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

RE: Betsy_Soto - Betsy Soto

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

Site Information:

Customer Info: Betsy Soto Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: Ft. White 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):

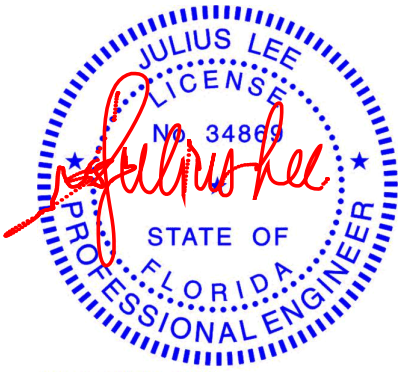
Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.5
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 17 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T30040007	A1GIR	3/13/23
2	T30040008	A2	3/13/23
3	T30040009	A3	3/13/23
4	T30040010	A4	3/13/23
5	T30040011	A5	3/13/23
6	T30040012	A6	3/13/23
7	T30040013	A7	3/13/23
8	T30040014	A8GIR	3/13/23
9	T30040015	CJ01	3/13/23
10	T30040016	CJ02	3/13/23
11	T30040017	J1	3/13/23
12	T30040018	J1A	3/13/23
13	T30040019	J2	3/13/23
14	T30040020	J2A	3/13/23
15	T30040021	J3	3/13/23
16	T30040022	J4	3/13/23
17	T30040023	J5	3/13/23

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Mayo Truss Company, Inc..

Truss Design Engineer's Name: Lee, Julius
My license renewal date for the state of Florida is February 28, 2025.



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

March 14,2023

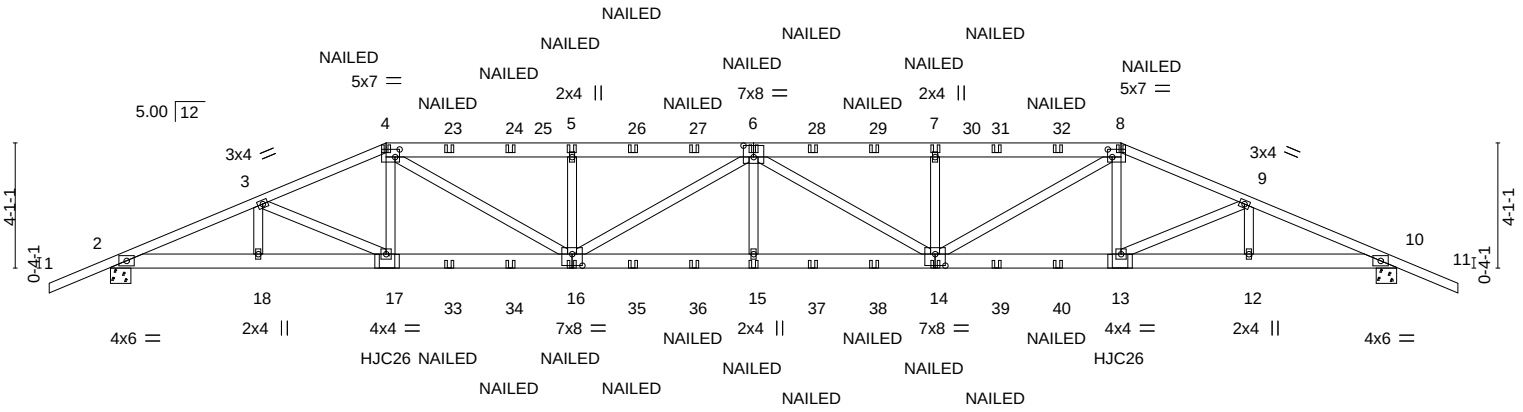
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	A1GIR	Hip Girder	1	2	T30040007
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:29 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-AAxOOHNV1CvVBC0jqjsTApPEEtsMVGPSt0ZPyszbOfK

-2-0-0	4-9-14	9-0-0	15-0-14	21-0-0	26-11-2	33-0-0	37-2-2	42-0-0	44-0-0
2-0-0	4-9-14	4-2-2	6-0-14	5-11-2	5-11-2	6-0-14	4-2-2	4-9-14	2-0-0

Scale = 1:75.2



4-9-14	9-0-0	15-0-14	21-0-0	26-11-2	33-0-0	37-2-2	42-0-0
4-9-14	4-2-2	6-0-14	5-11-2	5-11-2	6-0-14	4-2-2	4-9-14

Plate Offsets (X,Y)-- [4:0-1-12,0-3-0], [6:0-4-0,0-4-8], [8:0-1-12,0-3-0], [14:0-4-0,0-4-8], [16:0-4-0,0-4-8]

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	0.19	Vert(LL)	-0.22	15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.52	Vert(CT)	-0.43	15	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 540 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-8-0, 10=0-8-0
Max Horz 2=-78(LC 23)
Max Uplift 2=-274(LC 8), 10=-274(LC 8)
Max Grav 2=2007(LC 1), 10=2007(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4424/562, 3-4=-4071/609, 4-5=-5175/743, 5-6=-5172/742, 6-7=-5172/742, 7-8=-5175/743, 8-9=-4071/609, 9-10=-4424/562
BOT CHORD 2-18=-450/4057, 17-18=-450/4057, 16-17=-456/3732, 15-16=-647/5582, 14-15=-647/5582, 13-14=-456/3732, 12-13=-450/4057, 10-12=-450/4057
WEBS 3-17=-413/47, 4-17=-72/434, 4-16=-195/1758, 5-16=-465/106, 6-16=-547/28, 6-15=0/307, 6-14=-547/28, 7-14=-465/106, 8-14=-195/1758, 8-13=-72/434, 9-13=-413/47

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, 2x6 - 2 rows staggered 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) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional); cantilever left and right exposed ; 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=274, 10=274.
10) Use MiTek HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 23-11-4 oc max. starting at 9-0-6 from the left end to 32-11-10 to connect truss(es) to front face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

Continued on page 2

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

March 14,2023

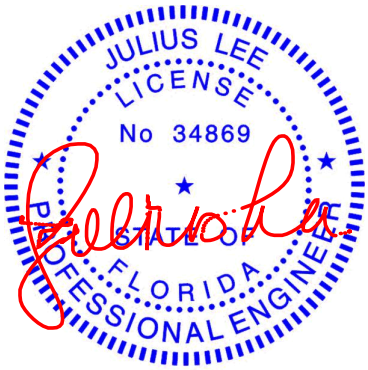
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-60, 4-8=-60, 8-11=-60, 2-10=-20
   Concentrated Loads (lb)
   Vert: 17=-83(F) 16=-23(F) 15=-23(F) 14=-23(F) 13=-83(F) 33=-23(F) 34=-23(F) 35=-23(F) 36=-23(F) 37=-23(F) 38=-23(F) 39=-23(F) 40=-23(F)



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

March 14,2023

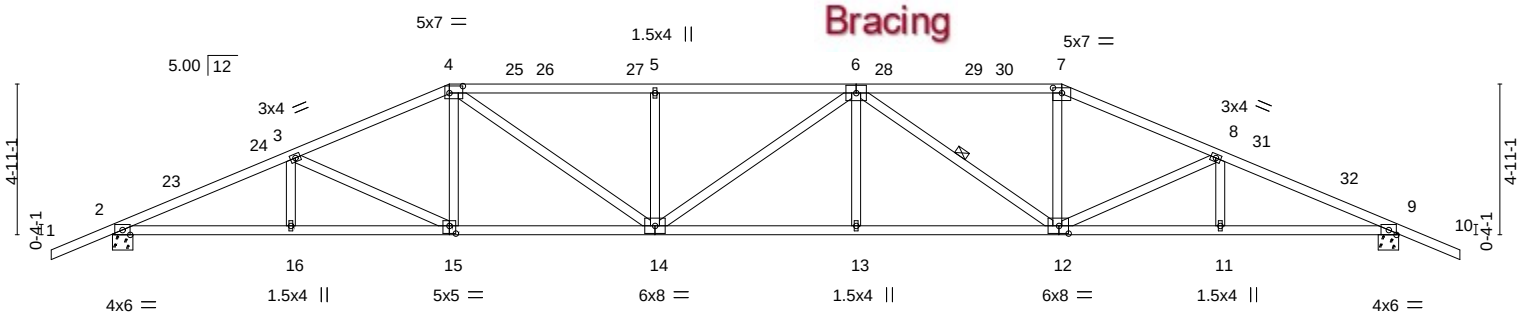
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	A2	Hip	2	1	T30040008
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:32 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-aldX0JPOK7I32gIlVrPAoS1aL4nZibPuZ_o3ZBzbOfH

-2-0-0	5-9-14	11-0-0	17-8-9	24-3-7	31-0-0	36-2-2	42-0-0	44-0-0
2-0-0	5-9-14	5-2-2	6-8-9	6-6-13	6-8-9	5-2-2	5-9-14	2-0-0

Scale = 1:75.2



5-9-14	11-0-0	17-8-9	24-3-7	31-0-0	36-2-2	42-0-0
5-9-14	5-2-2	6-8-9	6-6-13	6-8-9	5-2-2	5-9-14

Plate Offsets (X,Y)-- [4:0-5-4,0-2-12], [7:0-3-8,0-2-1], [12:0-3-12,0-3-0], [15:0-2-8,0-3-0]

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	0.84	Vert(LL)	-0.36	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	1.00	Vert(CT)	-0.77	14-15	>652	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.23	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 217 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except*
	6-7: 2x4 SP No.1
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-12

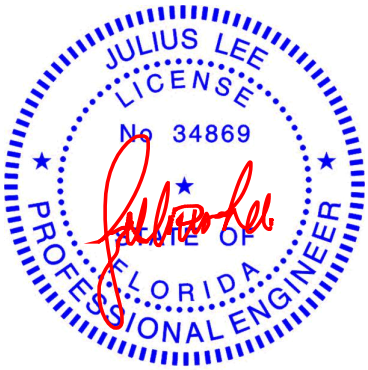
REACTIONS. (size) 2=0-8-0, 9=0-8-0
Max Horz 2=-92(LC 10)
Max Uplift 2=-49(LC 12), 9=-49(LC 12)
Max Grav 2=1800(LC 1), 9=1800(LC 1)

