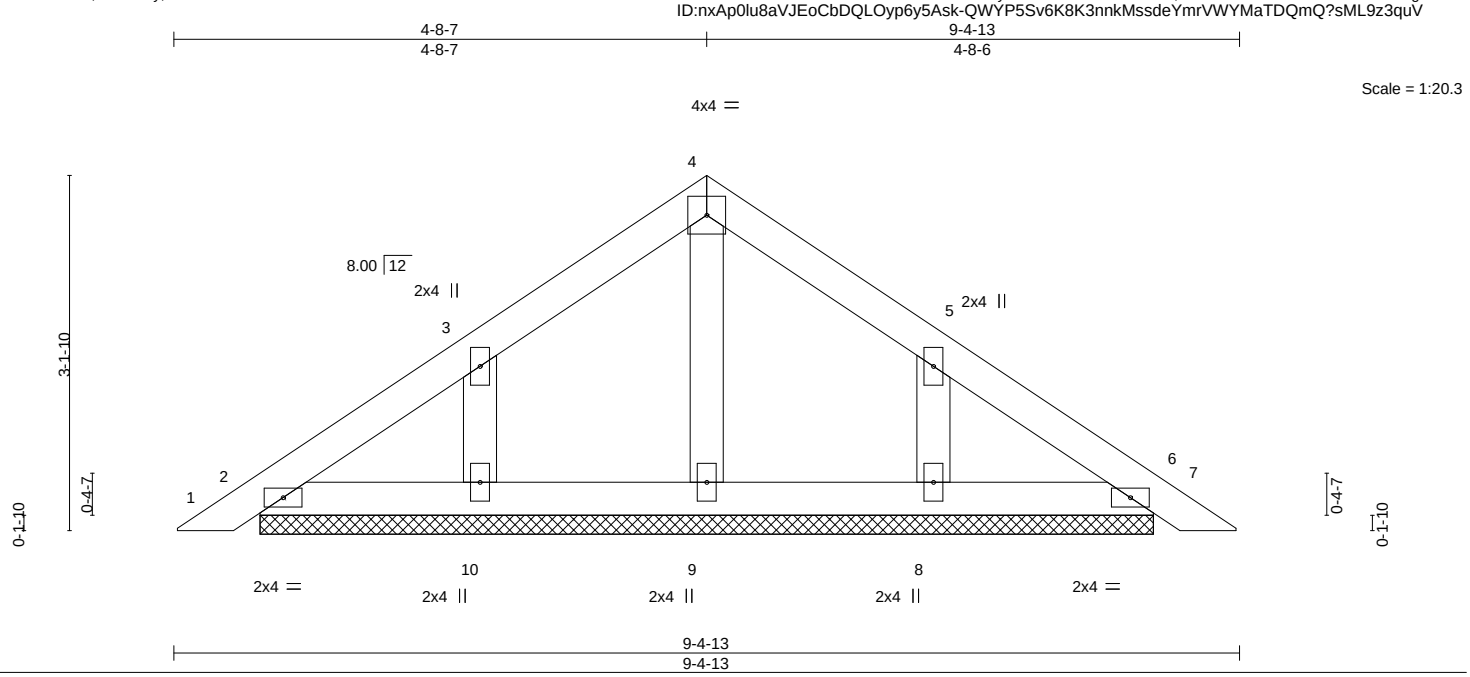

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.04	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	0.00	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 35 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 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. All bearings 7-10-9.
(lb) - Max Horz 2=-65(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; 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) 0-3-5 to 3-3-5, Interior(1) 3-3-5 to 4-8-7, Exterior(2R) 4-8-7 to 7-8-7, Interior(1) 7-8-7 to 9-1-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878299
3574425	T01	ATTIC	6	1	Job Reference (optional)

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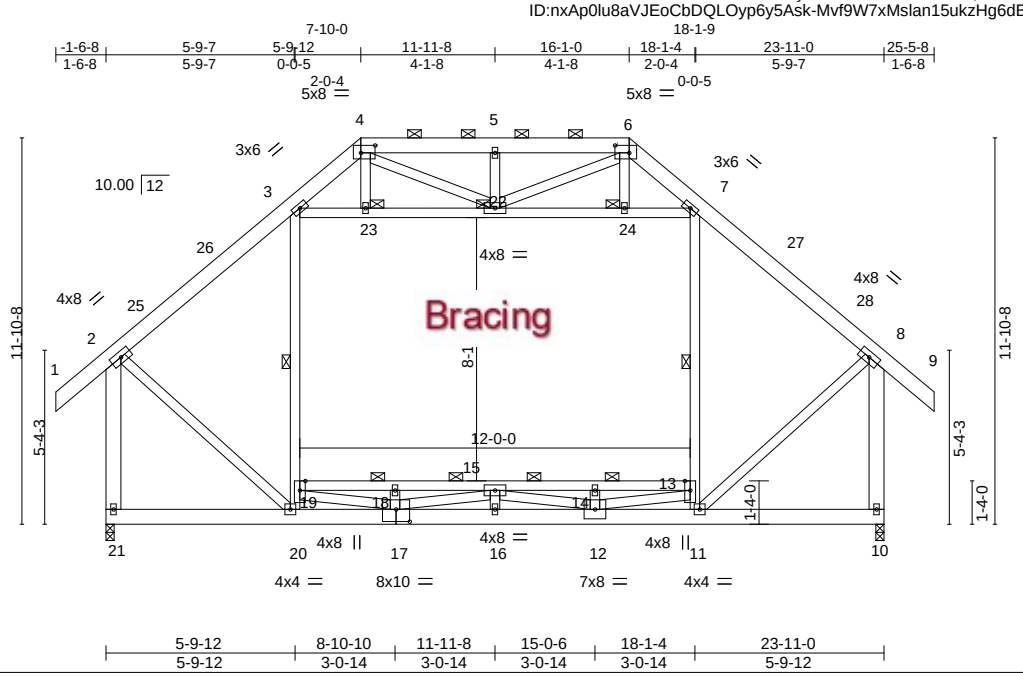

Plate Offsets (X,Y)-- [4:0-5-4,0-2-12], [6:0-5-4,0-2-12], [17:0-5-0,0-4-8]

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	0.29	Vert(LL)	0.14	20	>999	240	MT20	244/190
TCDL 7.0		Lumber DOL 1.25	BC	1.00	Vert(CT)	-0.19	15	>999	180		
BCLL 0.0	*	Rep Stress Incr YES	WB	0.79	Horz(CT)	0.02	10	n/a	n/a		
BCDL 10.0		Code FBC2020/TPI2014	Matrix-MS		Attic	-0.09	13-19	1640	360	Weight: 279 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
13-19: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
2-21,8-10: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
2-4-0 oc bracing: 13-19
WEBS 1 Row at midpt 3-19, 7-13
JOINTS 1 Brace at Jt(s): 22, 23, 24

REACTIONS. (size) 21=0-3-0, 10=0-3-0
Max Horz 21=-335(LC 10)
Max Grav 21=1577(LC 2), 10=1577(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1109/10, 3-4=-566/135, 4-5=-661/203, 5-6=-661/203, 6-7=-566/135, 7-8=-1109/10, 2-21=-1564/27, 8-10=-1564/28
BOT CHORD 20-21=-330/305, 17-20=-102/933, 16-17=0/3001, 12-16=0/3001, 11-12=0/815, 18-19=-1564/0, 15-18=-1551/0, 14-15=-1548/0, 13-14=-1548/0
WEBS 19-20=-455/10, 3-19=-108/398, 11-13=-456/10, 7-13=-108/398, 3-23=-567/79, 22-23=-557/80, 22-24=-558/80, 7-24=-567/79, 2-20=-8/1127, 8-11=-9/1128, 4-22=-234/346, 6-22=-234/346, 17-18=-397/0, 17-19=0/1655, 15-17=-823/96, 12-14=-397/0, 12-15=-807/73, 12-13=0/1640

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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 7-10-0, Exterior(2R) 7-10-0 to 11-11-8, Interior(1) 11-11-8 to 16-1-0, Exterior(2R) 16-1-0 to 20-3-15, Interior(1) 20-3-15 to 25-5-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Ceiling dead load (5.0 psf) on member(s). 3-23, 22-23, 22-24, 7-24; Wall dead load (5.0psf) on member(s).3-19, 7-13
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-19, 15-18, 14-15, 13-14
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878300
3574425	T01G	GABLE	1	1	Job Reference (optional)

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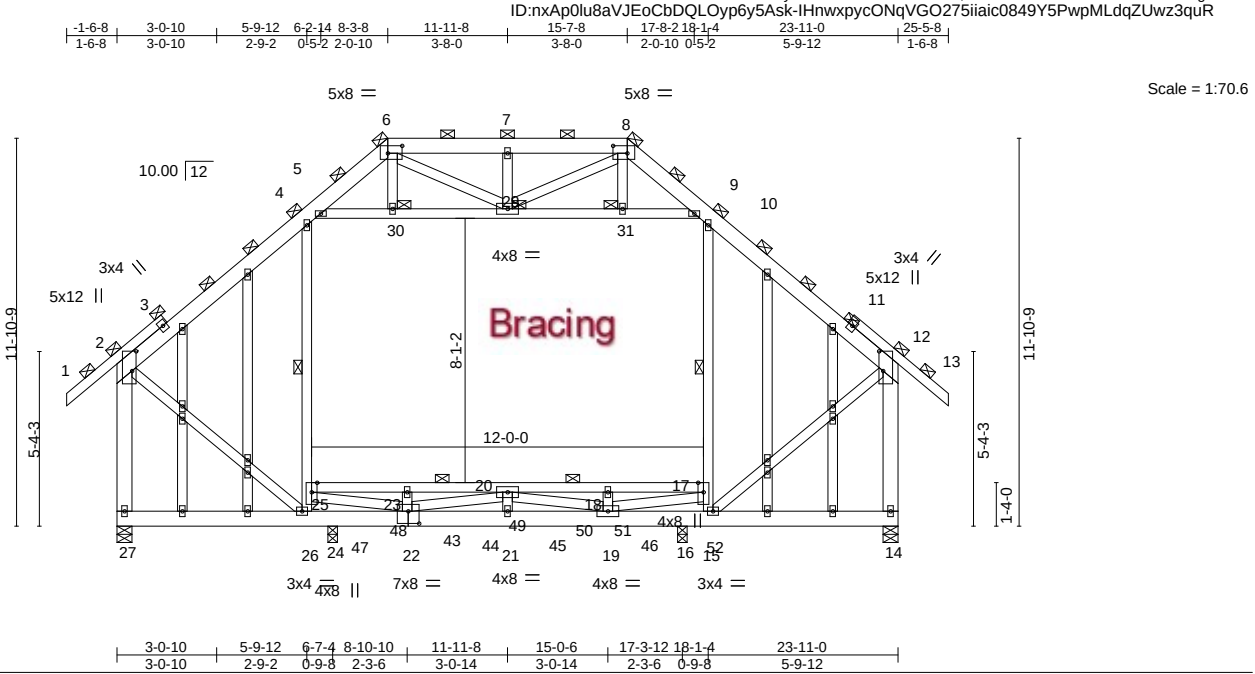

Plate Offsets (X,Y)-- [2:0-7-4,0-1-8], [6:0-5-4,0-2-12], [8:0-5-4,0-2-12], [12:0-7-4,0-1-8], [22:0-4-0,0-4-8]

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	0.20	Vert(LL)	-0.06	20	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL 1.25	BC	0.76	Vert(CT)	-0.11	20	>999	180		
BCLL	0.0 *	Rep Stress Incr NO	WB	0.46	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014	Matrix-MS		Attic	-0.06	17-25	2412	360	Weight: 315 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2 *Except* 1-3,11-13: 2x4 SP No.2
BOT CHORD	2x6 SP No.2 *Except* 17-25: 2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 2-27,12-14: 2x6 SP No.2
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	2-0-0 oc purlins (6-0-0 max.), except end verticals, and sheathed or 6-0-0 oc purlins: 4-5, 9-10.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 5-6-0 oc bracing: 17-25
WEBS	1 Row at midpt 4-25, 10-17
JOINTS	1 Brace at Jt(s): 2, 6, 8, 12, 29, 30, 31

REACTIONS. All bearings 0-5-8 except (jt=length) 24=0-3-8, 16=0-3-8.
(lb) - Max Horz 27=328(LC 27)
Max Uplift All uplift 100 lb or less at joint(s) 24, 16 except 27=-135(LC 24), 14=-106(LC 25)
Max Grav All reactions 250 lb or less at joint(s) except 27=601(LC 1), 14=600(LC 1), 24=1334(LC 34), 16=1311(LC 35)

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

TOP CHORD	2-4=-313/135, 4-5=-386/149, 5-6=-487/108, 6-7=-596/171, 7-8=-596/171, 8-9=-487/108, 9-10=-387/148, 10-12=-313/137, 2-27=-532/158, 12-14=-532/129
BOT CHORD	26-27=-304/286, 24-26=-140/290, 22-24=-140/290, 21-22=0/1879, 19-21=0/1879, 16-19=-112/269, 15-16=-112/269, 23-25=-998/0, 20-23=-984/0, 18-20=-981/0, 17-18=-981/0
WEBS	25-26=-813/14, 4-25=-496/160, 15-17=-811/15, 10-17=-496/166, 6-29=-106/313, 8-29=-109/313, 20-21=-5/274, 22-23=-414/0, 22-25=-7/964, 20-22=-923/0, 18-19=-415/0, 19-20=-925/0, 17-19=0/948

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; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Ceiling dead load (5.0 psf) on member(s). 4-5, 9-10, 5-30, 29-30, 29-31, 9-31; Wall dead load (5.0psf) on member(s).4-25, 10-17
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 23-25, 20-23, 18-20, 17-18

Continued on page 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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 16 except (jt=lb) 27=135, 14=106.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 26 lb down and 21 lb up at 6-6-4, 26 lb down and 21 lb up at 8-6-4, 26 lb down and 21 lb up at 10-6-4, 26 lb down and 21 lb up at 11-11-8, 26 lb down and 21 lb up at 13-4-12, and 26 lb down and 21 lb up at 15-4-12, and 26 lb down and 21 lb up at 17-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
15) Attic room checked for L/360 deflection.
16) 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: 1-2=-54, 2-4=-54, 4-5=-64, 5-6=-54, 6-8=-54, 8-9=-54, 9-10=-64, 10-12=-54, 12-13=-54, 14-27=-20, 17-25=-40, 5-9=-10
   Drag: 4-25=-10, 10-17=-10
   Concentrated Loads (lb)
   Vert: 21=-13(B) 24=-13(B) 16=-13(B) 43=-13(B) 44=-13(B) 45=-13(B) 46=-13(B)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878301
3574425	T02	ATTIC	5	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:11 2023 Page 1

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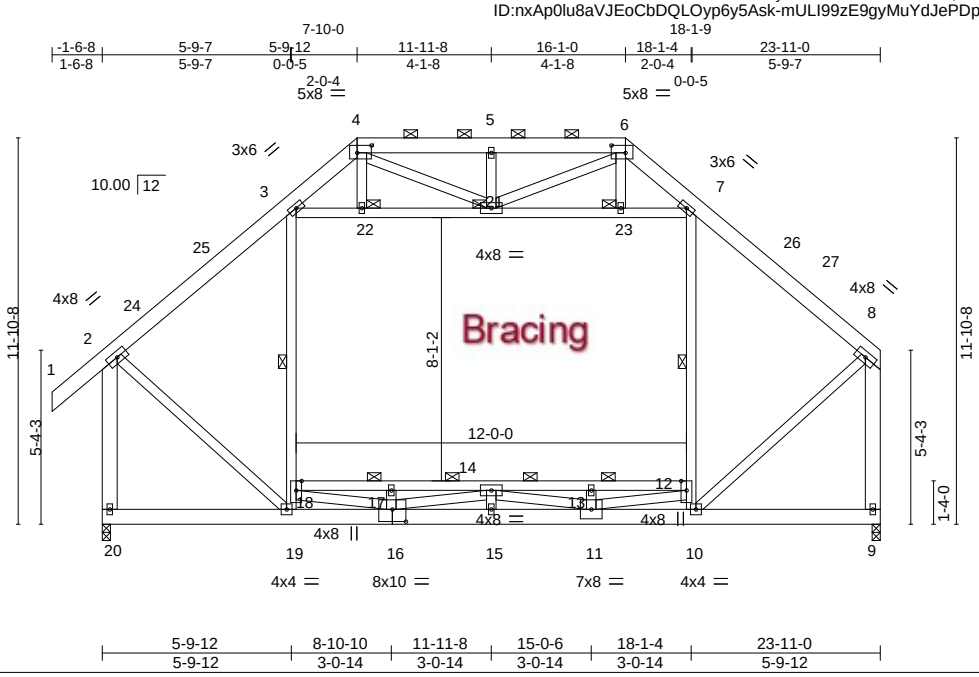

Plate Offsets (X,Y)-- [4:0-5-4,0-2-12], [6:0-5-4,0-2-12], [16:0-5-0,0-4-8]

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	0.29	Vert(LL)	0.13	10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	1.00	Vert(CT)	-0.19	14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS		Attic	-0.09	12-18	1640	360	Weight: 274 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
12-18: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
2-20,8-9: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
2-4-0 oc bracing: 12-18
WEBS 1 Row at midpt 3-18, 7-12
JOINTS 1 Brace at Jt(s): 21, 22, 23

REACTIONS. (size) 20=0-3-0, 9=0-3-0
Max Horz 20=-272(LC 10)
Max Grav 20=1580(LC 2), 9=1497(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1113/11, 3-4=-565/135, 4-5=-657/205, 5-6=-657/205, 6-7=-562/124, 7-8=-1108/0, 2-20=-1569/0, 8-9=-1480/0
BOT CHORD 16-19=-47/889, 15-16=0/3003, 11-15=0/3003, 10-11=0/825, 17-18=-1561/0, 14-17=-1548/0, 13-14=-1552/0, 12-13=-1552/0
WEBS 18-19=-454/17, 3-18=-107/399, 10-12=-467/30, 7-12=-118/395, 3-22=-557/82, 21-22=-548/83, 21-23=-563/82, 7-23=-572/81, 2-19=0/1115, 8-10=0/1094, 16-17=-397/0, 11-13=-397/0, 16-18=0/1653, 14-16=-806/62, 11-14=-789/67, 11-12=0/1642, 4-21=-221/345, 6-21=-227/345

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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 7-10-0, Exterior(2R) 7-10-0 to 11-11-8, Interior(1) 11-11-8 to 16-1-0, Exterior(2R) 16-1-0 to 20-3-15, Interior(1) 20-3-15 to 23-8-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Ceiling dead load (5.0 psf) on member(s). 3-22, 21-22, 21-23, 7-23; Wall dead load (5.0psf) on member(s).3-18, 7-12
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 17-18, 14-17, 13-14, 12-13
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

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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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	T03	ATTIC GIRDER	1	3	T30878302
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:13 2023 Page 1

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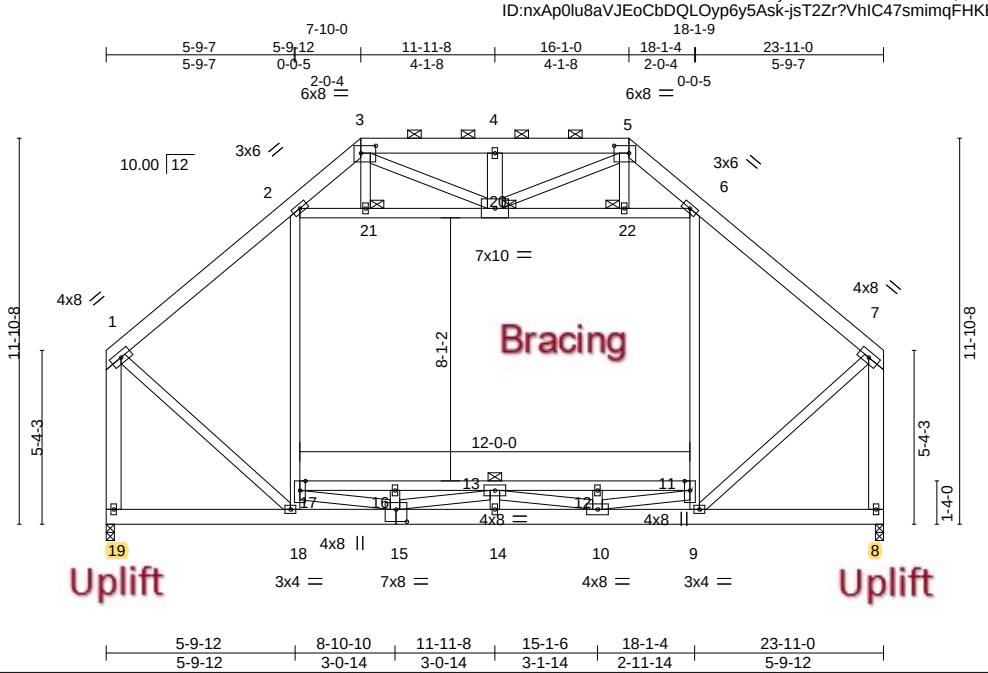

Plate Offsets (X,Y)-- [3:0-5-8,0-2-12], [5:0-5-8,0-2-12], [15:0-4-0,0-4-8]

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	0.27	Vert(LL)	0.05	9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.35	Vert(CT)	-0.08	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS		Attic	-0.03	11-17	4734	360	Weight: 812 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
11-17: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
1-19,7-8,4-20: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: 11-17
JOINTS 1 Brace at Jt(s): 20, 21, 22

REACTIONS. (size) 19=0-3-0, 8=0-3-0
Max Horz 19=-261(LC 6)
Max Uplift 19=-656(LC 8), 8=-659(LC 9)
Max Grav 19=3660(LC 1), 8=3660(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2727/547, 2-3=-4139/1199, 3-4=-8559/2569, 4-5=-8559/2569, 5-6=-4139/1194, 6-7=-2731/521, 1-19=-3624/658, 7-8=-3634/660
BOT CHORD 15-18=-515/2322, 14-15=-10/4114, 10-14=-10/4114, 9-10=-393/2243, 16-17=-1680/0, 13-16=-1669/0, 12-13=-1644/0, 11-12=-1644/0
WEBS 17-18=-1669/417, 2-17=-1377/645, 9-11=-1671/410, 6-11=-1377/618, 2-21=-806/1183, 20-21=-794/1179, 20-22=-815/1179, 6-22=-825/1183, 1-18=-553/2795, 7-9=-536/2797, 4-20=-4641/1438, 3-20=-1921/6013, 5-20=-1919/6013, 15-16=-398/0, 10-12=-401/0, 15-17=0/1659, 13-15=-793/126, 10-13=-821/115, 10-11=0/1623

NOTES-

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) 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; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Ceiling dead load (5.0 psf) on member(s). 2-21, 20-21, 20-22, 6-22; Wall dead load (5.0psf) on member(s).2-17, 6-11
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 16-17, 13-16, 12-13, 11-12

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:

June 23,2023

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=656, 8=659.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 4807 lb down and 1462 lb up at 11-11-7 on top chord. The design/selection of such connection device(s) is the responsibility of others.
15) Attic room checked for L/360 deflection.

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, 8-19=-20, 11-17=-40, 2-6=-10
   Drag: 2-17=-10, 6-11=-10
   Concentrated Loads (lb)
   Vert: 4=-4807

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878303
3574425	T04	PIGGYBACK BASE	2	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:14 2023 Page 1

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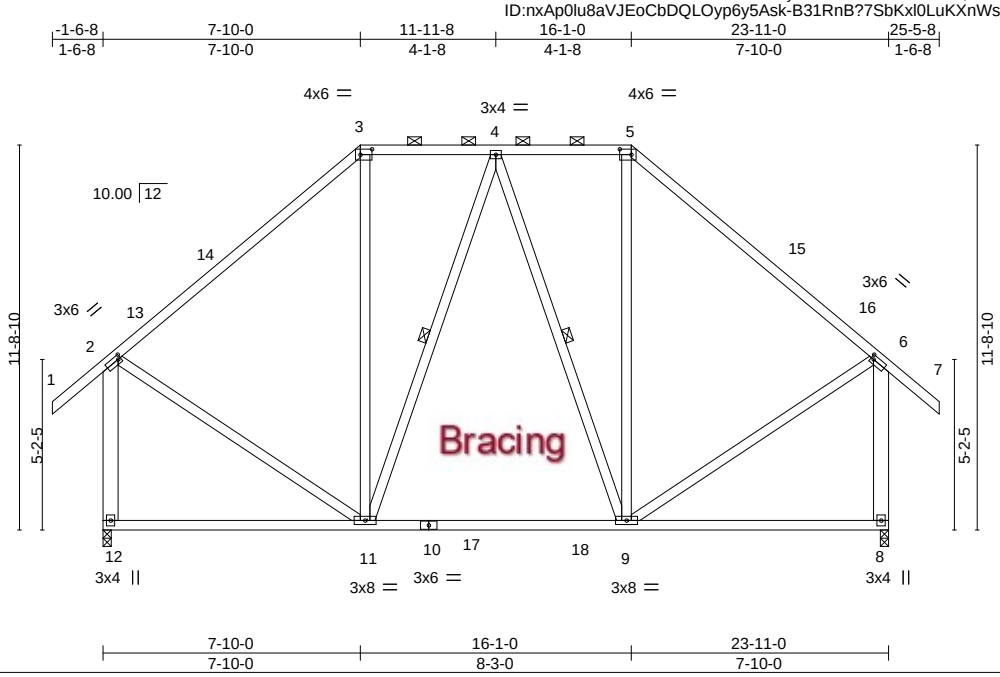

Plate Offsets (X,Y)-- [2:0-1-0,0-1-8], [3:0-4-4,0-2-0], [5:0-4-4,0-2-0], [6:0-1-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.61	Vert(LL)	-0.14	9-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.19	9-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	-0.01	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 202 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 2-12,6-8: 2x6 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-11, 4-9

REACTIONS. (size) 12=0-3-0, 8=0-3-0
Max Horz 12=-336(LC 10)
Max Uplift 12=-208(LC 12), 8=-208(LC 13)
Max Grav 12=1042(LC 2), 8=1042(LC 2)

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

TOP CHORD	2-3=-728/198, 3-4=-467/226, 4-5=-467/226, 5-6=-728/198, 2-12=-926/251, 6-8=-926/251
BOT CHORD	11-12=-305/315, 9-11=-181/534
WEBS	2-11=-127/520, 6-9=-128/520

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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 7-10-0, Exterior(2R) 7-10-0 to 11-11-8, Interior(1) 11-11-8 to 16-1-0, Exterior(2R) 16-1-0 to 20-3-15, Interior(1) 20-3-15 to 25-5-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) 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 100 lb uplift at joint(s) except (jt=lb) 12=208, 8=208.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878304
3574425	T04G	GABLE	1	1	Job Reference (optional)

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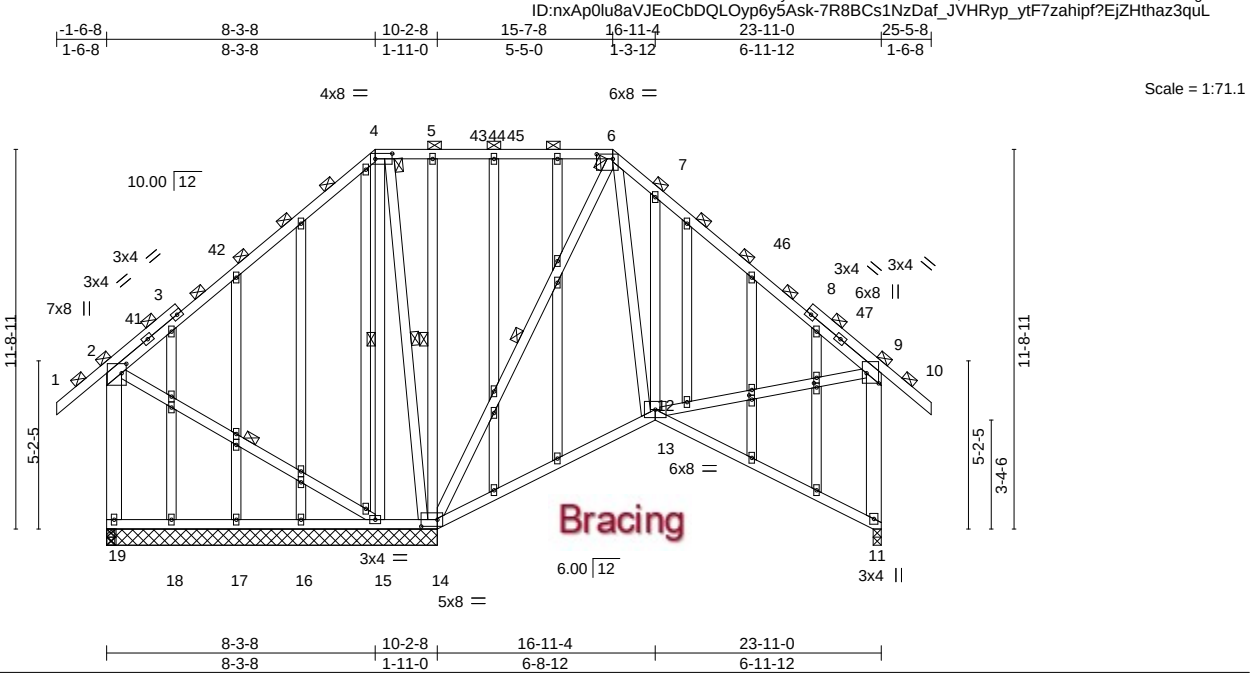

Plate Offsets (X,Y)-- [2:0-3-8,0-1-12], [4:0-6-4,0-2-0], [6:0-6-0,0-1-12], [9:0-3-12,Edge], [14:0-6-0,0-2-8], [25:0-1-9,0-1-0], [28:0-1-9,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.43	Vert(LL)	-0.07	11-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.37	Vert(CT)	-0.15	11-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.03	11	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 333 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 6-14: 2x4 SP No.2, 2-19,9-11: 2x6 SP No.2
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	2-0-0 oc purlins (6-0-0 max.), except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-15, 4-14, 5-14, 6-14, 2-15