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

TOP CHORD	2-3=-3767/132, 3-4=-3254/149, 4-5=-3751/180, 5-6=-3751/180, 6-7=-2971/159, 7-8=-3256/150, 8-9=-3763/130
BOT CHORD	2-16=-44/3423, 15-16=-44/3423, 14-15=-4/2948, 13-14=-3/3711, 12-13=-3/3711, 11-12=-60/3419, 9-11=-60/3419
WEBS	3-15=-529/52, 4-15=0/404, 4-14=-39/1083, 5-14=-469/115, 6-13=0/325, 6-12=-1009/0, 7-12=0/836, 8-12=-516/48

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 2-2-6, Interior(1) 2-2-6 to 11-0-0, Exterior(2R) 11-0-0 to 16-11-4, Interior(1) 16-11-4 to 31-0-0, Exterior(2R) 31-0-0 to 36-11-4, Interior(1) 36-11-4 to 44-0-0 zone; cantilever left and right exposed ; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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

March 14,2023

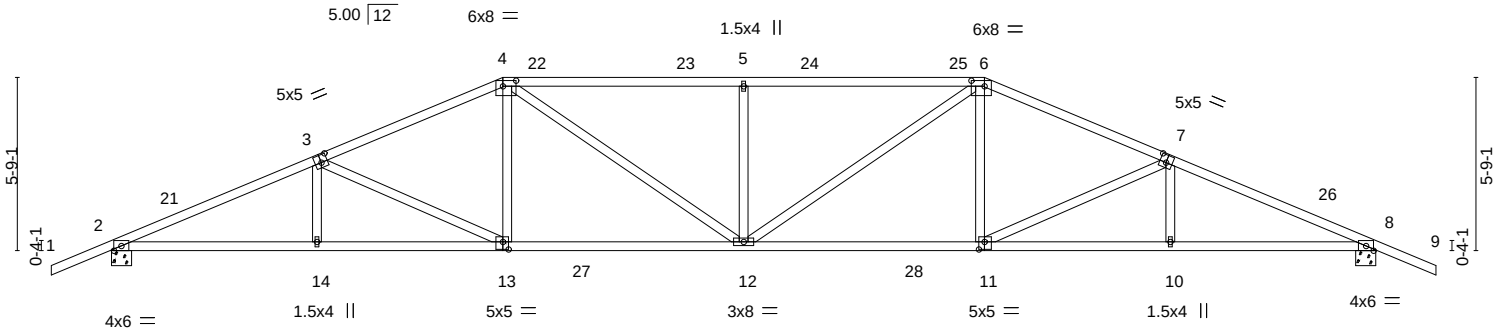
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	A3	Hip	2	1	T30040009
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:34 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-X8lHR_ReskYnH_vgcGRett7uvuVyAQSB1IHAe3zbOfF

-2-0-0	6-9-14	13-0-0	21-0-0	29-0-0	35-2-2	42-0-0	44-0-0
2-0-0	6-9-14	6-2-2	8-0-0	8-0-0	6-2-2	6-9-14	2-0-0

Scale = 1:76.5



6-9-14	13-0-0	21-0-0	29-0-0	35-2-2	42-0-0
6-9-14	6-2-2	8-0-0	8-0-0	6-2-2	6-9-14

Plate Offsets (X,Y)-- [3:0-2-8,0-3-0], [4:0-5-4,0-2-4], [6:0-5-4,0-2-4], [7:0-2-8,0-3-0], [11:0-2-4,0-3-0], [13:0-2-4,0-3-0]

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	0.90	Vert(LL)	-0.41	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.81	Vert(CT)	-0.78	12-13	>643	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.20	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 213 lb	FT = 20%

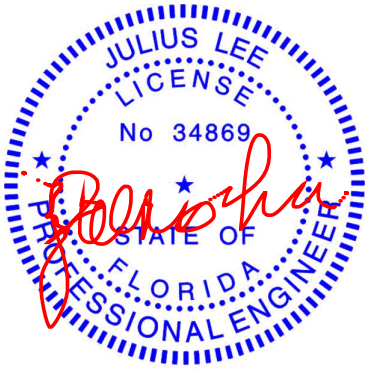
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-8-0, 8=0-8-0
Max Horz 2=106(LC 11)
Max Uplift 2=-49(LC 12), 8=-49(LC 12)
Max Grav 2=1987(LC 17), 8=1987(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4107/115, 3-4=-3380/157, 4-5=-3638/168, 5-6=-3638/168, 6-7=-3380/157, 7-8=-4107/115
BOT CHORD 2-14=-19/3797, 13-14=-22/3788, 12-13=0/3136, 11-12=-9/3056, 10-11=-39/3708, 8-10=-36/3717
WEBS 3-14=0/296, 3-13=-723/33, 4-13=0/534, 4-12=-7/821, 5-12=-531/120, 6-12=-7/821, 6-11=0/534, 7-11=-724/33, 7-10=0/296

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 2-2-6, Interior(1) 2-2-6 to 13-0-0, Exterior(2R) 13-0-0 to 18-11-4, Interior(1) 18-11-4 to 29-0-0, Exterior(2R) 29-0-0 to 35-1-0, Interior(1) 35-1-0 to 44-0-0 zone; cantilever left and right exposed ; 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) 2, 8.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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

March 14,2023

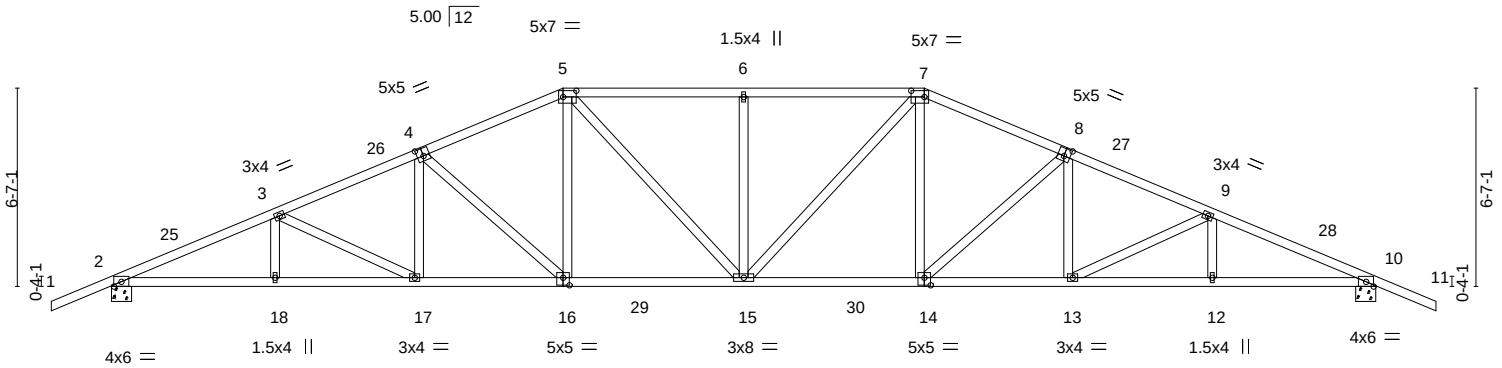
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	A4	Hip	2	1	T30040010
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:36 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-TWs2sgSuOMoVXH33khU6yICLmhA8eMTUUcmGiyzbOfD

-2-0-0	5-5-3	10-2-10	15-0-0	21-0-0	27-0-0	31-9-6	36-6-13	42-0-0	44-0-0
2-0-0	5-5-3	4-9-6	4-9-6	6-0-0	6-0-0	4-9-6	4-9-6	5-5-3	2-0-0

Scale = 1:76.5



5-5-3	10-2-10	15-0-0	21-0-0	27-0-0	31-9-6	36-6-13	42-0-0
5-5-3	4-9-6	4-9-6	6-0-0	6-0-0	4-9-6	4-9-6	5-5-3

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-5-4,0-2-8], [7:0-5-4,0-2-8], [8:0-2-8,0-3-0], [14:0-2-8,0-3-0], [16:0-2-8,0-3-0]

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	0.49	Vert(LL)	-0.36	15-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.89	Vert(CT)	-0.67	15-16	>754	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.22	10	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 238 lb	FT = 20%

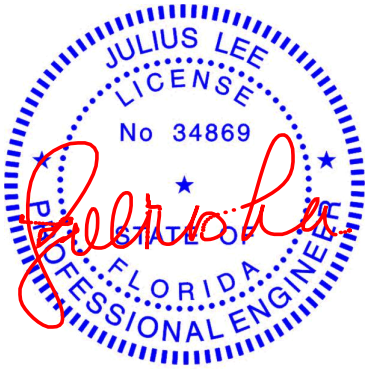
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-8-0, 10=0-8-0
Max Horz 2=121(LC 11)
Max Uplift 2=-49(LC 12), 10=-49(LC 12)
Max Grav 2=1988(LC 17), 10=1988(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4229/133, 3-4=-3701/146, 4-5=-3133/170, 5-6=-3126/177, 6-7=-3126/177, 7-8=-3133/170, 8-9=-3701/146, 9-10=-4229/132
BOT CHORD 2-18=-47/3944, 17-18=-47/3944, 16-17=-8/3424, 15-16=0/2918, 14-15=0/2841, 13-14=-26/3334, 12-13=-64/3855, 10-12=-64/3855
WEBS 3-17=-567/44, 4-17=0/441, 4-16=-688/43, 5-16=0/641, 5-15=-12/530, 6-15=-392/96, 7-15=-12/530, 7-14=0/641, 8-14=-688/43, 8-13=0/442, 9-13=-568/44

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 2-2-6, Interior(1) 2-2-6 to 15-0-0, Exterior(2R) 15-0-0 to 21-0-0, Interior(1) 21-0-0 to 27-0-0, Exterior(2R) 27-0-0 to 32-11-4, Interior(1) 32-11-4 to 44-0-0 zone; cantilever left and right exposed ; 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) 2, 10.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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