REACTIONS. All bearings 10-2-8 except (jt=length) 19=0-3-0, 19=0-3-0, 19=0-3-0, 11=0-3-0.
(lb) - Max Horz 19=-330(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 11 except 19=-124(LC 24), 14=-316(LC 13), 15=-278(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 19, 19, 19, 18, 17, 16 except 14=1024(LC 1), 11=438(LC 24), 15=447(LC 19)

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

TOP CHORD	2-4=-120/404, 4-5=-18/259, 5-6=-19/262, 9-11=-390/83
BOT CHORD	18-19=-309/318, 17-18=-309/318, 16-17=-309/318, 15-16=-309/318, 14-15=-323/300, 13-14=-244/339, 12-13=-283/360
WEBS	5-14=-273/155, 6-14=-565/182, 6-13=-215/439, 7-12=-305/261, 2-15=-434/365

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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 8-3-8, Exterior(2R) 8-3-8 to 12-6-7, Interior(1) 12-6-7 to 15-7-8, Exterior(2R) 15-7-8 to 19-10-7, Interior(1) 19-10-7 to 25-5-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 19=124, 14=316, 15=278.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878305
3574425	T05	PIGGYBACK BASE	8	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:16 2023 Page 1

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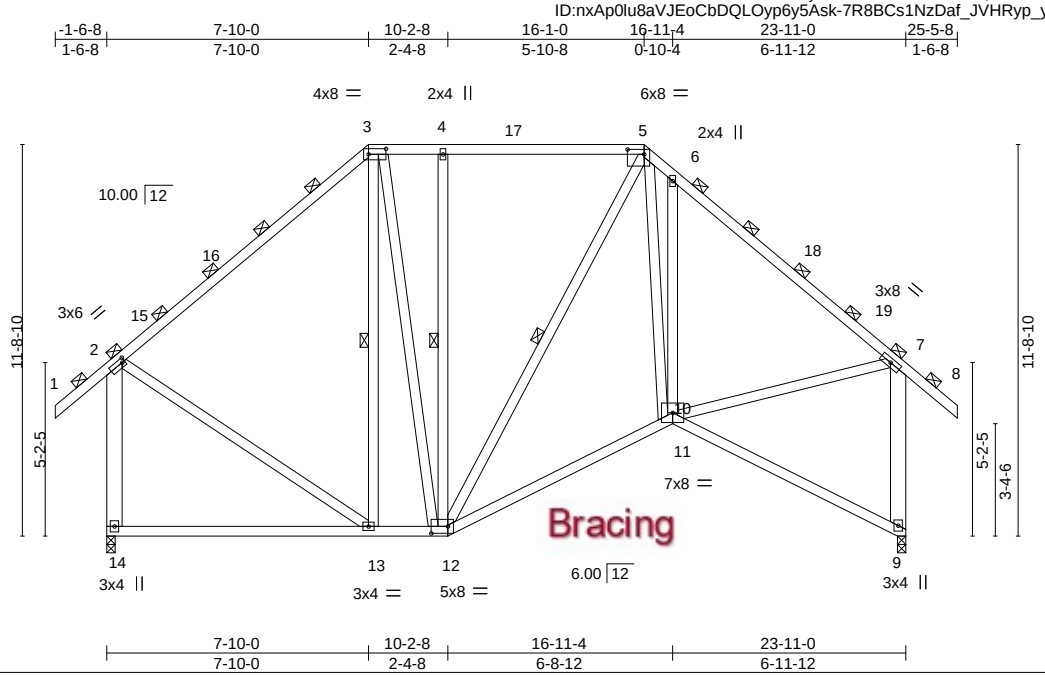

Plate Offsets (X,Y)-- [2:0-1-0,0-1-8], [3:0-6-4,0-2-0], [5:0-6-0,0-1-12], [12:0-6-0,0-2-8]

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	0.64	Vert(LL)	-0.09	13-14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	-0.19	13-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 224 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except*
	5-12: 2x4 SP No.2, 2-14,7-9: 2x6 SP No.2

BRACING-

TOP CHORD	2-0-0 oc purlins (5-10-11 max.), except end verticals, and sheathed or 6-0-0 oc purlins: 3-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 3-13, 4-12, 5-12

REACTIONS. (size) 14=0-3-0, 9=0-3-0
Max Horz 14=-336(LC 10)
Max Uplift 14=-209(LC 12), 9=-207(LC 13)
Max Grav 14=964(LC 1), 9=964(LC 1)

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

TOP CHORD	2-3=-673/198, 3-4=-441/223, 4-5=-438/222, 5-6=-810/395, 6-7=-879/226, 2-14=-891/253, 7-9=-907/268
BOT CHORD	13-14=-304/315, 12-13=-197/434, 11-12=-200/643, 10-11=-226/433
WEBS	3-12=-211/281, 4-12=-278/157, 5-12=-250/76, 5-11=-297/563, 6-10=-345/294, 2-13=-126/418, 7-10=-147/559

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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 7-10-0, Exterior(2R) 7-10-0 to 12-0-15, Interior(1) 12-0-15 to 16-1-0, Exterior(2R) 16-1-0 to 20-3-15, Interior(1) 20-3-15 to 25-5-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) 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) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=209, 9=207.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	T06	ATTIC	6	1	T30878306
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:17 2023 Page 1

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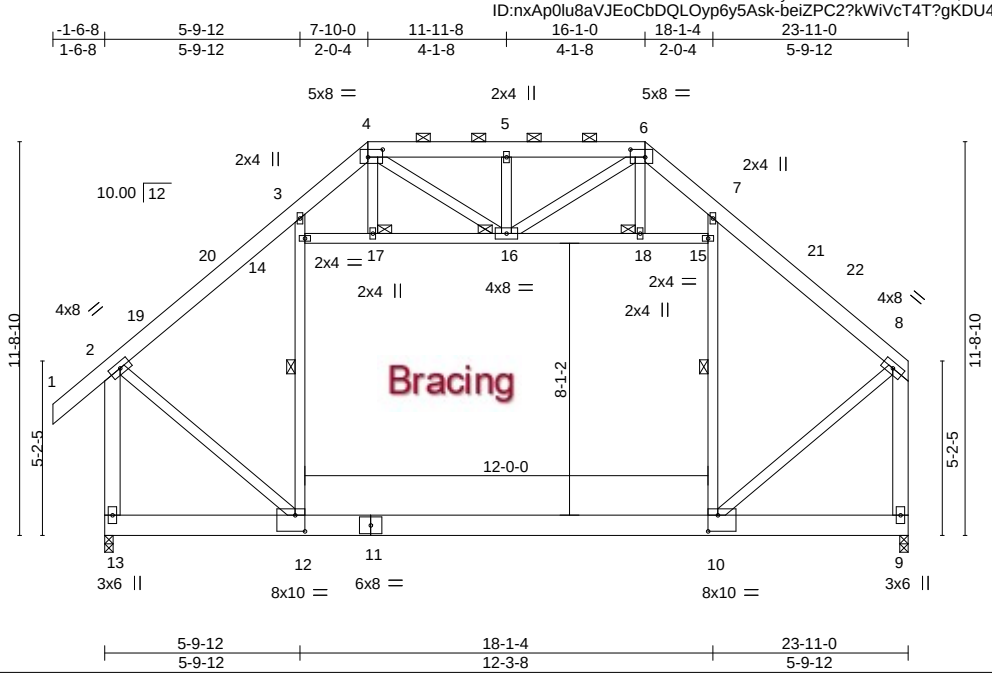

Plate Offsets (X,Y)-- [4:0-5-4,0-2-12], [6:0-5-4,0-2-12], [10:0-3-8,0-5-12], [12:0-3-8,0-5-12]

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)	-0.23	10-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.44	Vert(CT)	-0.36	10-12	>792	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS		Attic	-0.18	10-12	800	360	Weight: 255 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x8 SP 2400F 2.0E
WEBS	2x4 SP No.3 *Except* 3-12,7-10: 2x4 SP No.2, 2-13,8-9: 2x6 SP No.2

REACTIONS. (size) 13=0-3-0, 9=0-3-0
Max Horz 13=-267(LC 10)
Max Grav 13=1470(LC 2), 9=1386(LC 2)

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 12-14, 10-15
JOINTS	1 Brace at Jt(s): 16, 17, 18

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

TOP CHORD	2-3=-1145/25, 3-4=-732/106, 4-5=-657/122, 5-6=-657/122, 6-7=-734/112, 7-8=-1136/10, 2-13=-1580/10, 8-9=-1489/0
BOT CHORD	10-12=0/817
WEBS	12-14=-122/486, 3-14=-56/442, 10-15=-135/477, 7-15=-70/433, 2-12=-5/1055, 8-10=0/1039

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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 7-10-0, Exterior(2R) 7-10-0 to 11-11-8, Interior(1) 11-11-8 to 16-1-0, Exterior(2R) 16-1-0 to 20-3-15, Interior(1) 20-3-15 to 23-8-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) 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) Ceiling dead load (5.0 psf) on member(s). 14-17, 16-17, 16-18, 15-18; Wall dead load (5.0psf) on member(s).12-14, 10-15
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Attic room checked for L/360 deflection.

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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878307
3574425	T07	Jack-Closed	5	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:18 2023 Page 1

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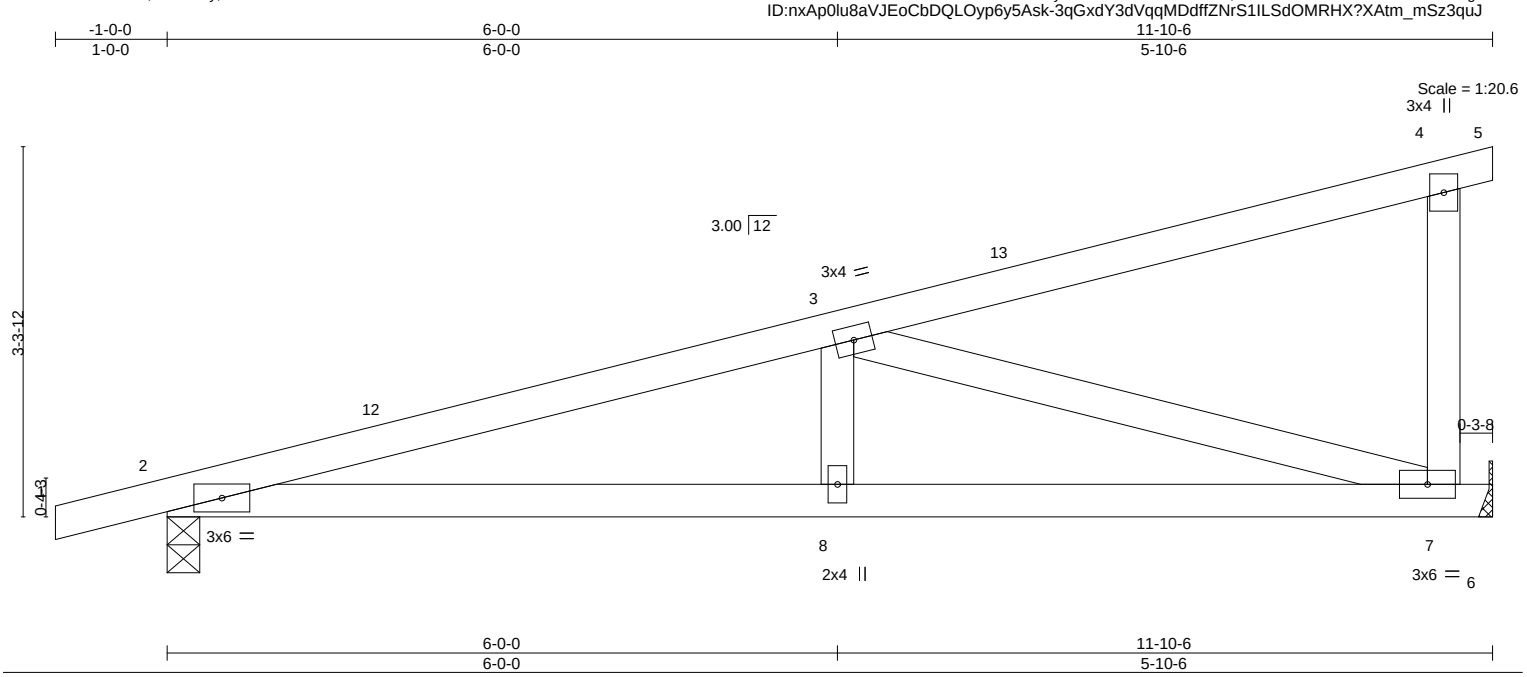

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.48	Vert(LL)	-0.05	8-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.41	Vert(CT)	-0.10	8-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 51 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 5-6-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-4-14 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=Mechanical
Max Horz 2=113(LC 8)
Max Uplift 2=-144(LC 8), 6=-129(LC 8)
Max Grav 2=493(LC 1), 6=438(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1017/302
BOT CHORD 2-8=-388/968, 7-8=-388/968
WEBS 3-8=0/264, 3-7=-938/365

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) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 11-10-6 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 100 lb uplift at joint(s) except (jt=lb) 2=144, 6=129.