March 14,2023

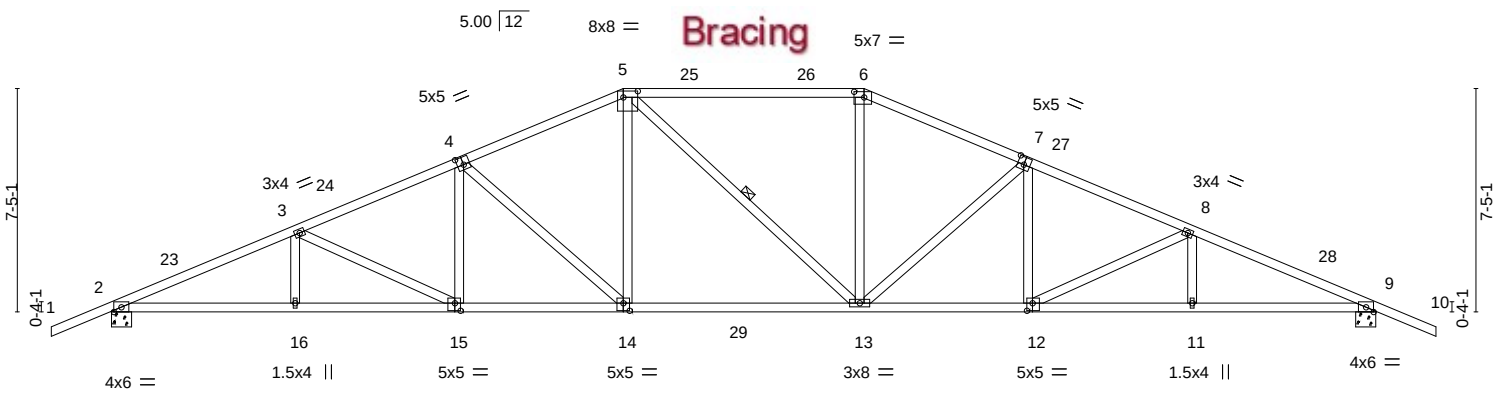
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	A5	Hip	2	1	T30040011
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:38 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdlt5-Pv_oHMU8vz2DmbCRr6Wa2jHdNVr06DpnywFNnqzbOfB

-2-0-0	6-1-3	11-6-10	17-0-0	25-0-0	30-5-6	35-10-13	42-0-0	44-0-0
2-0-0	6-1-3	5-5-6	5-5-6	8-0-0	5-5-6	5-5-6	6-1-3	2-0-0

Scale = 1:76.5



6-1-3	11-6-10	17-0-0	25-0-0	30-5-6	35-10-13	42-0-0
6-1-3	5-5-6	5-5-6	8-0-0	5-5-6	5-5-6	6-1-3

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-5-12,0-2-8], [6:0-4-0,0-2-4], [7:0-2-8,0-3-0], [12:0-2-4,0-3-0], [14:0-2-8,0-3-0], [15:0-2-4,0-3-0]

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	0.74	Vert(LL)	-0.43	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.93	Vert(CT)	-0.80	13-14	>633	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.21	9	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 230 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except*
	5-6: 2x4 SP No.1
BOT CHORD	2x4 SP No.2 *Except*
	12-14: 2x4 SP No.1
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-13

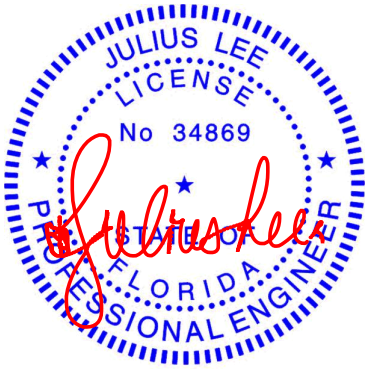
REACTIONS. (size) 2=0-8-0, 9=0-8-0
Max Horz 2=-135(LC 10)
Max Uplift 2=-49(LC 12), 9=-49(LC 12)
Max Grav 2=1983(LC 17), 9=1977(LC 18)

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

TOP CHORD	2-3=-4193/132, 3-4=-3541/157, 4-5=-2900/180, 5-6=-2678/181, 6-7=-2907/169, 7-8=-3527/157, 8-9=-4179/132
BOT CHORD	2-16=-42/3918, 15-16=-42/3918, 14-15=-8/3261, 13-14=0/2709, 12-13=-25/3149, 11-12=-59/3805, 9-11=-59/3805
WEBS	3-15=-704/40, 4-15=0/486, 4-14=-748/52, 5-14=0/751, 6-13=0/746, 7-13=-713/64, 7-12=0/447, 8-12=-705/40

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 2-2-6, Interior(1) 2-2-6 to 17-0-0, Exterior(2R) 17-0-0 to 22-11-4, Interior(1) 22-11-4 to 25-0-0, Exterior(2R) 25-0-0 to 30-11-4, Interior(1) 30-11-4 to 44-0-0 zone; cantilever left and right exposed ; 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) 2, 9.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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

March 14,2023

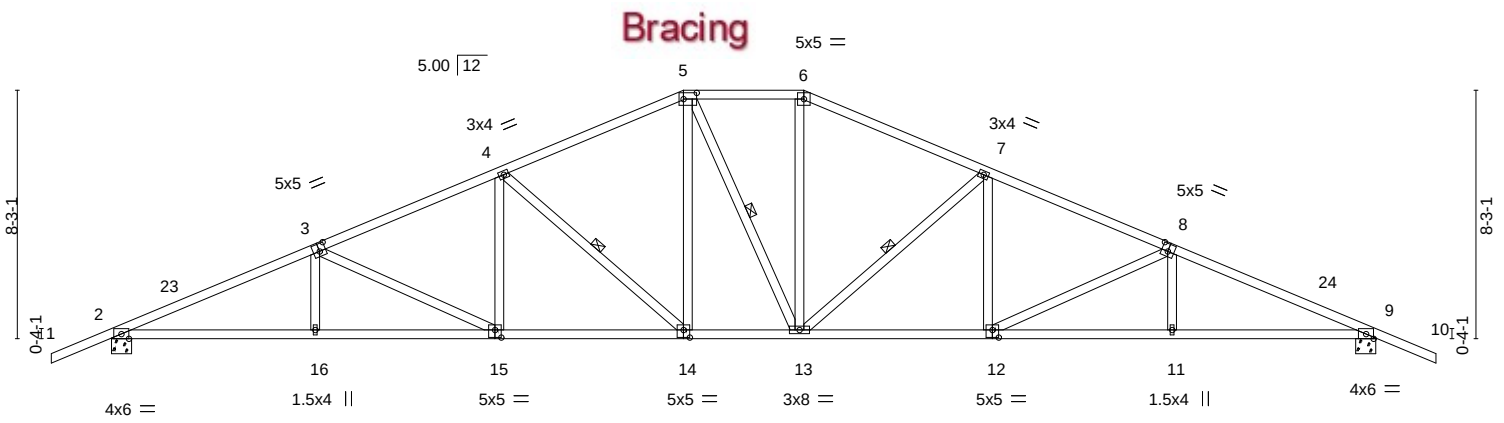
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	A6	Hip	2	1	T30040012
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:40 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-LI6Yh2VPRaIx0vMqzXY278MxEIY3aBF4PEkUrjzbOf9

-2-0-0	6-9-3	12-10-10	19-0-0	23-0-0	29-1-6	35-2-13	42-0-0	44-0-0
2-0-0	6-9-3	6-1-6	6-1-6	4-0-0	6-1-6	6-1-6	6-9-3	2-0-0

Scale = 1:76.5



6-9-3	12-10-10	19-0-0	23-0-0	29-1-6	35-2-13	42-0-0
6-9-3	6-1-6	6-1-6	4-0-0	6-1-6	6-1-6	6-9-3

Plate Offsets (X,Y)-- [3:0-2-8,0-3-0], [5:0-5-4,0-2-8], [8:0-2-8,0-3-0], [12:0-2-8,0-3-0], [14:0-2-8,0-3-0], [15:0-2-8,0-3-0]

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	0.84	Vert(LL)	-0.26	14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.89	Vert(CT)	-0.60	14-15	>836	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.20	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 237 lb	FT = 20%

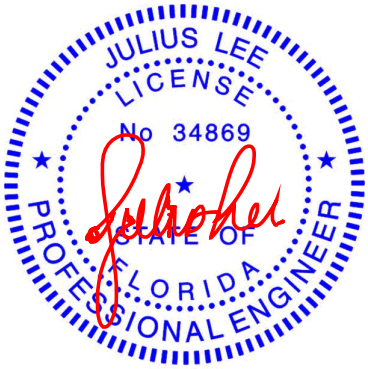
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-14, 5-13, 7-13

REACTIONS. (size) 2=0-8-0, 9=0-8-0
Max Horz 2=149(LC 11)
Max Uplift 2=-49(LC 12), 9=-49(LC 12)
Max Grav 2=1800(LC 1), 9=1800(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3678/99, 3-4=-3082/158, 4-5=-2456/176, 5-6=-2203/178, 6-7=-2455/170, 7-8=-3082/158, 8-9=-3678/99
BOT CHORD 2-16=-5/3322, 15-16=-7/3317, 14-15=-4/2798, 13-14=0/2192, 12-13=-20/2798, 11-12=-24/3317, 9-11=-22/3322
WEBS 3-16=0/288, 3-15=-572/6, 4-15=0/435, 4-14=-808/83, 5-14=-7/616, 6-13=0/635, 7-13=-801/90, 7-12=0/413, 8-12=-572/6, 8-11=0/288

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 2-2-6, Interior(1) 2-2-6 to 19-0-0, Exterior(2E) 19-0-0 to 23-0-0, Exterior(2R) 23-0-0 to 29-1-6, Interior(1) 29-1-6 to 44-0-0 zone; cantilever left and right exposed ; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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