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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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	T07G	GABLE	1	1	T30878308
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:18 2023 Page 1

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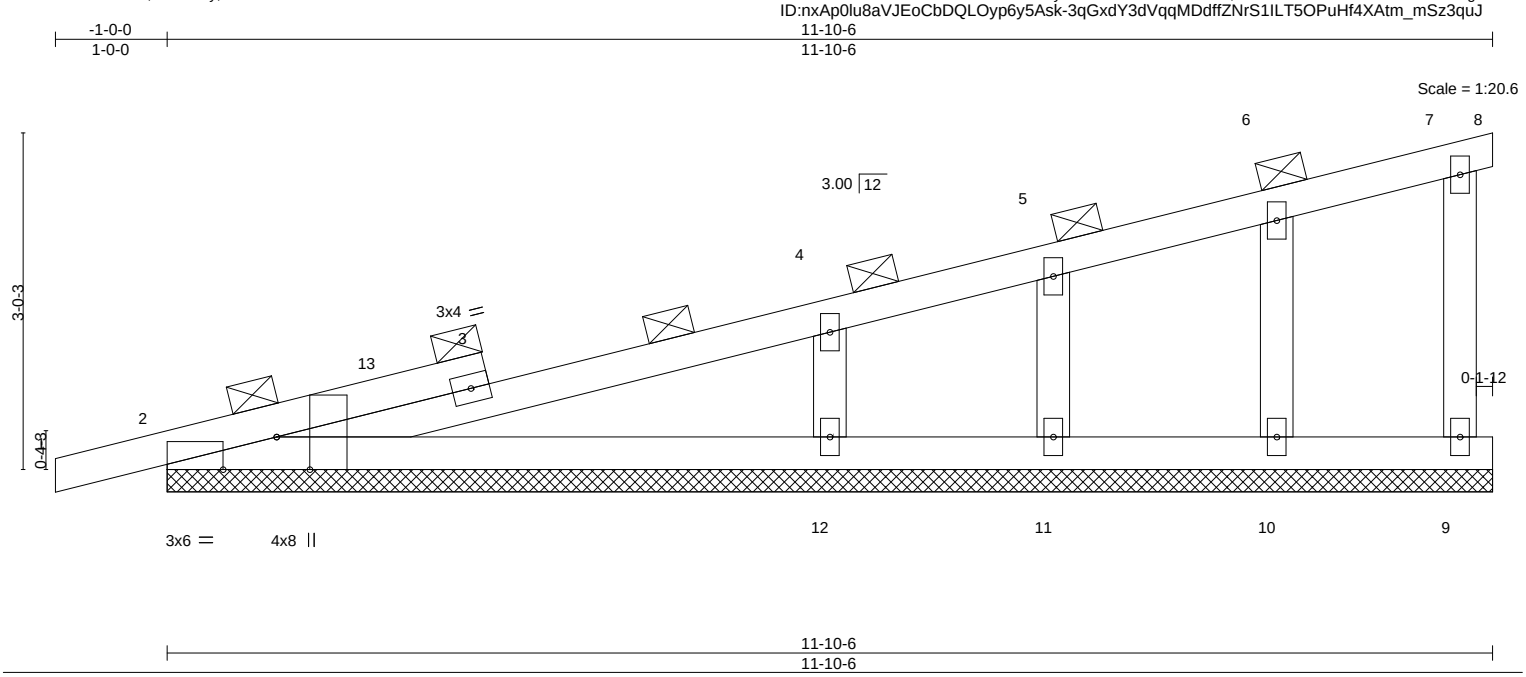

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-5-12,Edge]

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)	-0.00	1	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.26	Vert(CT)	0.01	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.01	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 50 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 11-10-6.
(lb) - Max Horz 2=103(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 9, 11, 10 except 12=-117(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 9, 11, 10 except 12=447(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-12=-314/160

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) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 11-10-6 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 9, 11, 10 except (jt=lb) 12=117.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	T08G	GABLE	1	1	T30878309
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:19 2023 Page 1

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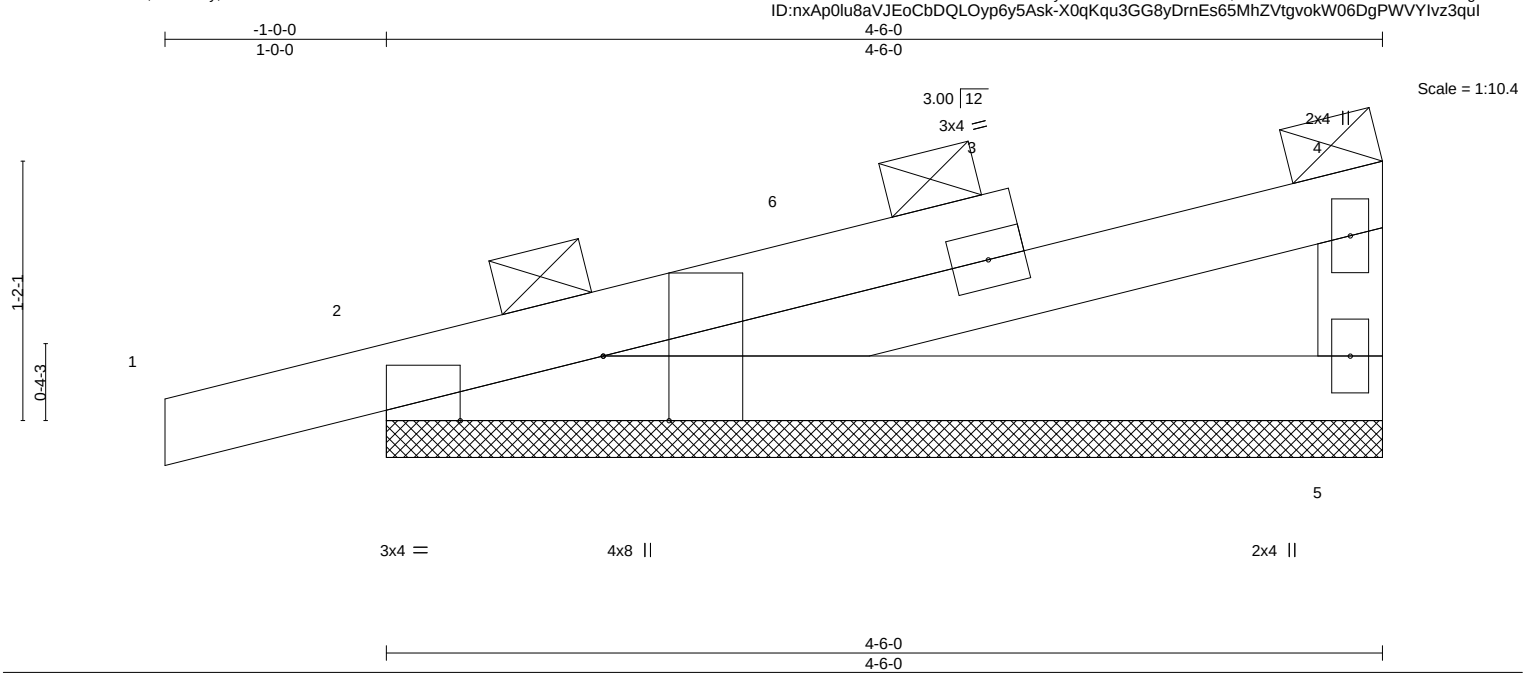

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-7-12,Edge]

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	0.26	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-P							Weight: 19 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	2-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=4-6-0, 5=4-6-0
Max Horz 2=38(LC 8)
Max Uplift 2=-83(LC 8), 5=-44(LC 12)
Max Grav 2=221(LC 1), 5=155(LC 1)

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

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

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	T09	COMMON	1	1	T30878310
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:20 2023 Page 1

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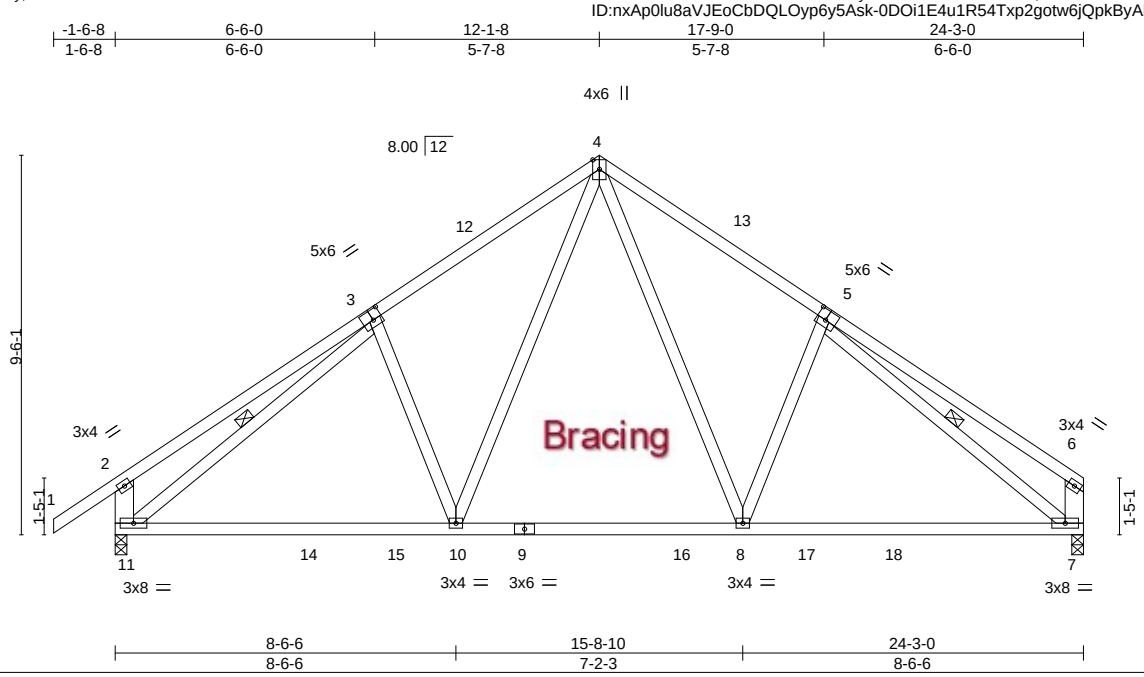

Plate Offsets (X,Y)-- [3:0-2-12,0-3-0], [5:0-2-12,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.38	Vert(LL)	-0.15	10-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.72	Vert(CT)	-0.27	10-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 156 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 2-11,6-7: 2x6 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-3-7 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 3-11, 5-7

REACTIONS. (size) 11=0-3-8, 7=0-3-8
Max Horz 11=232(LC 9)
Max Uplift 11=-207(LC 12), 7=-169(LC 13)
Max Grav 11=1124(LC 19), 7=1031(LC 20)

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

TOP CHORD	2-3=-354/172, 3-4=-1107/286, 4-5=-1117/290, 5-6=-330/126, 2-11=-408/202, 6-7=-295/132
BOT CHORD	10-11=-191/1008, 8-10=-47/737, 7-8=-140/906
WEBS	4-8=-173/565, 4-10=-168/548, 3-11=-969/108, 5-7=-979/138

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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 12-1-8, Exterior(2R) 12-1-8 to 15-1-8, Interior(1) 15-1-8 to 24-0-4 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=207, 7=169.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	T09G	GABLE	1	1	T30878311
					Job Reference (optional)

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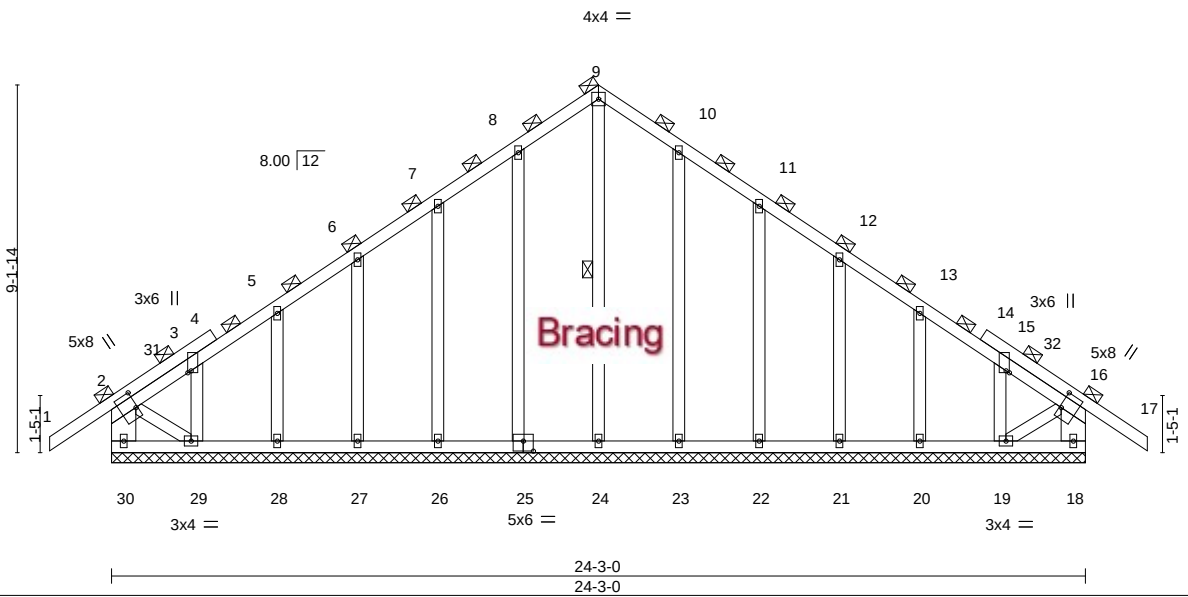
-1-6-8 | 12-1-8 | 24-3-0 | 25-9-8

1-6-8 | 12-1-8 | 12-1-8 | 1-6-8

Scale = 1:57.4



24-3-0

24-3-0

Plate Offsets (X,Y)-- [2:0-5-0,0-0-8], [3:0-0-9,0-1-0], [15:0-0-9,0-1-0], [16:0-5-0,0-0-8], [25:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.21	Vert(LL)	-0.01	17	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	-0.02	17	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	18	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 186 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except*
	2-30,16-18: 2x8 SP 2400F 2.0E
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	2-0-0 oc purlins (6-0-0 max.).
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 9-24

REACTIONS. All bearings 24-3-0.

(lb) - Max Horz 30=-193(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 30, 25, 26, 27, 28, 23, 22, 21, 20, 18 except 29=-150(LC 12), 19=-131(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 30, 24, 25, 26, 27, 28, 29, 23, 22, 21, 20, 18, 19

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; 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 Corner(3E) -1-6-8 to 1-5-8, Exterior(2N) 1-5-8 to 12-1-8, Corner(3R) 12-1-8 to 15-1-8, Exterior(2N) 15-1-8 to 25-9-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 30, 25, 26, 27, 28, 23, 22, 21, 20, 18 except (jt=lb) 29=150, 19=131.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Date:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878312
3574425	T10	Piggyback Base	5	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:22 2023 Page 1

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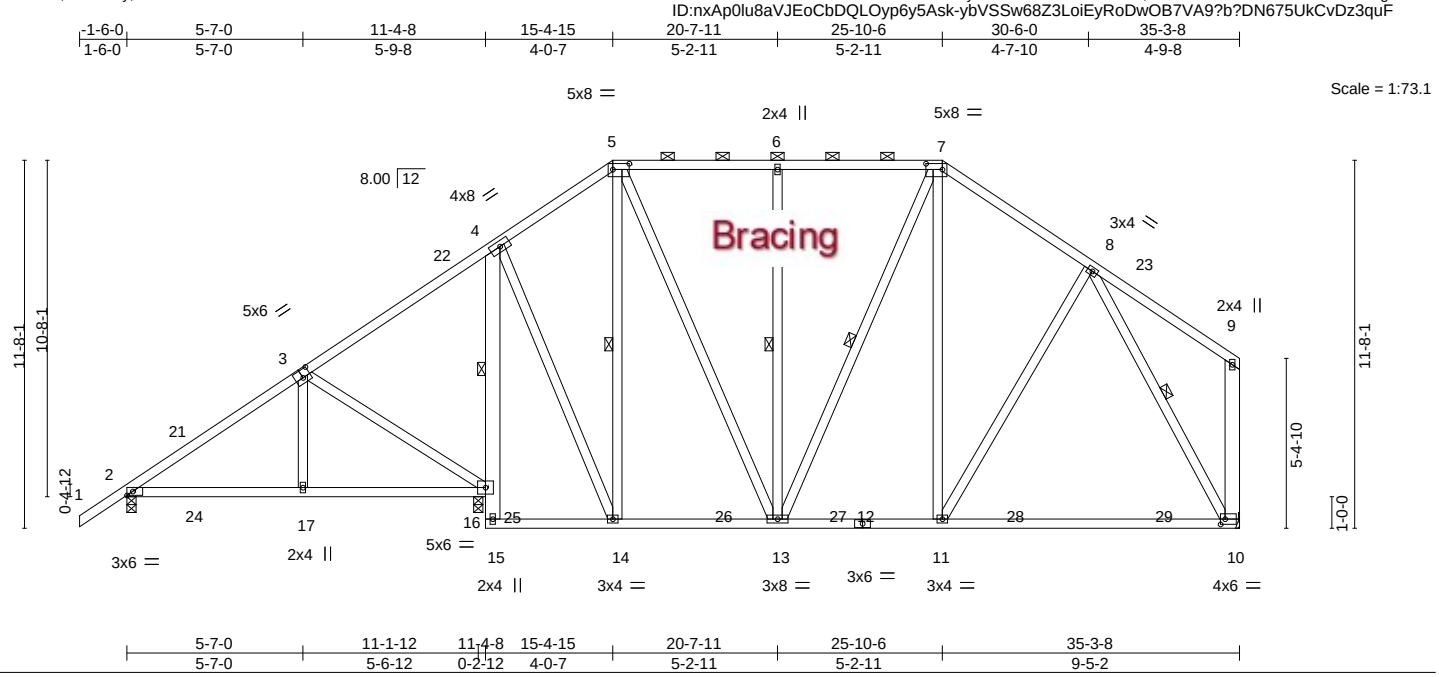