March 14,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

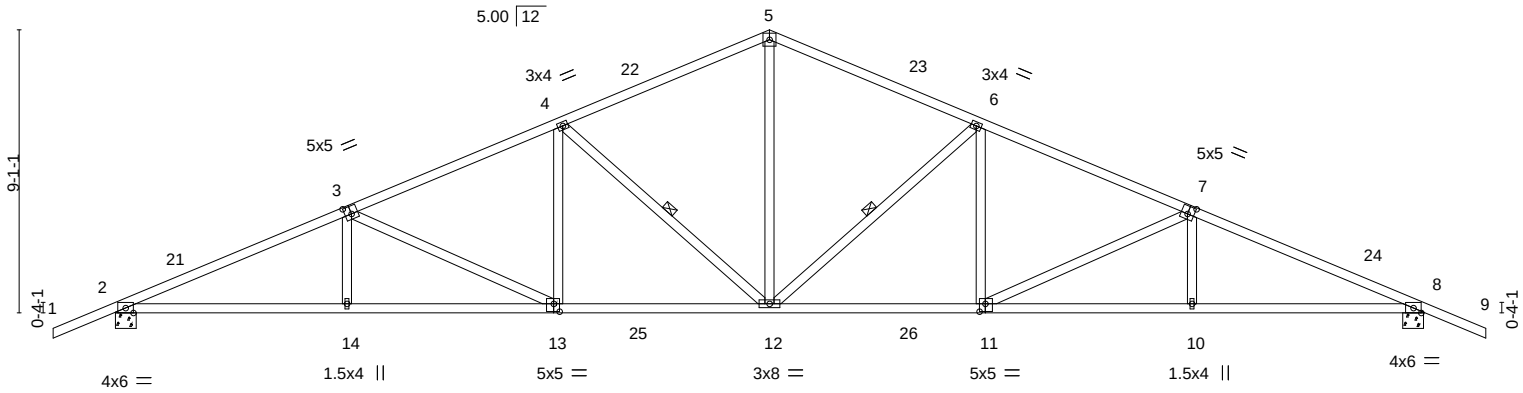
Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	A7	Common	5	1	T30040013
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:42 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-IgDJ6kXfzCYfFCWD4ybWCZSIa6Bq203MsYDbwczbOf7

-2-0-0	7-5-3	14-2-10	21-0-0	27-9-6	34-6-13	42-0-0	44-0-0
2-0-0	7-5-3	6-9-6	6-9-6	6-9-6	6-9-6	7-5-3	2-0-0

Scale = 1:74.0

Bracing



7-5-3	14-2-10	21-0-0	27-9-6	34-6-13	42-0-0
7-5-3	6-9-6	6-9-6	6-9-6	6-9-6	7-5-3

Plate Offsets (X,Y)-- [3:0-2-8,0-3-0], [7:0-2-8,0-3-0], [11:0-2-4,0-3-0], [13:0-2-4,0-3-0]

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	0.79	Vert(LL)	-0.35	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	1.00	Vert(CT)	-0.66	12-13	>768	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.20	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 222 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 1-3,7-9: 2x4 SP No.1
BOT CHORD	2x4 SP No.1 *Except* 11-13: 2x4 SP No.2
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-12, 4-12

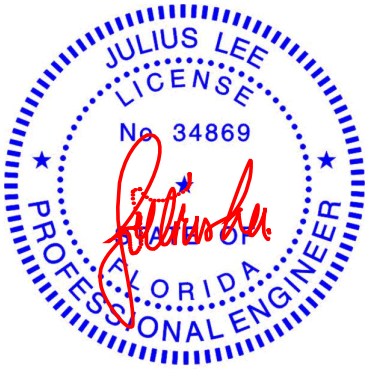
REACTIONS. (size) 2=0-8-0, 8=0-8-0
Max Horz 2=-163(LC 10)
Max Uplift 2=-49(LC 12), 8=-49(LC 12)
Max Grav 2=1988(LC 17), 8=1988(LC 18)

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

TOP CHORD	2-3=-4059/81, 3-4=-3273/146, 4-5=-2505/171, 5-6=-2505/171, 6-7=-3273/146, 7-8=-4060/81
BOT CHORD	2-14=0/3790, 13-14=0/3781, 12-13=0/3065, 11-12=0/2950, 10-11=-2/3659, 8-10=0/3668
WEBS	5-12=-7/1561, 6-12=-1022/97, 6-11=0/548, 7-11=-780/7, 7-10=0/324, 4-12=-1021/97, 4-13=0/548, 3-13=-780/7, 3-14=0/324

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 2-2-6, Interior(1) 2-2-6 to 21-0-0, Exterior(2R) 21-0-0 to 25-2-6, Interior(1) 25-2-6 to 44-0-0 zone; cantilever left and right exposed ; 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) 2, 8.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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

March 14,2023

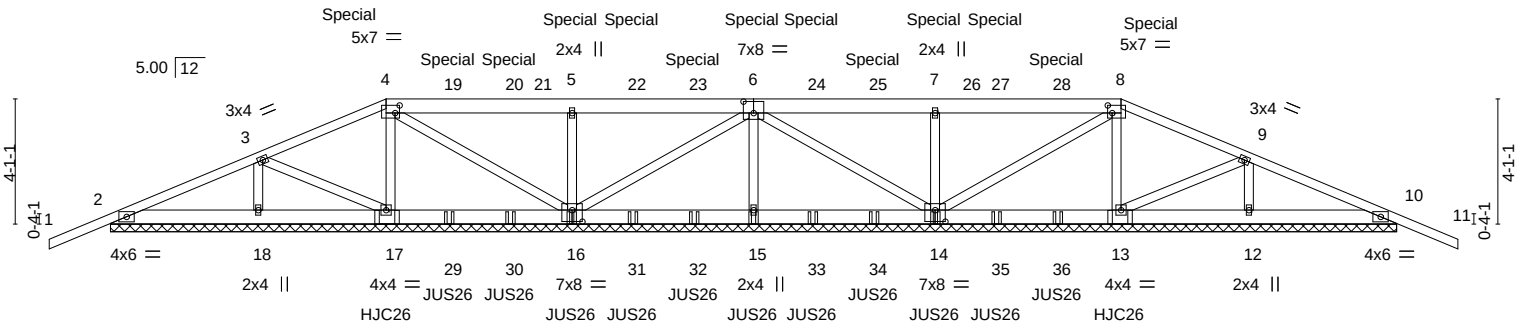
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	A8GIR	Hip Girder	1	2	T30040014
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:47 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-ee1C9RbookBxLzOAtVAhvc9Jx76hjSL50qwMbpzbOf2

-2-0-0	4-9-14	9-0-0	15-0-14	21-0-0	26-11-2	33-0-0	37-2-2	42-0-0	44-0-0
2-0-0	4-9-14	4-2-2	6-0-14	5-11-2	5-11-2	6-0-14	4-2-2	4-9-14	2-0-0

Scale = 1:75.2



"Special" indicates special hanger(s) or other connection device(s) required at location(s) shown. The design/selection of such special connection device(s) is the responsibility of others. This applies to all applicable truss designs in this job.

4-9-14	9-0-0	15-0-14	21-0-0	26-11-2	33-0-0	37-2-2	42-0-0
4-9-14	4-2-2	6-0-14	5-11-2	5-11-2	6-0-14	4-2-2	4-9-14

Plate Offsets (X,Y)-- [4:0-1-12,0-3-0], [6:0-4-0,0-4-8], [8:0-1-12,0-3-0], [14:0-4-0,0-4-8], [16:0-4-0,0-4-8]

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	0.17	Vert(LL)	0.00	11	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.13	Vert(CT)	0.00	10	n/r	120		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 540 lb	FT = 20%

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

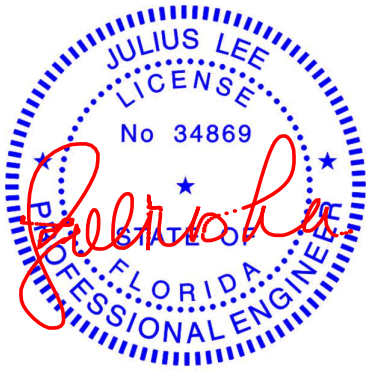
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 42-0-0.
(lb) - Max Horz 2=77(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 15, 12, 10 except 17=-200(LC 8), 16=-261(LC 8), 14=-261(LC 8), 13=-200(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except 2=336(LC 17), 18=351(LC 13), 17=1727(LC 1), 16=1296(LC 18), 15=1255(LC 17), 14=1296(LC 17), 13=1727(LC 1), 12=348(LC 14), 10=336(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-18=-274/51, 4-17=-298/79, 5-16=-606/213, 6-15=-302/91, 7-14=-606/213, 8-13=-298/79, 9-12=-274/51

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, 2x6 - 2 rows staggered 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) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional); cantilever left and right exposed ; 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) Provide adequate drainage to prevent water ponding.
7) Gable requires continuous bottom chord bearing.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 15, 12, 10 except (jt=lb) 17=200, 16=261, 14=261, 13=200.
11) Use MiTek HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 23-11-4 oc max. starting at 9-0-6 from the left end to 32-11-10 to connect truss(es) to back face of bottom chord.
12) Use MiTek JUS26 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 11-0-12 from the left end to 30-11-4 to connect truss(es) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.

Continued on page 2



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

March 14,2023

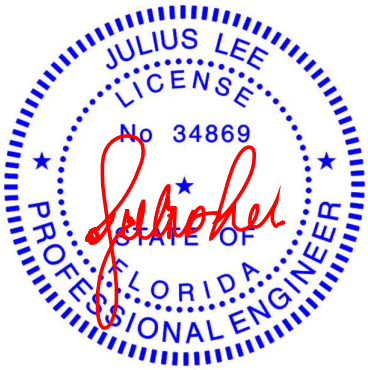
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 78 lb down and 71 lb up at 9-0-0, 78 lb down and 68 lb up at 11-0-12, 78 lb down and 68 lb up at 13-0-12, 78 lb down and 68 lb up at 15-0-12, 78 lb down and 68 lb up at 17-0-12, 78 lb down and 68 lb up at 19-0-12, 78 lb down and 68 lb up at 21-0-0, 78 lb down and 68 lb up at 22-11-4, 78 lb down and 68 lb up at 24-11-4, 78 lb down and 68 lb up at 26-11-4, 78 lb down and 68 lb up at 28-11-4, and 78 lb down and 68 lb up at 30-11-4, and 78 lb down and 71 lb up at 33-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-60, 4-8=-60, 8-11=-60, 2-10=-20
   Concentrated Loads (lb)
   Vert: 4=-45(B) 8=-45(B) 17=-963(B) 16=-219(B) 5=-45(B) 6=-45(B) 15=-219(B) 14=-219(B) 7=-45(B) 13=-963(B) 19=-45(B) 20=-45(B) 22=-45(B) 23=-45(B) 24=-45(B) 25=-45(B) 27=-45(B) 28=-45(B) 29=-219(B) 30=-219(B) 31=-219(B) 32=-219(B) 33=-219(B) 34=-219(B) 35=-219(B) 36=-219(B)



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

March 14,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	CJ01	Diagonal Hip Girder	2	1	T30040015
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:49 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-a09ya7c2KLRfbHYZ?wD9_1EXXxh0BJZOU8PSgizbOf0

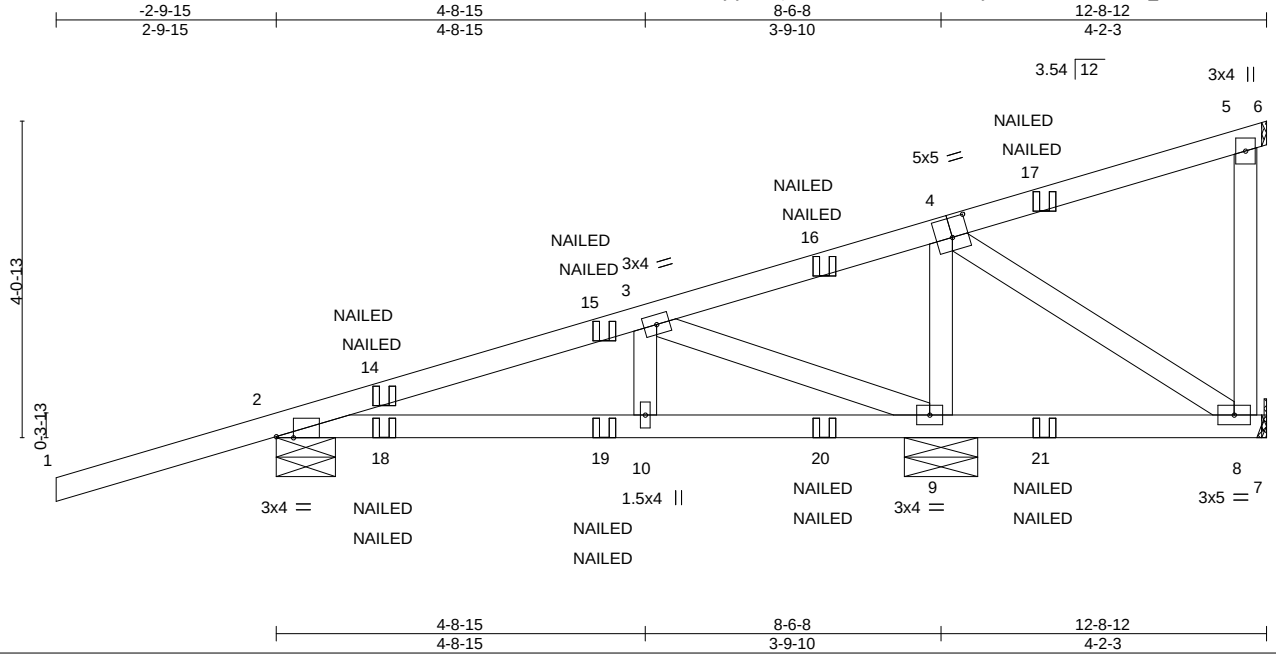


Plate Offsets (X,Y)-- [2:0-2-10,Edge], [4:0-2-8,0-3-0]

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	0.61	Vert(LL)	-0.05	10-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.52	Vert(CT)	0.05	10-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 65 lb	FT = 20%

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

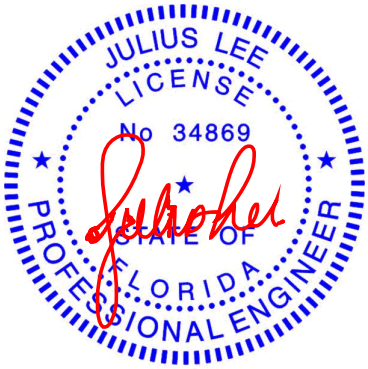
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 8-9.

REACTIONS. (size) 2=0-9-2, 9=0-11-5, 8=Mechanical
Max Horz 2=118(LC 23)
Max Uplift 2=-203(LC 8), 9=-236(LC 5), 8=-72(LC 8)
Max Grav 2=438(LC 28), 9=931(LC 29), 8=89(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-481/75, 3-4=-88/284
BOT CHORD 2-10=-108/400, 9-10=-108/400, 8-9=-250/48
WEBS 3-9=-674/127, 4-9=-557/163, 4-8=-32/291

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Part. Encl., GCpi=0.55; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=203, 9=236.
7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-60, 5-6=-20, 7-11=-20
Concentrated Loads (lb)
Vert: 14=71(F=35, B=35) 16=-70(F=-35, B=-35) 17=-180(F=-84, B=-96) 18=83(F=42, B=42) 19=3(F=2, B=2) 20=-50(F=-25, B=-25) 21=70(F=121, B=-51)



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

March 14,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	CJ02	Diagonal Hip Girder	2	1	T30040016
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:51 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-XPGj?oeIrzhNqbix6LFd3SKt1kL2fAmhxRuZkazbOf_

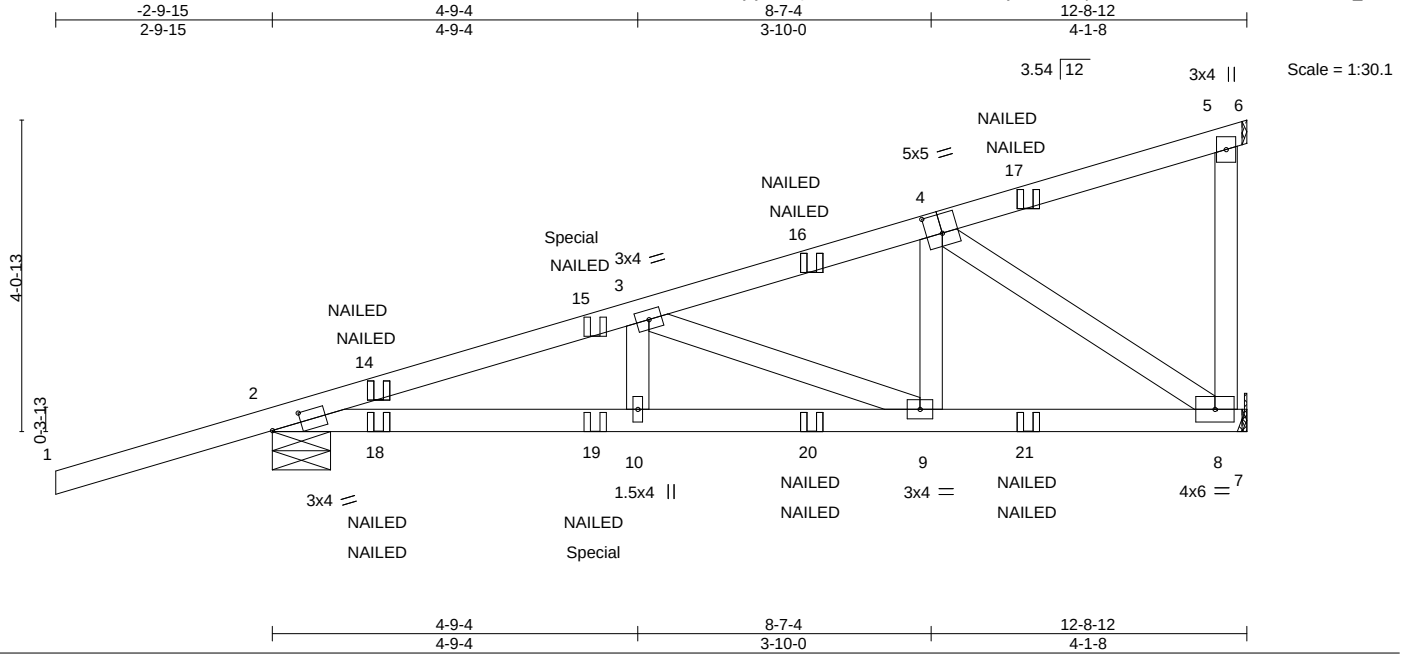


Plate Offsets (X,Y)-- [2:0-4-10,0-1-8], [4:0-2-8,0-3-0]

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	0.61	Vert(LL)	-0.06	10-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.08	9-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 65 lb	FT = 20%

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

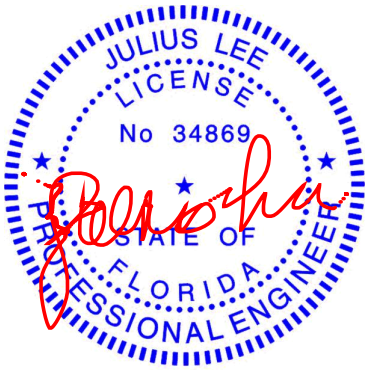
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-9-2, 8=Mechanical
Max Horz 2=118(LC 7)
Max Uplift 2=-240(LC 8), 8=-97(LC 5)
Max Grav 2=750(LC 28), 8=785(LC 30)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1539/209, 3-4=-945/110
BOT CHORD 2-10=-242/1409, 9-10=-242/1409, 8-9=-98/807
WEBS 3-9=-632/157, 4-9=0/453, 4-8=-939/114

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Part. Encl., GCpi=0.55; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=240.
7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-60, 5-6=-20, 7-11=-20
Concentrated Loads (lb)
Vert: 14=71(F=35, B=35) 16=-70(F=-35, B=-35) 17=-192(F=-96, B=-96) 18=83(F=42, B=42) 19=3(F=2, B=2) 20=-50(F=-25, B=-25) 21=-102(F=-51, B=-51)