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [5:0-6-4,0-2-4], [7:0-6-4,0-2-4], [10:0-1-12,0-2-0]

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	0.32	Vert(LL)	-0.34	10-11	>820	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.95	Vert(CT)	-0.54	10-11	>518	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 289 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 4-15: 2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 5-13,7-13: 2x4 SP No.2, 9-10: 2x6 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-15 2-2-0 oc bracing: 10-11. 1 Row at midpt 4-16
WEBS	1 Row at midpt 5-14, 6-13, 7-13, 8-10

REACTIONS. (size) 2=0-3-8, 16=0-3-8, 10=Mechanical
Max Horz 2=264(LC 12)
Max Uplift 2=-80(LC 12), 16=-346(LC 12), 10=-203(LC 13)
Max Grav 2=518(LC 2), 16=1471(LC 2), 10=1016(LC 2)

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

TOP CHORD	2-3=-528/233, 4-5=-415/205, 5-6=-504/233, 6-7=-504/233, 7-8=-701/245
BOT CHORD	2-17=-212/430, 16-17=-216/433, 4-16=-1083/267, 13-14=-50/288, 11-13=-34/532, 10-11=-83/432
WEBS	3-17=-208/260, 3-16=-467/316, 4-14=-93/721, 5-14=-442/117, 5-13=-127/522, 6-13=-327/161, 7-11=-35/293, 8-10=-812/171

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) -1-6-0 to 2-0-6, Interior(1) 2-0-6 to 15-4-15, Exterior(2R) 15-4-15 to 20-7-11, Interior(1) 20-7-11 to 25-10-6, Exterior(2R) 25-10-6 to 30-6-14, Interior(1) 30-6-14 to 35-0-12 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) 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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 16=346, 10=203.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been 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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878313
3574425	T10G	GABLE	1	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:24 2023 Page 1

ID:nxAp0lu8aVJEoCbDQLOyp6y5Ask-u_dDtc7O5gbWxY6pveysGYbVUpJGhGnPZoDJz6z3quD

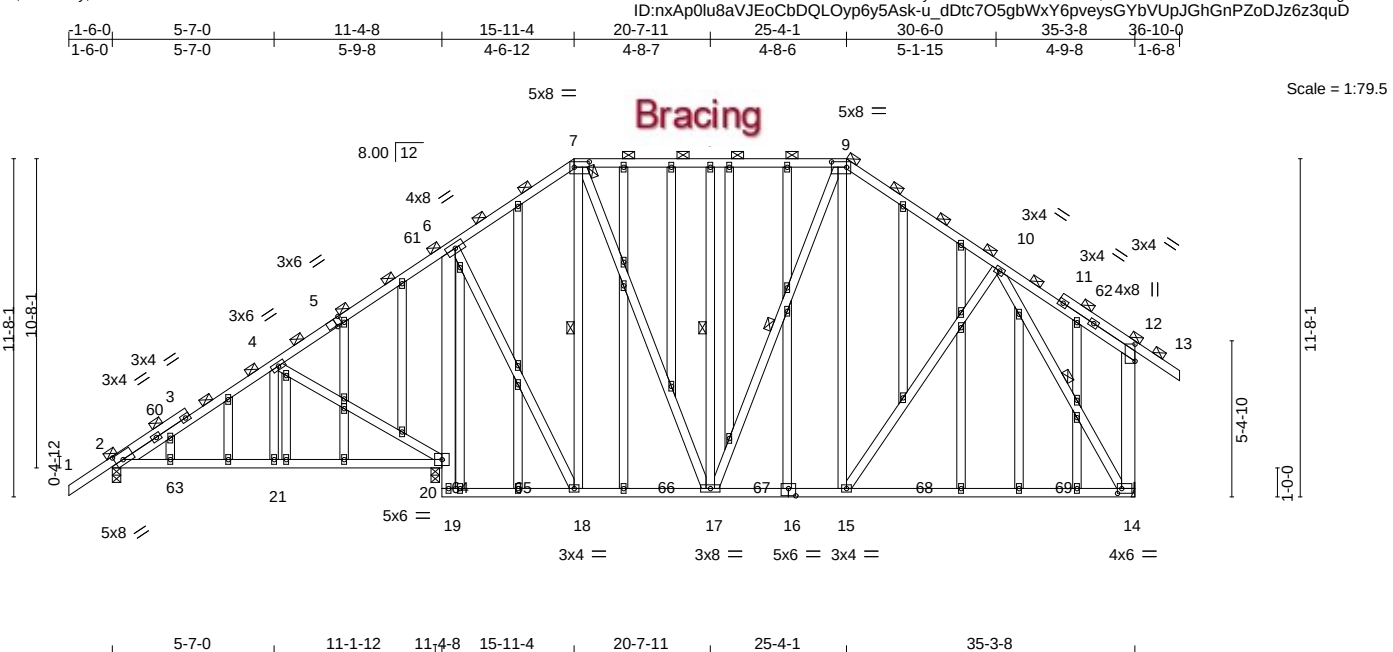


Plate Offsets (X,Y)-- [2:0-3-5,0-3-0], [5:0-2-5,Edge], [7:0-6-4,0-2-4], [9:0-6-4,0-2-4], [12:0-7-1,0-0-0], [14:0-1-12,0-2-0], [16:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	-0.37	14-15	>766	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.58	14-15	>483	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.02	14	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 447 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.1 *Except* 2-20: 2x4 SP No.2, 6-19: 2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 12-14: 2x6 SP No.2
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	2-0-0 oc purlins (6-0-0 max.), except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-19.
WEBS	1 Row at midpt 7-18, 8-17, 9-17, 10-14

REACTIONS. (size) 2=0-3-8, 14=Mechanical, 20=0-3-8
Max Horz 2=321(LC 11)
Max Uplift 2=-114(LC 12), 14=-232(LC 13), 20=-355(LC 9)
Max Grav 2=503(LC 2), 14=1111(LC 20), 20=1515(LC 2)

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

TOP CHORD	2-4=-566/336, 6-7=-502/214, 7-8=-506/225, 8-9=-506/225, 9-10=-735/228, 12-14=-286/117
BOT CHORD	2-21=-209/437, 20-21=-209/437, 6-20=-1092/291, 17-18=-77/319, 15-17=-66/534, 14-15=-109/435
WEBS	4-21=-199/251, 4-20=-477/314, 6-18=-121/710, 7-18=-416/141, 7-17=-123/475, 8-17=-290/145, 9-15=-37/340, 10-14=-780/174

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) -1-6-0 to 2-0-6, Interior(1) 2-0-6 to 15-11-4, Exterior(2R) 15-11-4 to 20-7-11, Interior(1) 20-7-11 to 25-4-1, Exterior(2R) 25-4-1 to 30-7-0, Interior(1) 30-7-0 to 36-10-0 zone; end vertical right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=114, 14=232, 20=355.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been electronically signed and sealed by 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:

June 23,2023

MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

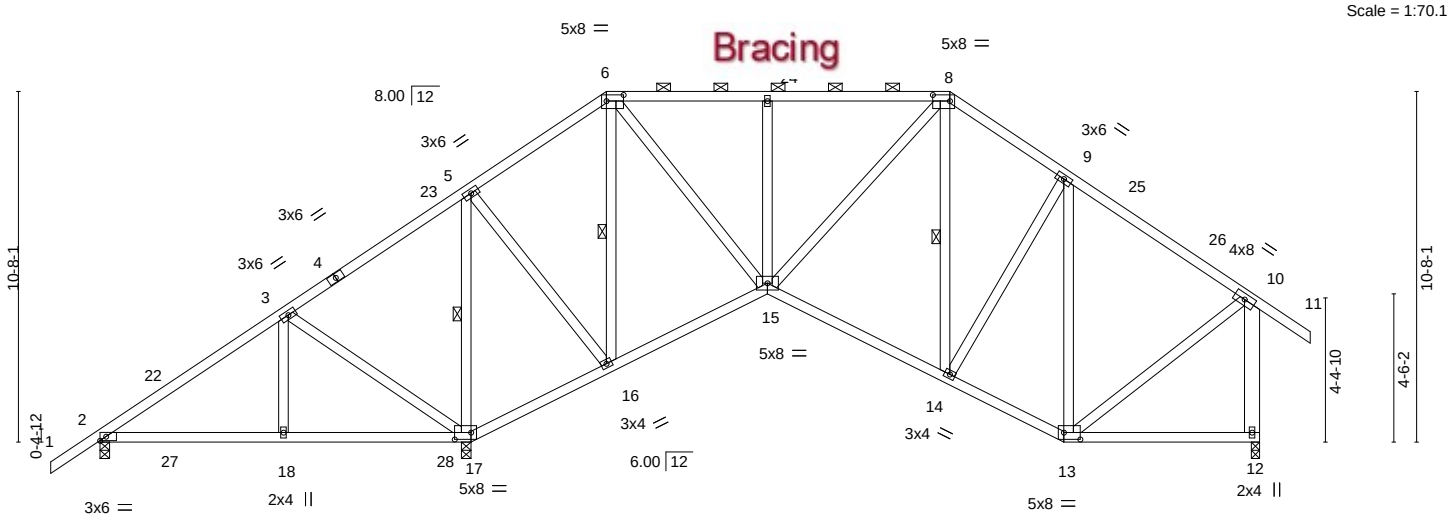
Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878314
3574425	T11	Piggyback Base	9	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:24 2023 Page 1

ID:nxAp0lu8aVJEoCbDQLOyp6y5Ask-u_dDtc7O5gbWxY6pveysGYbV2pRxhFmPZoDJz6z3quD

-1-6-0	5-7-0	11-3-8	15-4-15	20-3-12	25-10-6	29-4-0	35-3-8	36-10-0
1-6-0	5-7-0	5-8-8	4-1-7	4-10-13	5-6-10	3-5-10	5-11-8	1-6-8

Scale = 1:70.1



5-7-0	11-3-8	15-4-15	20-3-12	25-10-6	29-4-0	35-3-8
5-7-0	5-8-8	4-1-7	4-10-13	5-6-10	3-5-10	5-11-8

Plate Offsets (X,Y)-- [6:0-6-4,0-2-4], [8:0-6-4,0-2-4], [13:0-6-0,0-2-8], [17:0-6-0,0-2-8]

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	0.36	Vert(LL)	-0.04	12-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.28	Vert(CT)	-0.09	14-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.05	12	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 253 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except*
	10-12: 2x6 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 5-17, 6-16, 8-14

REACTIONS. (size) 2=0-3-8, 17=0-3-8, 12=0-3-0
Max Horz 2=300(LC 11)
Max Uplift 2=-74(LC 12), 17=-376(LC 9), 12=-212(LC 13)
Max Grav 2=309(LC 23), 17=1613(LC 1), 12=876(LC 24)

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

TOP CHORD	3-5=-190/446, 6-7=-607/188, 7-8=-607/188, 8-9=-632/240, 9-10=-584/167, 10-12=-816/229
BOT CHORD	16-17=-384/215, 14-15=-101/549, 13-14=-90/473
WEBS	3-18=-211/259, 3-17=-415/304, 5-17=-1131/263, 5-16=-139/725, 6-16=-688/183, 6-15=-147/752, 7-15=-329/161, 9-13=-406/98, 10-13=-54/483

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) -1-6-0 to 2-0-6, Interior(1) 2-0-6 to 15-4-15, Exterior(2R) 15-4-15 to 20-3-12, Interior(1) 20-3-12 to 25-10-6, Exterior(2R) 25-10-6 to 30-10-4, Interior(1) 30-10-4 to 36-10-0 zone; end vertical right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 17=376, 12=212.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

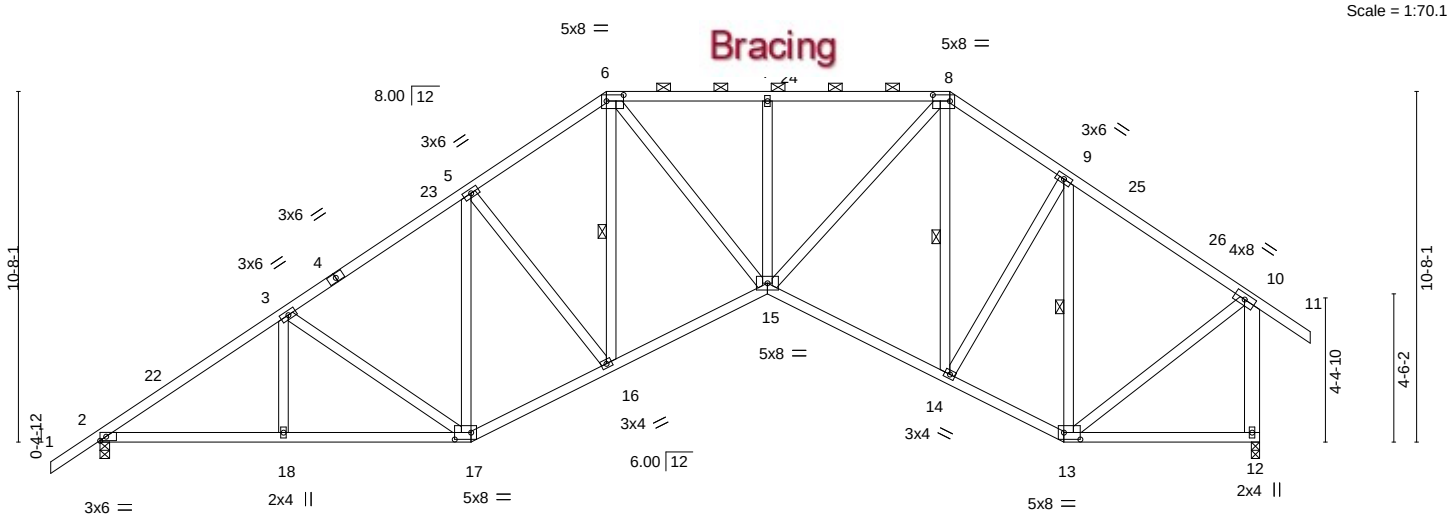
Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878315
3574425	T12	Piggyback Base	1	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:25 2023 Page 1

ID:nxAp0lu8aVJEoCbDQLOyp6y5Ask-MABb5x80s_jNZih?TLT5pm7gRCk1Qi2ZnSysWYz3quC

-1-6-0	5-7-0	11-3-8	15-4-15	20-3-12	25-10-6	29-4-0	35-3-8	36-10-0
1-6-0	5-7-0	5-8-8	4-1-7	4-10-13	5-6-10	3-5-10	5-11-8	1-6-8

Scale = 1:70.1



5-7-0	11-3-8	15-4-15	20-3-12	25-10-6	29-4-0	35-3-8
5-7-0	5-8-8	4-1-7	4-10-13	5-6-10	3-5-10	5-11-8

Plate Offsets (X,Y)-- [6:0-6-4,0-2-4], [8:0-6-4,0-2-4], [13:0-6-0,0-2-8], [17:0-6-0,0-2-8]

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	0.38	Vert(LL)	-0.11	15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	-0.22	15-16	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.15	12	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 253 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 10-12: 2x6 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-8 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-10-8 oc bracing: 2-18 8-11-3 oc bracing: 17-18.
WEBS	1 Row at midpt 6-16, 8-14, 9-13

REACTIONS. (size) 2=0-3-8, 12=0-3-0
Max Horz 2=300(LC 11)
Max Uplift 2=-319(LC 12), 12=-282(LC 13)
Max Grav 2=1378(LC 1), 12=1394(LC 1)

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

TOP CHORD	2-3=-2036/440, 3-5=-1669/412, 5-6=-1703/457, 6-7=-1909/447, 7-8=-1909/447, 8-9=-1306/331, 9-10=-1028/235, 10-12=-1333/298
BOT CHORD	2-18=-438/1632, 17-18=-438/1632, 16-17=-328/1490, 15-16=-346/1530, 14-15=-210/1166, 13-14=-144/877
WEBS	3-17=-402/184, 5-17=-360/133, 6-15=-167/867, 7-15=-325/161, 8-15=-334/1286, 8-14=-475/215, 9-14=-169/524, 9-13=-859/158, 10-13=-115/939

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) -1-6-0 to 2-0-6, Interior(1) 2-0-6 to 15-4-15, Exterior(2R) 15-4-15 to 20-3-12, Interior(1) 20-3-12 to 25-10-6, Exterior(2R) 25-10-6 to 30-10-4, Interior(1) 30-10-4 to 36-10-0 zone; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=319, 12=282.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

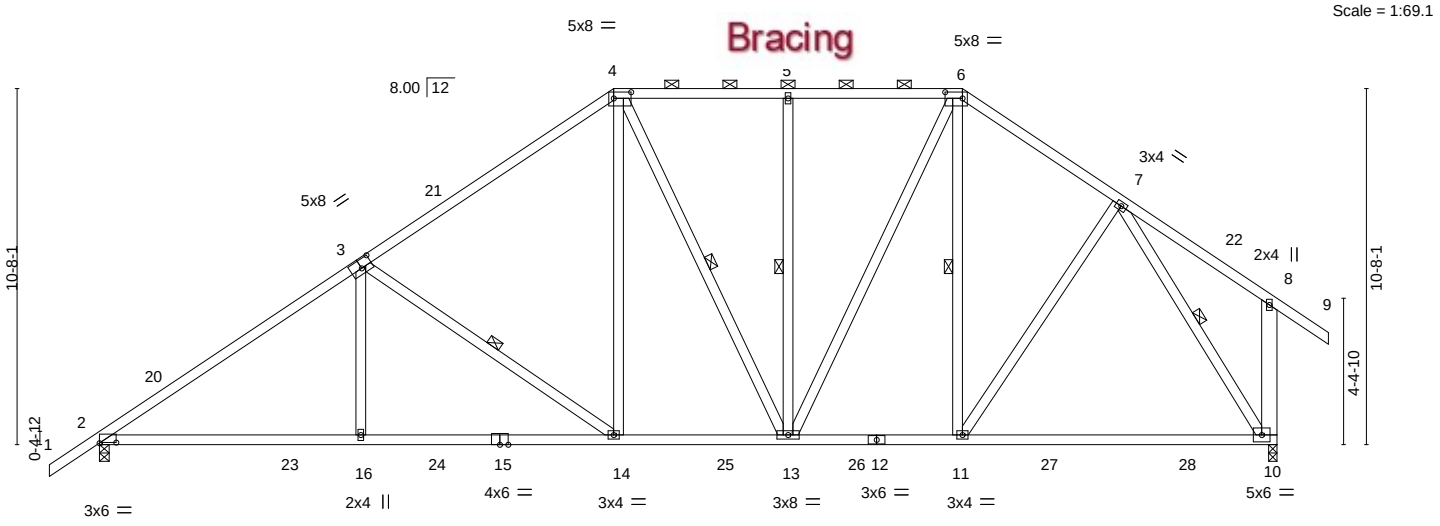
Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	T13	Piggyback Base	6	1	T30878316
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:26 2023 Page 1

ID:nxAp0lu8aVJEoCbDQLOyp6y5Ask-qMlzIH9fdHrEBsGC13_KMzgmxcxW98Yi06iP2?z3quB

-1-6-0	7-10-0	15-4-15	20-7-11	25-10-6	30-6-0	35-3-8	36-10-0
1-6-0	7-10-0	7-6-15	5-2-11	5-2-11	4-7-10	4-9-8	1-6-8

Scale = 1:69.1



7-10-0	15-4-15	20-7-11	25-10-6	35-3-8
7-10-0	7-6-15	5-2-11	5-2-11	9-5-2

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

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	0.65	Vert(LL)	-0.33	10-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.98	Vert(CT)	-0.54	10-11	>780	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 251 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except*
	8-10: 2x6 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-3-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-2 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 3-14, 4-13, 5-13, 6-11, 7-10

REACTIONS. (size) 2=0-3-8, 10=0-3-0
Max Horz 2=300(LC 11)
Max Uplift 2=-317(LC 12), 10=-284(LC 13)
Max Grav 2=1555(LC 19), 10=1587(LC 2)

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

TOP CHORD	2-3=-2252/428, 3-4=-1623/373, 4-5=-1237/336, 5-6=-1237/336, 6-7=-1286/293, 8-10=-284/131
BOT CHORD	2-16=-402/1927, 14-16=-402/1931, 13-14=-244/1292, 11-13=-147/1018, 10-11=-134/789
WEBS	3-16=0/411, 3-14=-784/287, 4-14=-114/712, 5-13=-319/164, 6-13=-183/531, 7-11=-109/448, 7-10=-1399/214

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) -1-6-0 to 2-0-6, Interior(1) 2-0-6 to 15-4-15, Exterior(2R) 15-4-15 to 20-7-11, Interior(1) 20-7-11 to 25-10-6, Exterior(2R) 25-10-6 to 30-7-0, Interior(1) 30-7-0 to 36-10-0 zone; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) 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 100 lb uplift at joint(s) except (jt=lb) 2=317, 10=284.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been electronically signed and sealed by 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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	T17	COMMON	3	1	T30878317
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:27 2023 Page 1

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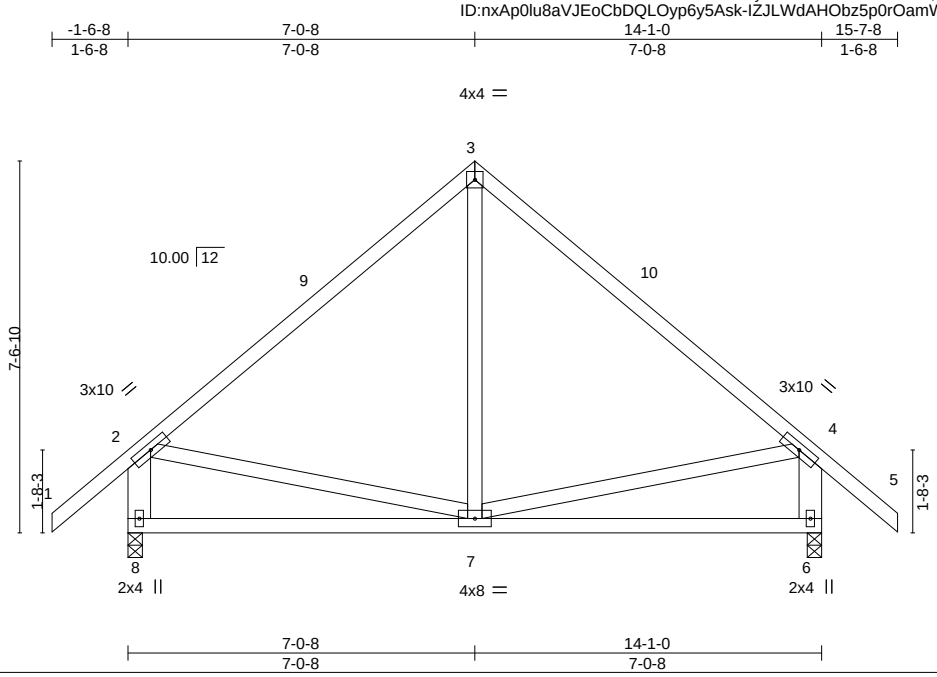

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.53	Vert(LL)	-0.04	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.40	Vert(CT)	-0.09	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 91 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-8,4-6: 2x6 SP No.2

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

REACTIONS. (size) 8=0-3-8, 6=0-3-8
Max Horz 8=-207(LC 10)
Max Uplift 8=-124(LC 12), 6=-124(LC 13)
Max Grav 8=600(LC 1), 6=600(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-462/156, 3-4=-462/156, 2-8=-539/226, 4-6=-539/226
BOT CHORD 7-8=-225/297
WEBS 3-7=-15/251

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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 7-0-8, Exterior(2R) 7-0-8 to 10-0-8, Interior(1) 10-0-8 to 15-7-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=124, 6=124.

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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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878318
3574425	T17G	GABLE	1	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:28 2023 Page 1

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-1-6-8 / 1-6-8 | 7-0-8 / 7-0-8 | 14-1-0 / 7-0-8 | 15-7-8 / 1-6-8

Scale = 1:44.5

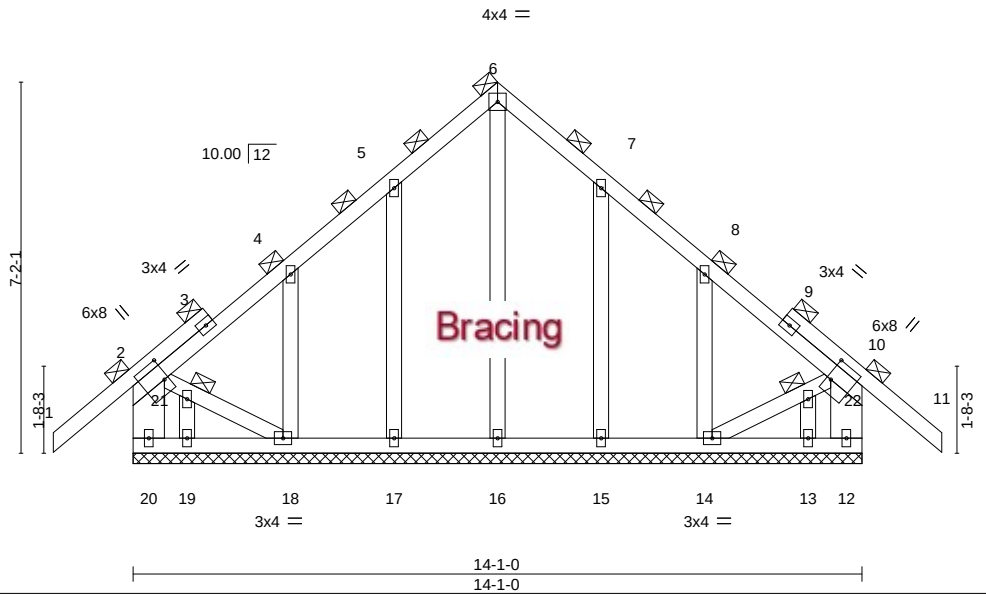

Plate Offsets (X,Y)-- [2:0-5-0,0-1-0], [10:0-5-0,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.28	Vert(LL)	-0.01	11	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	-0.02	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 112 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except*
	2-20,10-12: 2x8 SP 2400F 2.0E
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	2-0-0 oc purlins (6-0-0 max.).
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 6, 21, 22

REACTIONS. All bearings 14-1-0.

(lb) - Max Horz 20=-149(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 20, 12, 17, 15 except 18=-157(LC 12), 14=-152(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; 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 Corner(3E) -1-6-8 to 1-5-8, Exterior(2N) 1-5-8 to 7-0-8, Corner(3R) 7-0-8 to 10-0-8, Exterior(2N) 10-0-8 to 15-7-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 12, 17, 15 except (jt=lb) 18=157, 14=152.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878319
3574425	T18	COMMON	3	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:28 2023 Page 1

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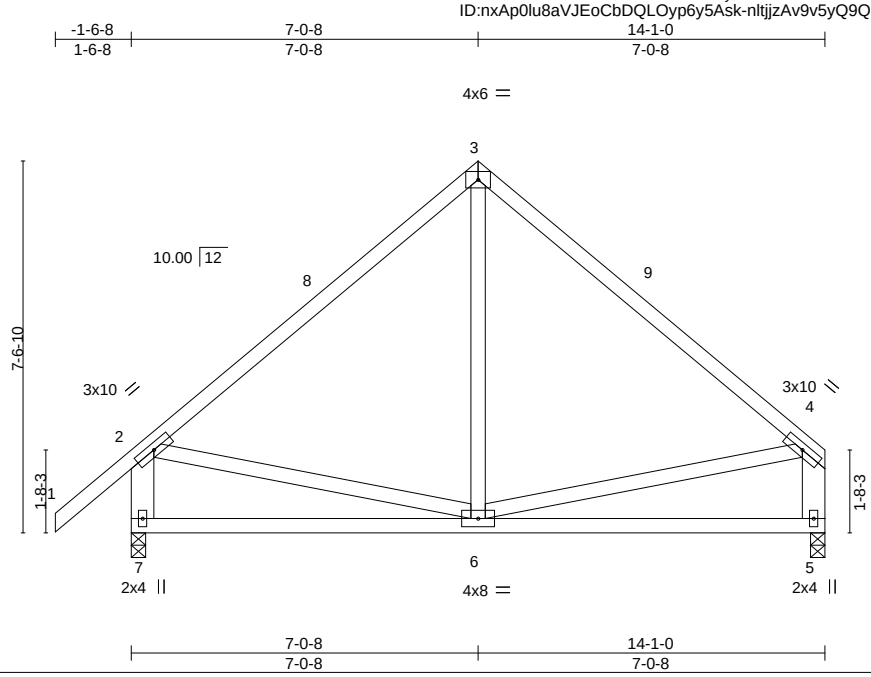

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.55	Vert(LL)	-0.04	5-6	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.40	Vert(CT)	-0.09	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 88 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-7,4-5: 2x6 SP No.2

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

REACTIONS. (size) 7=0-3-8, 5=0-3-8
Max Horz 7=196(LC 9)
Max Uplift 7=-124(LC 12), 5=-87(LC 13)
Max Grav 7=606(LC 1), 5=498(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-470/156, 3-4=-460/149, 2-7=-546/226, 4-5=-438/154
BOT CHORD 6-7=-239/277

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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 7-0-8, Exterior(2R) 7-0-8 to 10-0-8, Interior(1) 10-0-8 to 13-10-4 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 7=124.