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

March 14,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	J1	Jack-Partial	13	1	T30040017
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:52 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-?bq5D8ewcGpESlH8g2mscgs8T8koOgwrA5e7F1zbOez

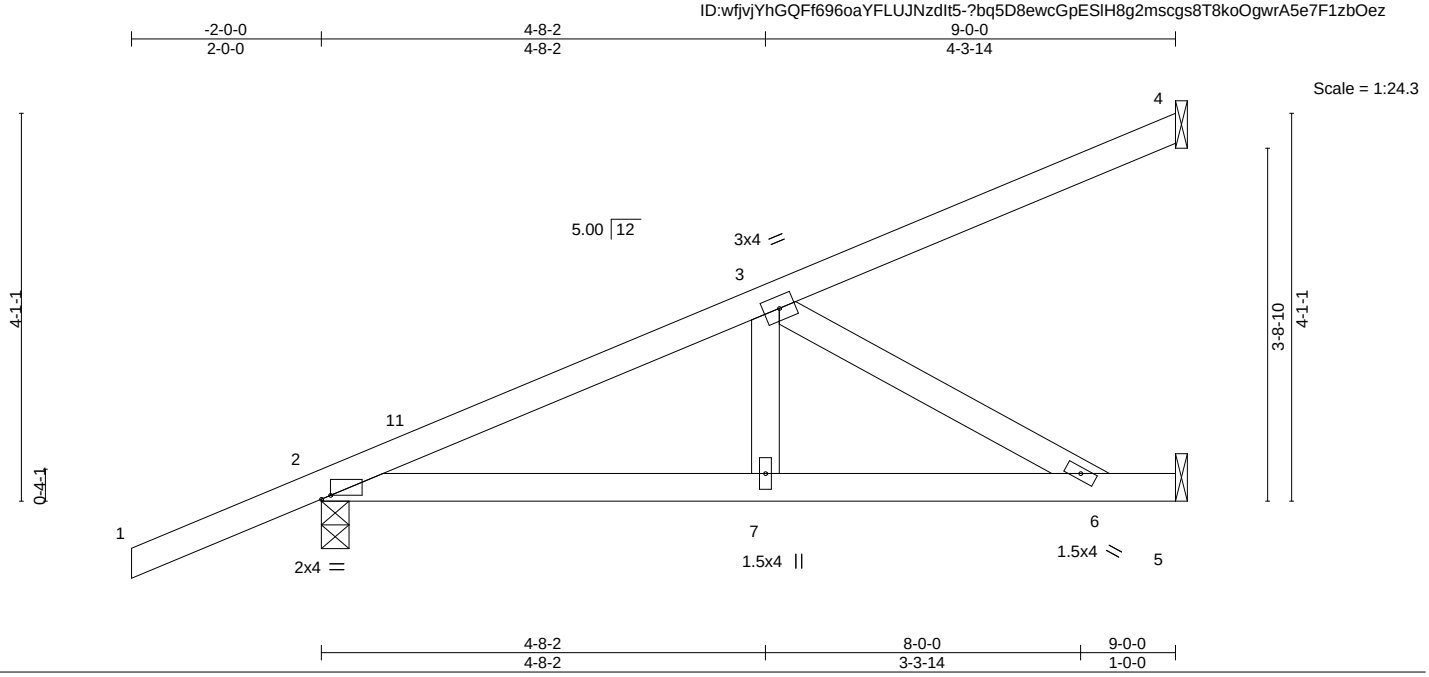


Plate Offsets (X,Y)-- [2:0-1-2,Edge]

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	0.25	Vert(LL)	0.03	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.06	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 40 lb	FT = 20%

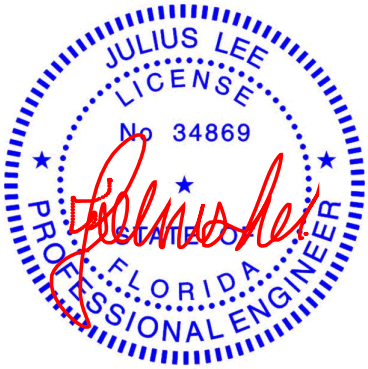
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=155(LC 12)
Max Uplift 4=-47(LC 12), 2=-72(LC 12), 5=-14(LC 12)
Max Grav 4=111(LC 17), 2=491(LC 1), 5=251(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-534/73
BOT CHORD 2-7=-199/483, 6-7=-199/483
WEBS 3-6=-552/228

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Part. Encl., GCpi=0.55; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 8-11-4 zone; cantilever left and right exposed ; 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
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) 4, 2, 5.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



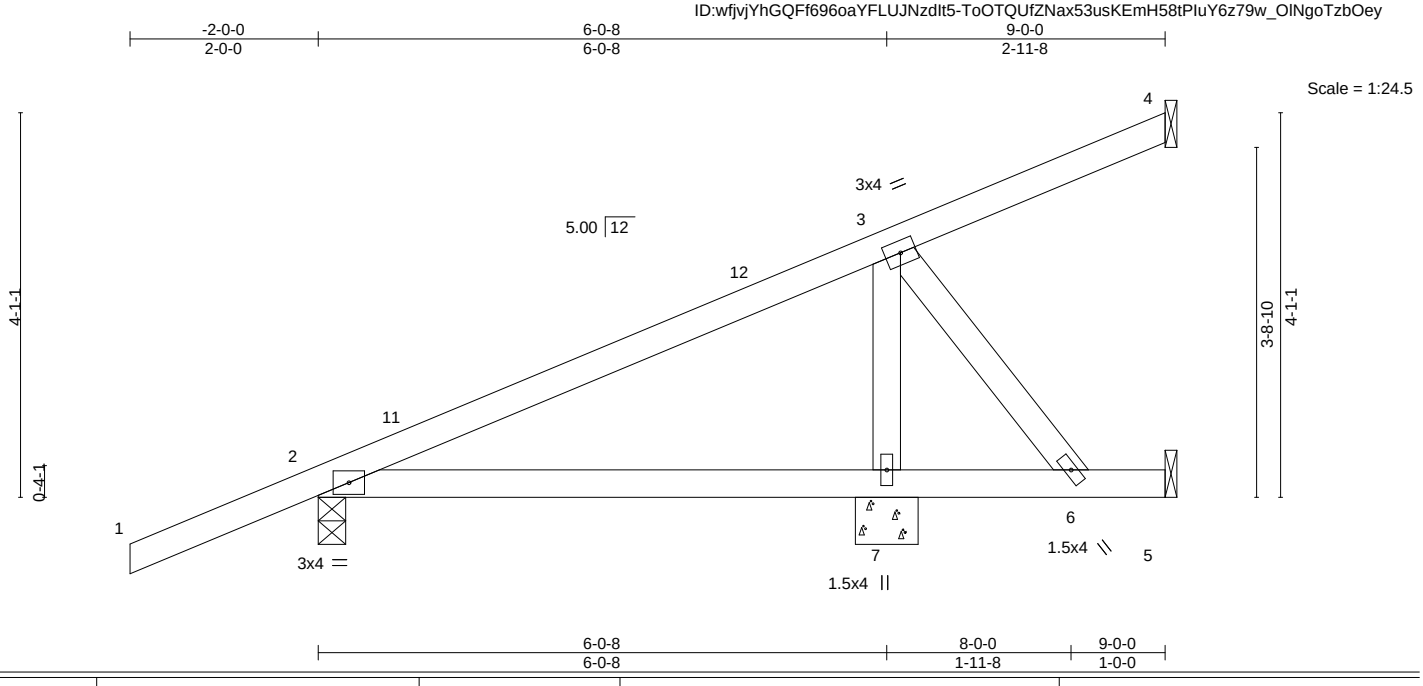
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 14,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	J1A	Jack-Partial	13	1	T30040018
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:53 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-ToOTQUfZNax53usKEmH58tPIuY6z79w_OlNgoTzbOey



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)	-0.03	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.26	Vert(CT)	-0.06	7-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 39 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. All bearings Mechanical except (jt=length) 2=0-3-8, 7=0-8-0.
(lb) - Max Horz 2=155(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 4, 2, 5, 7
Max Grav All reactions 250 lb or less at joint(s) 4, 5 except 2=363(LC 1), 7=412(LC 17)

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Part. Encl., GCpi=0.55; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 8-11-4 zone; cantilever left and right exposed ; 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
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) 4, 2, 5, 7.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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

March 14,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	J2	Jack-Open	6	1	T30040019
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:55 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-PAWDrAhpvBBoJC?jLAKZEIUajLlzb3xHs3snsLzbOew

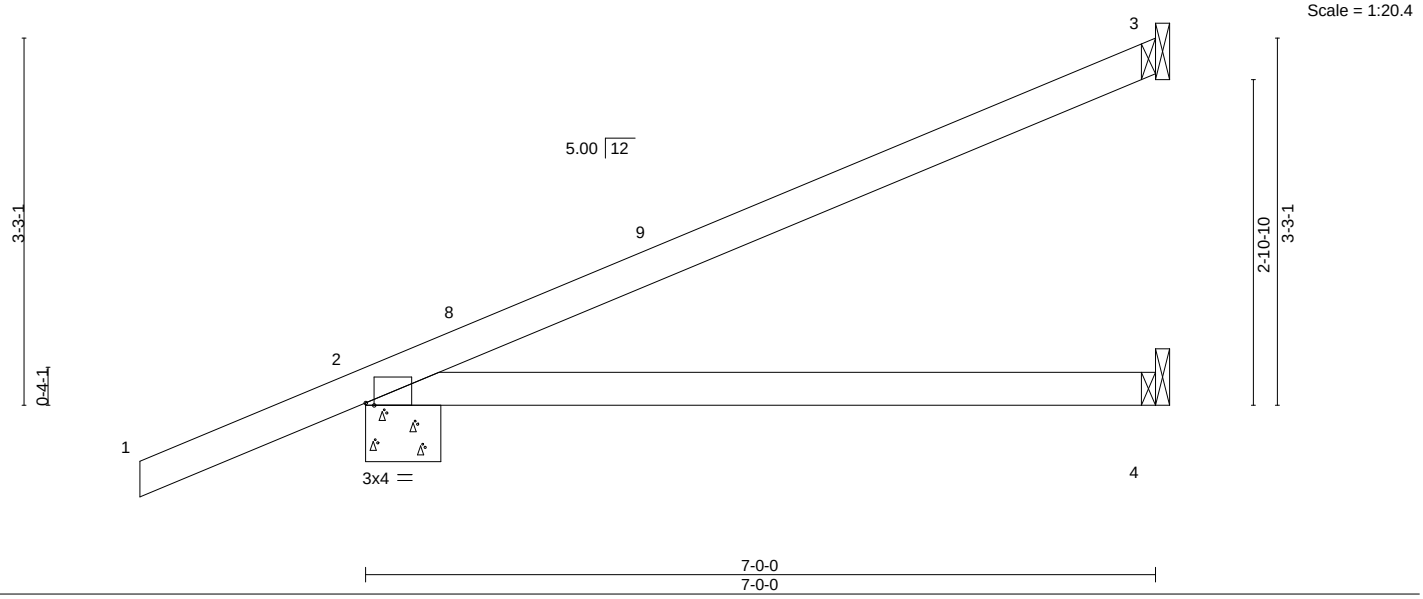


Plate Offsets (X,Y)-- [2:0-0-14,Edge]