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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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878320
3574425	T19	COMMON GIRDER	1	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:29 2023 Page 1

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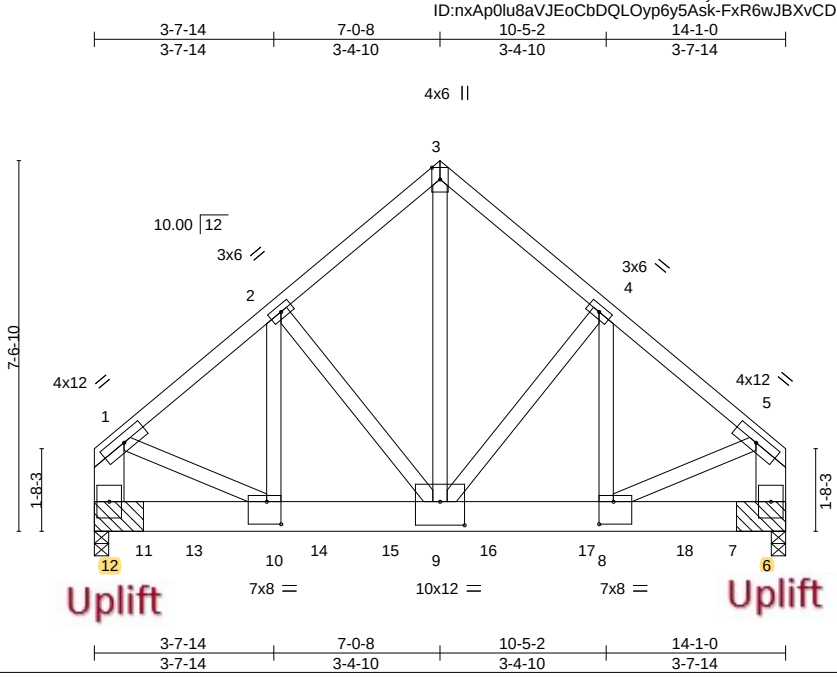

Plate Offsets (X,Y)-- [8:0-3-8,0-5-8], [9:0-6-0,0-5-12], [10:0-3-8,0-5-8]

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	0.25	Vert(LL)	-0.05	9-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.22	Vert(CT)	-0.09	9-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 130 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x8 SP 2400F 2.0E
WEBS	2x4 SP No.3 *Except* 3-9: 2x4 SP No.2, 1-12,5-6: 2x8 SP 2400F 2.0E

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-3-5 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 12=(0-3-8 + bearing block) (req. 0-4-2), 6=(0-3-8 + bearing block) (req. 0-4-1)
Max Horz 12=-170(LC 23)
Max Uplift 12=-740(LC 8), 6=-715(LC 9)
Max Grav 12=3491(LC 2), 6=3420(LC 2)

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

TOP CHORD	1-2=-3033/667, 2-3=-2483/605, 3-4=-2483/605, 4-5=-3008/658, 1-12=-2823/607, 5-6=-2805/600
BOT CHORD	10-12=-223/427, 9-10=-524/2289, 8-9=-456/2269, 6-8=-89/341
WEBS	3-9=-690/2968, 4-9=-633/233, 4-8=-173/717, 2-9=-664/245, 2-10=-188/757, 1-10=-422/2105, 5-8=-420/2099

NOTES-

1) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 12 attached to front face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners. Bearing is assumed to be SP No.2.
2) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 6 attached to front face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners. Bearing is assumed to be SP No.2.
3) Unbalanced roof live loads have been considered for this design.
4) 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; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=740, 6=715.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1067 lb down and 252 lb up at 2-0-4, 996 lb down and 223 lb up at 4-0-4, 996 lb down and 223 lb up at 6-0-4, 996 lb down and 223 lb up at 8-0-4, and 996 lb down and 223 lb up at 10-0-4, and 996 lb down and 223 lb up at 12-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) 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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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 23,2023

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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, 6-12=-20
   Concentrated Loads (lb)
   Vert: 13=-935(B) 14=-846(B) 15=-846(B) 16=-846(B) 17=-846(B) 18=-846(B)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

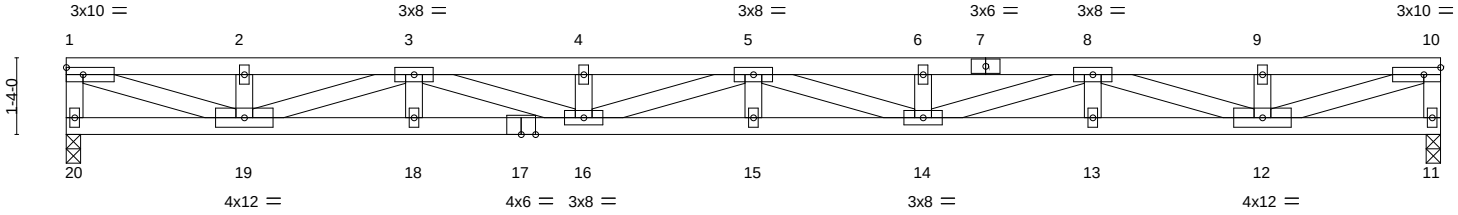
Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	TF01	FLOOR	2	2	T30878321
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:30 2023 Page 1

ID:nxAp0lu8aVJEoCbDQLOyp6y5Ask-j8_U8fC9gWLfgTazGu3GWprZ4DRT5v0lxkgdBmz3qu7

3-1-3	6-0-10	9-0-1	11-11-8	14-10-15	17-10-6	20-9-13	23-11-0
3-1-3	2-11-7	2-11-7	2-11-7	2-11-7	2-11-7	2-11-7	3-1-3

Scale = 1:40.1



THIS TRUSS IS DESIGNED TO SUPPORT ONLY 2'-0"
OF UNIFORM LOAD AS SHOWN.

3-1-3	6-0-10	9-0-1	11-11-8	14-10-15	17-10-6	20-9-13	23-11-0
3-1-3	2-11-7	2-11-7	2-11-7	2-11-7	2-11-7	2-11-7	3-1-3

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	40.0	Plate Grip DOL	1.00	TC	0.20	Vert(LL)	-0.40	15	>702	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.46	Vert(CT)	-0.56	15	>510	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.06	11	n/a	n/a		
BCDL	5.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 228 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP 2850F 2.0E or 2x4 SP M 31
BOT CHORD	2x4 SP 2850F 2.0E or 2x4 SP M 31
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 20=0-3-0, 11=0-3-0
Max Grav 20=1299(LC 1), 11=1299(LC 1)

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

TOP CHORD	1-20=-1239/0, 1-2=-3170/0, 2-3=-3170/0, 3-4=-6780/0, 4-5=-6780/0, 5-6=-6780/0, 6-8=-6780/0, 8-9=-3170/0, 9-10=-3170/0, 10-11=-1239/0
BOT CHORD	18-19=0/5442, 16-18=0/5442, 15-16=0/7233, 14-15=0/7233, 13-14=0/5442, 12-13=0/5442
WEBS	1-19=0/3207, 2-19=-278/0, 3-19=-2409/0, 3-16=0/1419, 4-16=-289/0, 5-16=-480/0, 5-14=-480/0, 6-14=-289/0, 8-14=0/1419, 8-12=-2409/0, 9-12=-278/0, 10-12=0/3207

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) The Fabrication Tolerance at joint 7 = 20%, joint 17 = 20%
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

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

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	TF01G	FLOOR	1	4	T30878322
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:30 2023 Page 1

ID:nxAp0lu8aVJEoCbDQLOyp6y5Ask-j8_U8fC9gWLfgTazGu3GWprUiDPo5u3IxkgdBmz3qu7

3-1-3	6-0-10	9-0-1	11-11-8	14-10-15	17-10-6	20-9-13	23-11-0
3-1-3	2-11-7	2-11-7	2-11-7	2-11-7	2-11-7	2-11-7	3-1-3

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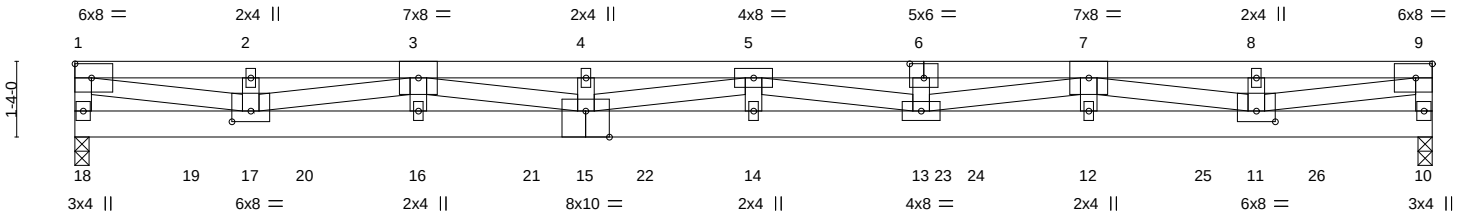

THIS TRUSS IS NOT SYMMETRIC.
PROPER ORIENTATION IS ESSENTIAL.

3-1-3	6-0-10	9-0-1	11-11-8	14-10-15	17-10-6	20-9-13	23-11-0
3-1-3	2-11-7	2-11-7	2-11-7	2-11-7	2-11-7	2-11-7	3-1-3

Plate Offsets (X,Y)-- [6:0-3-0,0-3-0], [11:0-4-0,0-2-4], [15:0-5-0,Edge], [17:0-4-0,0-2-4]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	40.0	Plate Grip DOL	1.00	TC	0.54	Vert(LL)	-0.57	13-14	>498	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(CT)	-0.77	13-14	>368	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.06	10	n/a	n/a		
BCDL	5.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 526 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP 2850F 2.0E or 2x4 SP M 31
BOT CHORD	2x6 SP M 26
WEBS	2x4 SP No.3 *Except* 1-17,3-17,3-15,5-15,5-13,7-13,7-11,9-11: 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 18=0-3-0, 10=0-3-0
Max Grav 18=3193(LC 1), 10=3932(LC 1)

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

TOP CHORD	1-18=-2777/0, 1-2=-8329/0, 2-3=-8329/0, 3-4=-19727/0, 4-5=-19728/0, 5-6=-22575/0, 6-7=-22580/0, 7-8=-10221/0, 8-9=-10221/0, 9-10=-3378/0
BOT CHORD	17-18=0/559, 16-17=0/15699, 15-16=0/15699, 14-15=0/23559, 13-14=0/23559, 12-13=0/18973, 11-12=0/18973, 10-11=0/690
WEBS	1-17=0/8169, 3-17=-7748/0, 3-16=0/689, 3-15=0/4235, 5-15=-4027/0, 5-14=0/1119, 5-13=-1034/0, 7-13=0/3792, 7-12=0/1254, 7-11=-9201/0, 9-11=0/10020

NOTES-

1) 4-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
   Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 219 lb down at 2-0-12, 219 lb down at 4-0-12, 219 lb down at 6-0-12, 219 lb down at 8-0-12, 219 lb down at 10-0-12, 636 lb down at 11-9-15, 1165 lb down at 15-3-12, 407 lb down at 15-10-12, 407 lb down at 17-10-12, and 407 lb down at 19-10-12, and 407 lb down at 21-10-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 1-9=-100, 10-18=-10
   Concentrated Loads (lb)
   Vert: 16=-219(B) 14=-636(B) 12=-407(B) 19=-219(B) 20=-219(B) 21=-219(B) 22=-219(B) 23=-1165(B) 24=-407(B) 25=-407(B) 26=-407(B)

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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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	TF02	FLOOR	5	1	T30878323
					Job Reference (optional)

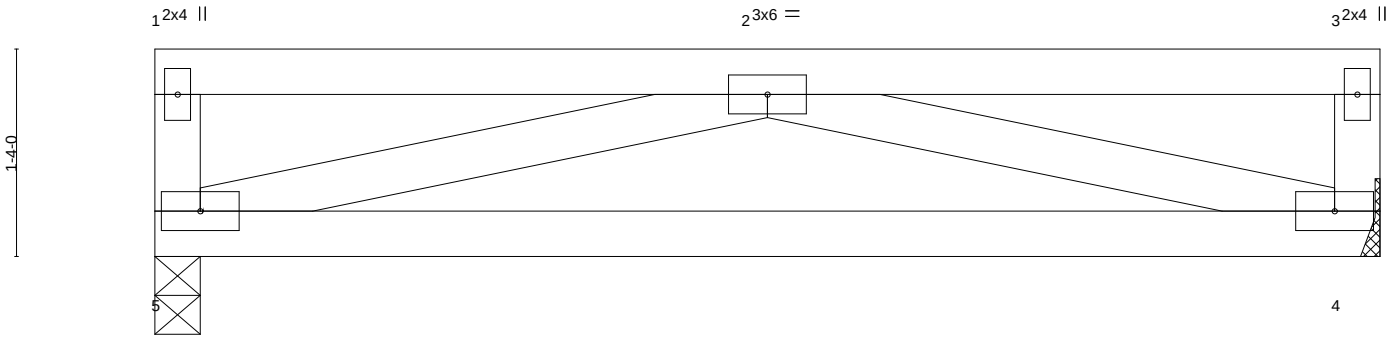
Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:31 2023 Page 1

ID:nxAp0lu8aVJEoCbDQLOyp6y5Ask-BKYsL?DnRqTWHd89pcaV31NjedpGqToRAOPAjCz3qu6

3-11-4 | 7-10-8

3-11-4 | 3-11-4

Scale = 1:14.8



7-10-8

7-10-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.27	Vert(LL)	-0.00	4-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.36	Vert(CT)	-0.05	4-5	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.01	4	n/a	n/a		
BCDL	5.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 37 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, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 4=Mechanical
Max Grav 5=417(LC 1), 4=417(LC 1)

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

BOT CHORD	4-5=0/825
WEBS	2-5=-766/0, 2-4=-766/0

NOTES-

1) Refer to girder(s) for truss to truss connections.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

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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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	TF03	FLOOR	1	2	T30878324

Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:31 2023 Page 1

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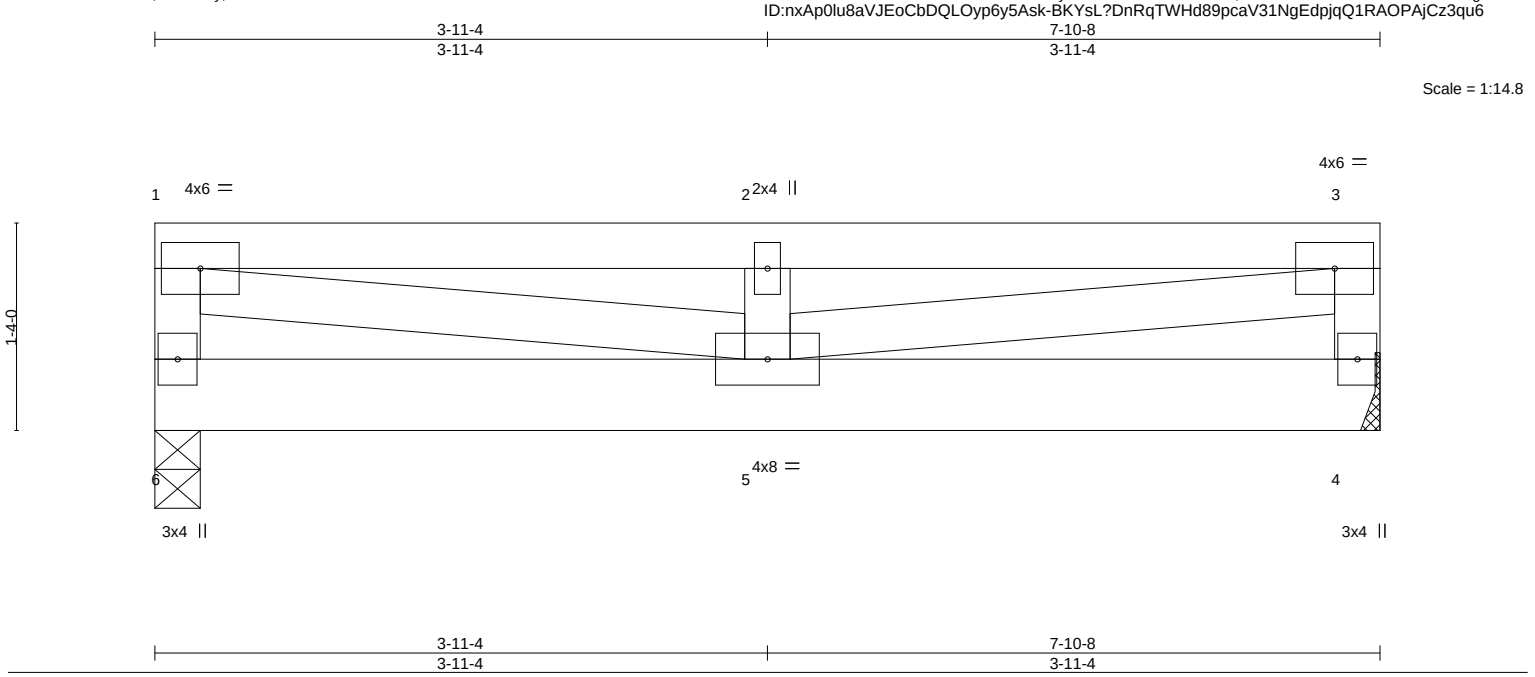

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.49	Vert(LL)	-0.04	5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.33	Vert(CT)	-0.06	5	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 86 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 4=Mechanical
Max Grav 6=1175(LC 1), 4=1175(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-1002/0, 1-2=-2221/0, 2-3=-2221/0, 3-4=-1002/0
BOT CHORD 5-6=0/354, 4-5=0/354
WEBS 1-5=0/1926, 2-5=-1215/0, 3-5=0/1926

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-3=-300, 4-6=-10

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

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	TF04	FLOOR	6	1	T30878325
					Job Reference (optional)

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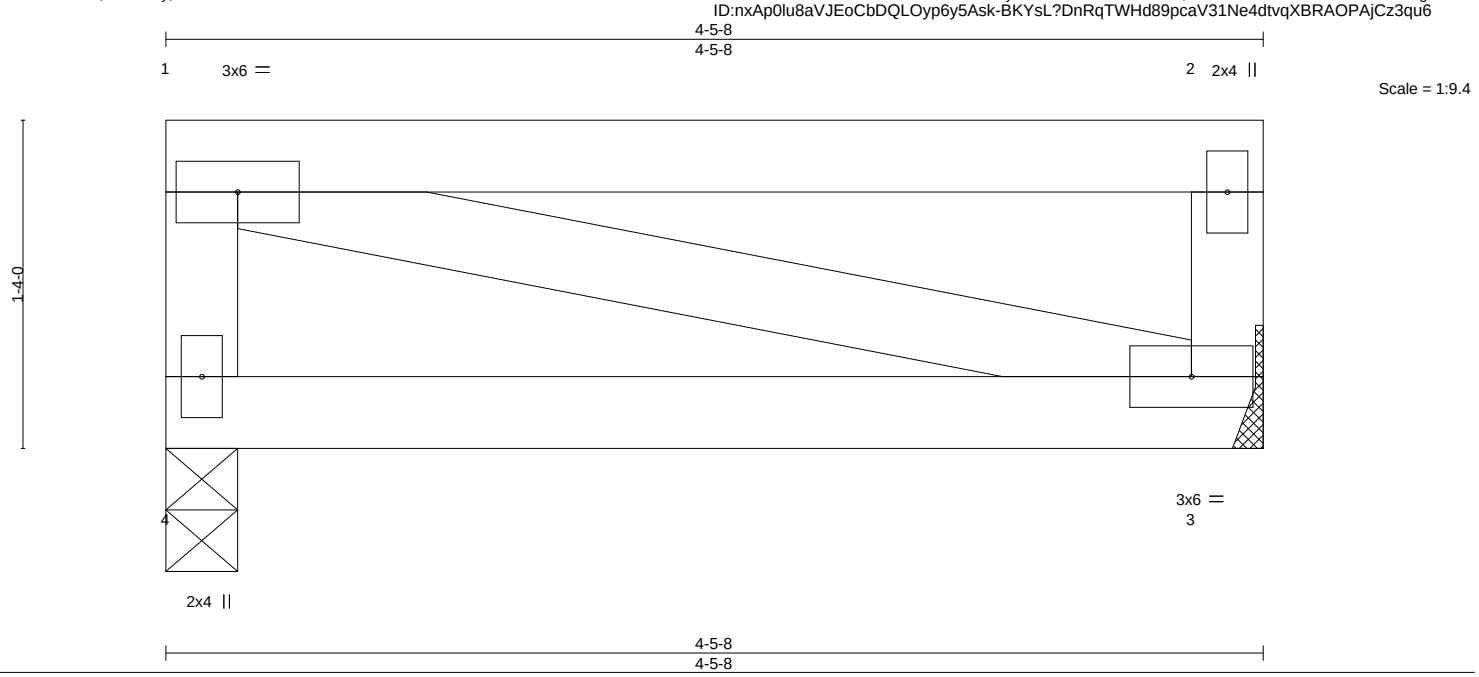

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.63	Vert(LL)	0.00	4	****	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.07	Vert(CT)	-0.01	3-4	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	5.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 21 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 4-5-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=0-3-8, 3=Mechanical
Max Grav 4=229(LC 1), 3=229(LC 1)

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

NOTES-

1) Refer to girder(s) for truss to truss connections.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

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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:

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES.
3574425	TF05	FLOOR	1	2	T30878326
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:32 2023 Page 1
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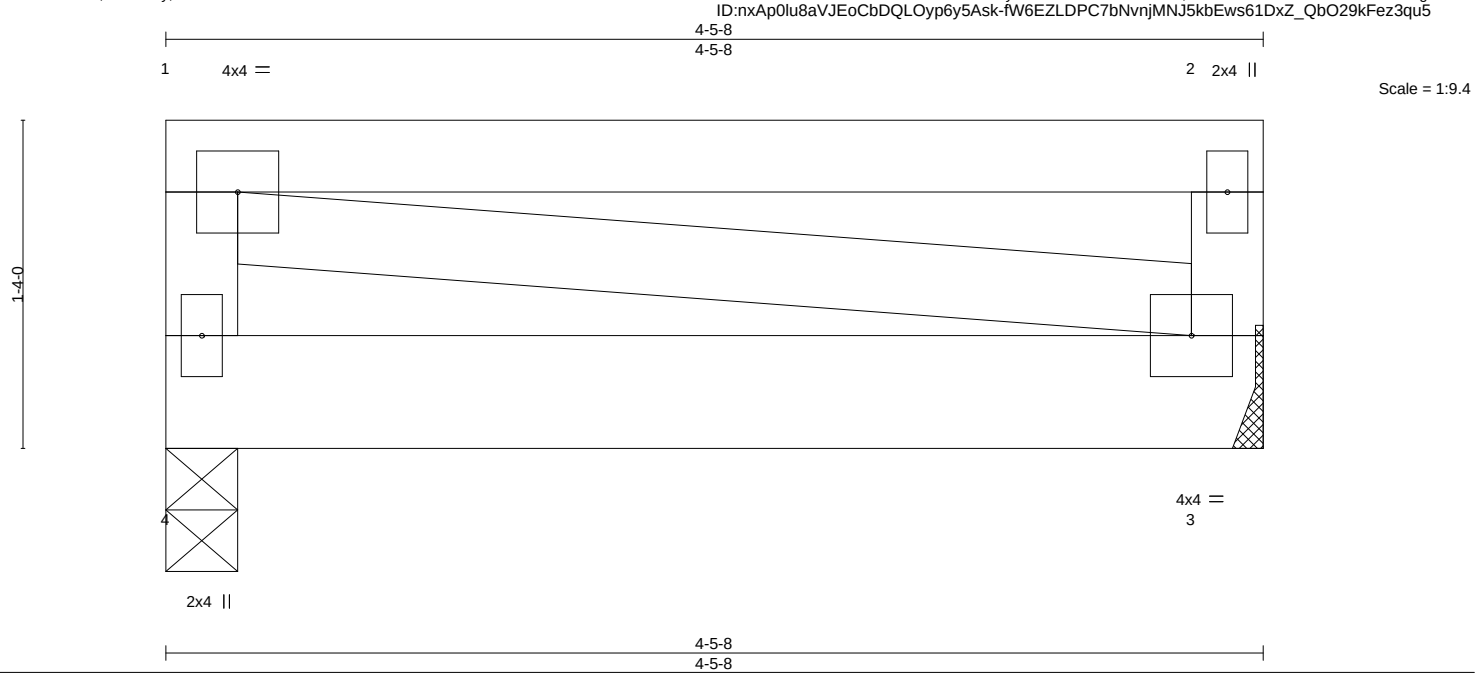

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.42	Vert(LL)	0.00	4	****	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	-0.00	3-4	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	5.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 49 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP 2850F 2.0E or 2x4 SP M 31
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=0-3-8, 3=Mechanical
Max Grav 4=646(LC 1), 3=646(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-4=-625/0, 2-3=-625/0

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-2=-300(F=-200), 3-4=-10

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

June 23,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - URRUTIA RES. T30878327
3574425	TG01	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 8.530 s May 26 2022 MiTek Industries, Inc. Thu Jun 22 16:46:33 2023 Page 1

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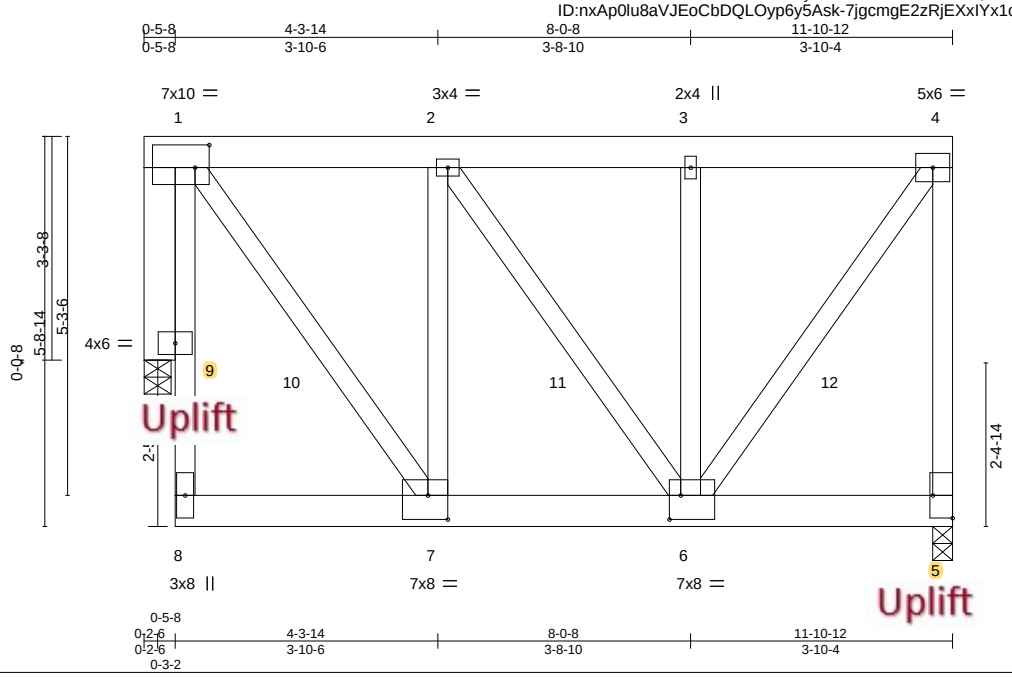

Scale = 1:33.9

Plate Offsets (X,Y)-- [1:0-2-8,0-4-0], [5:Edge,0-3-8], [6:0-2-0,0-4-4], [7:0-3-8,0-4-4]

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	0.62	Vert(LL)	-0.03	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.56	Vert(CT)	-0.06	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.82	Horz(CT)	-0.02	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 232 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2 *Except* 1-8: 2x4 SP No.3
WEBS	2x4 SP No.3
OTHERS	2x6 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 9=0-4-12
Max Horz 9=439(LC 4)
Max Uplift 5=-1376(LC 4), 9=-1465(LC 4)
Max Grav 5=4857(LC 1), 9=4861(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2530/683, 2-3=-2508/705, 3-4=-2508/705, 4-5=-3935/1098
BOT CHORD 8-9=-286/935, 1-9=-3952/1179, 6-7=-683/2530
WEBS 1-7=-1322/4260, 2-7=-866/299, 3-6=-923/233, 4-6=-1209/4304

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x4 - 2 rows staggered at 0-3-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) 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
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=1376, 9=1465.
11) Girder carries tie-in span(s): 15-0-0 from 0-0-0 to 12-2-4; 12-0-0 from 0-0-0 to 12-2-4; 12-0-0 from 0-0-0 to 12-2-4
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 418 lb down and 149 lb up at 2-2-8, 418 lb down and 149 lb up at 4-2-8, 418 lb down and 149 lb up at 6-1-8, and 418 lb down and 149 lb up at 8-1-8, and 418 lb down and 149 lb up at 10-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

June 23,2023

LOAD CASE(S) Standard

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

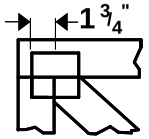
LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-239(F=-185), 5-8=-446(F=-426)
   Concentrated Loads (lb)
   Vert: 7=-418(F) 6=-418(F) 10=-418(F) 11=-418(F) 12=-418(F)

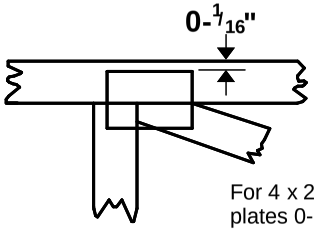
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

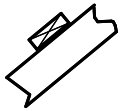
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

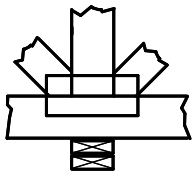
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

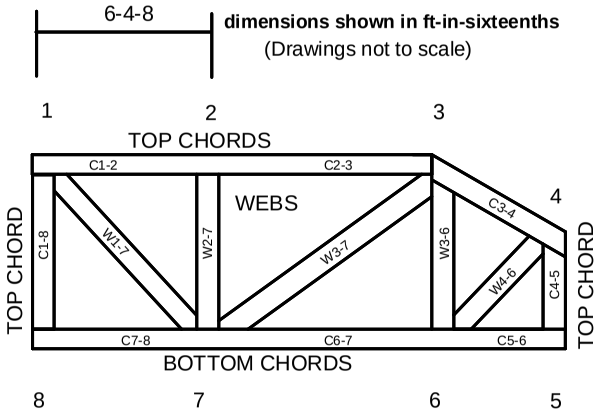


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.