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	0.57	Vert(LL)	0.09	4-7	>909	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	-0.20	4-7	>414	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 25 lb	FT = 20%

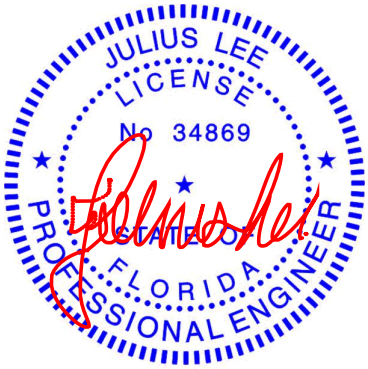
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 3=Mechanical, 2=0-8-0, 4=Mechanical
Max Horz 2=127(LC 12)
Max Uplift 3=-69(LC 12), 2=-70(LC 12)
Max Grav 3=192(LC 17), 2=415(LC 1), 4=122(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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Part. Encl., GCpi=0.55; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 6-11-4 zone; cantilever left and right exposed ; 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
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) 3, 2.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



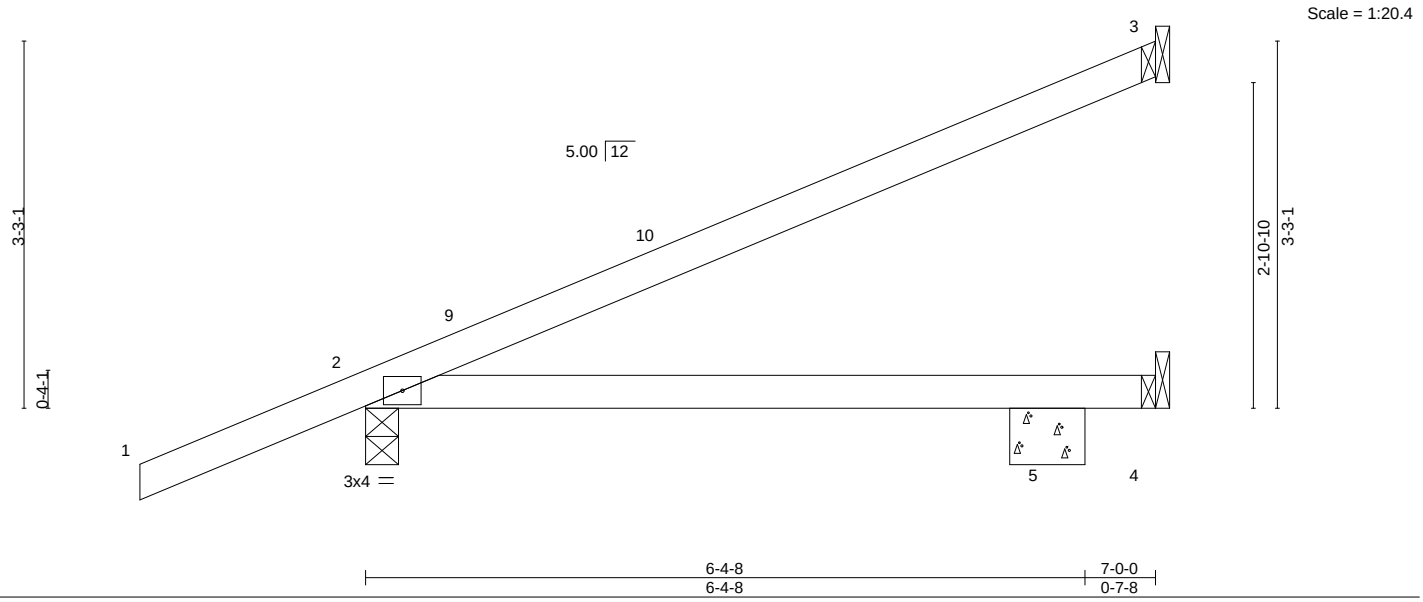
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 14,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	J2A	Jack-Open	2	1	T30040020
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:56 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-tN4c2WiRgVJfwMavvuromW1mel6YKWBQ5jcKOozbOev



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.49	Vert(LL)	0.05	5-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.40	Vert(CT)	-0.09	5-8	>831	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 25 lb	FT = 20%

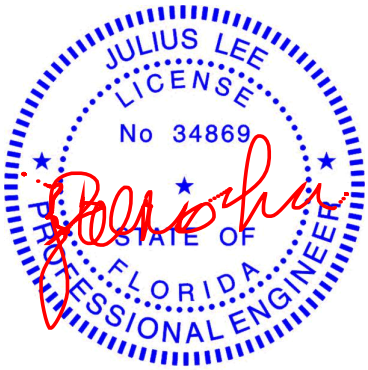
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. All bearings Mechanical except (jt=length) 2=0-3-8, 5=0-8-0.
(lb) - Max Horz 2=127(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 3, 2 except 4=-165(LC 17)
Max Grav All reactions 250 lb or less at joint(s) 3, 4 except 2=378(LC 1), 5=335(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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Part. Encl., GCpi=0.55; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 6-11-4 zone; cantilever left and right exposed ; 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
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) 3, 2 except (jt=lb) 4=165.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



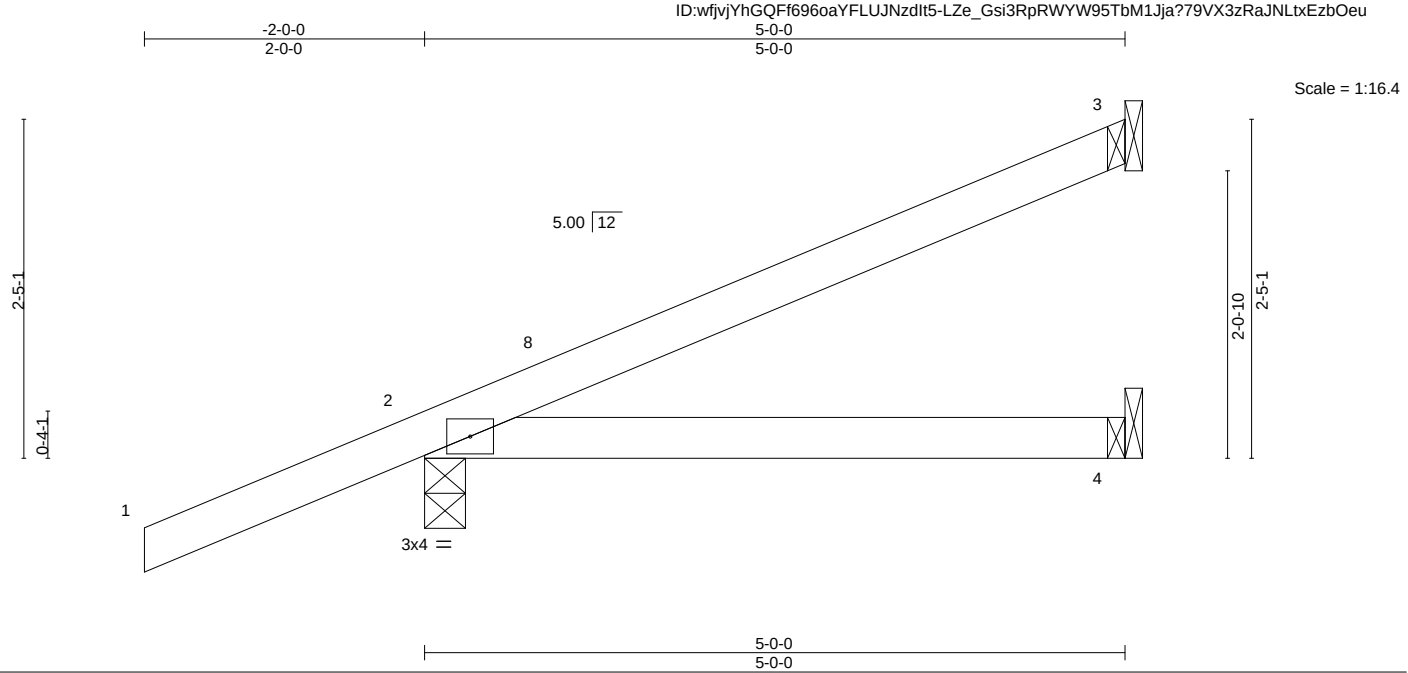
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 14,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	J3	Jack-Open	8	1	T30040021
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:57 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-LZe_Gsi3RpRWYW95TbM1Jja?79VX3zRaJNLtxEzbOeu



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)	0.03	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.22	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 19 lb	FT = 20%

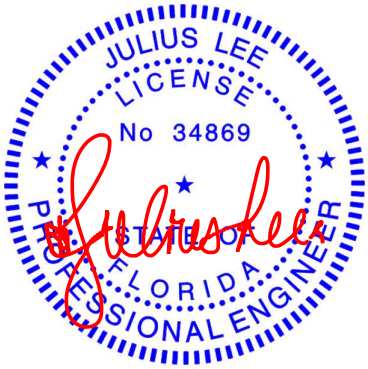
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=99(LC 12)
Max Uplift 3=-45(LC 12), 2=-70(LC 12)
Max Grav 3=129(LC 17), 2=342(LC 1), 4=86(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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Part. Encl., GCpi=0.55; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 4-11-4 zone; cantilever left and right exposed ; 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
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) 3, 2.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



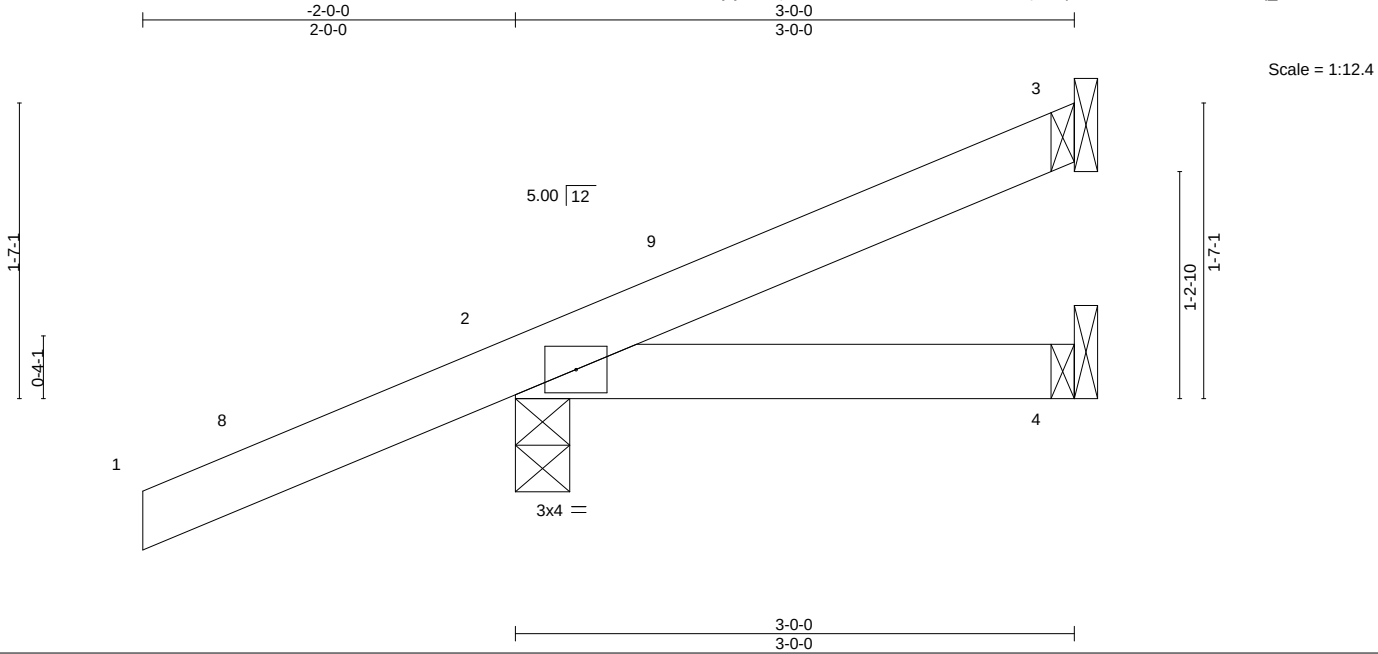
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 14,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	J4	Jack-Open	8	1	T30040022
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:05:59 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-IxlkhYkJzQhEnpJUa0OVO8fLtzDJXtxsnhq_?7zbOes



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.24	Vert(LL)	-0.00	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 13 lb	FT = 20%

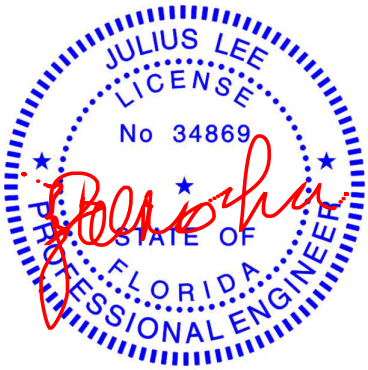
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=71(LC 12)
Max Uplift 3=-19(LC 12), 2=-75(LC 12)
Max Grav 3=63(LC 17), 2=278(LC 1), 4=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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Part. Encl., GCpi=0.55; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 2-11-4 zone; cantilever left and right exposed ; 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
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) 3, 2.



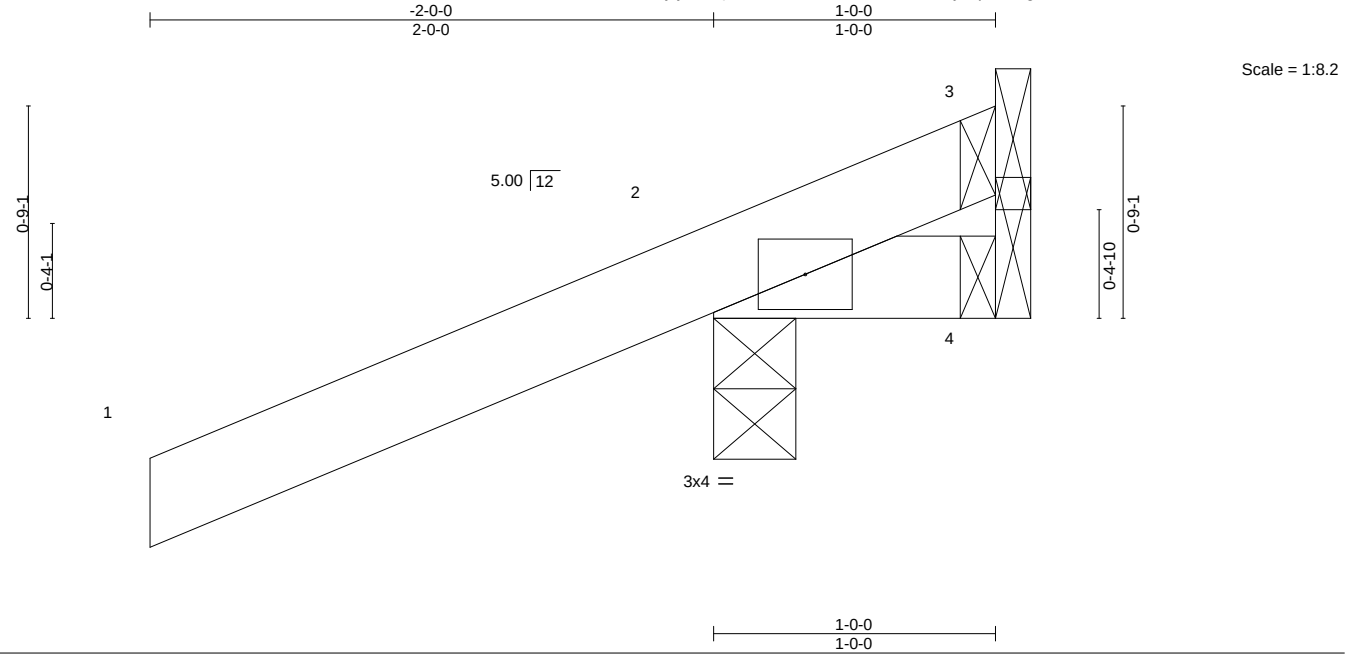
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 14,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Betsy Soto
BETSY_SOTO	J5	Jack-Open	8	1	T30040023
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Mar 13 09:06:00 2023 Page 1
ID:wfjvjYhGQFf696oaYFLUJNzdIt5-m8J6utlykkp5Pzug8kvkxMBVJMZ6GKA0?LaYYZzbOer



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	5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 7 lb	FT = 20%

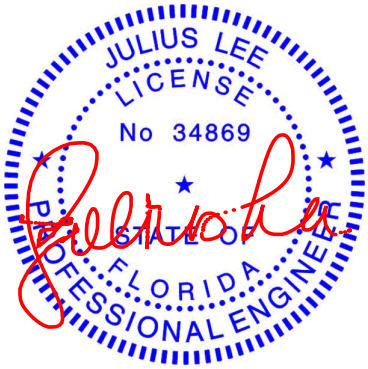
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=44(LC 12)
Max Uplift 3=-28(LC 1), 2=-112(LC 12), 4=-54(LC 1)
Max Grav 3=19(LC 12), 2=281(LC 1), 4=35(LC 12)

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Part. Encl., GCpi=0.55; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; 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
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) 3, 4 except (jt=lb) 2=112.



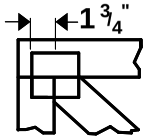
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 14,2023

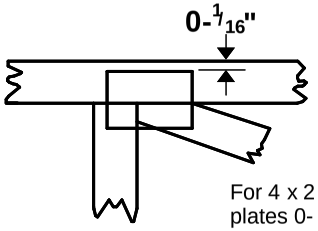
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

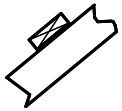
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

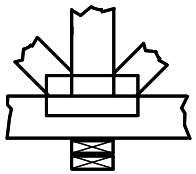
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

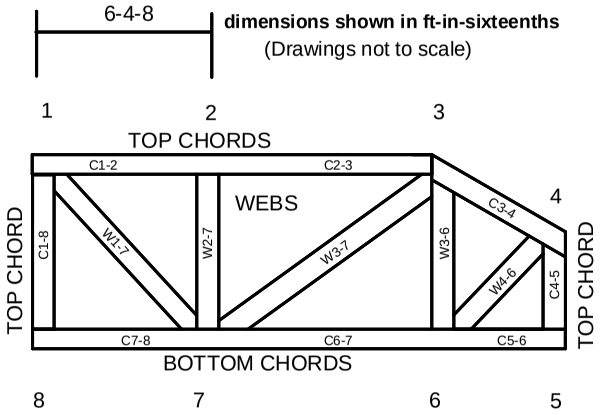


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.