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

RE: Brooks - Brooks

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

Site Information:
Customer Info: MSD CONST. Project Name: BROOKS Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: COLUMBIA CO. State: FL

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

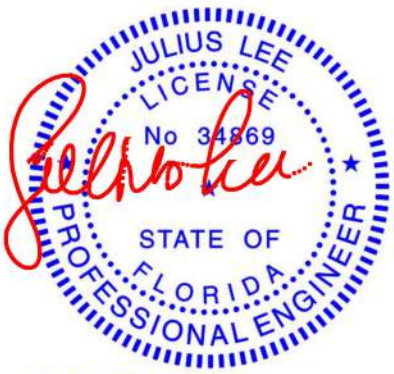
General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):
Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.5
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 59 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	T29051479	A01	10/24/22	23	T29051501	B06	10/24/22
2	T29051480	A02	10/24/22	24	T29051502	B07	10/24/22
3	T29051481	A03	10/24/22	25	T29051503	B08	10/24/22
4	T29051482	A04	10/24/22	26	T29051504	C01	10/24/22
5	T29051483	A05	10/24/22	27	T29051505	C02	10/24/22
6	T29051484	A06	10/24/22	28	T29051506	CJ01	10/24/22
7	T29051485	A07	10/24/22	29	T29051507	CJ02	10/24/22
8	T29051486	A08	10/24/22	30	T29051508	CJ03	10/24/22
9	T29051487	A09	10/24/22	31	T29051509	D01	10/24/22
10	T29051488	A10	10/24/22	32	T29051510	D02	10/24/22
11	T29051489	A11	10/24/22	33	T29051511	D03	10/24/22
12	T29051490	A12	10/24/22	34	T29051512	D04	10/24/22
13	T29051491	A13	10/24/22	35	T29051513	D05	10/24/22
14	T29051492	A14	10/24/22	36	T29051514	G01	10/24/22
15	T29051493	A15	10/24/22	37	T29051515	GDR	10/24/22
16	T29051494	A16	10/24/22	38	T29051516	H01	10/24/22
17	T29051495	A17	10/24/22	39	T29051517	J01	10/24/22
18	T29051496	B01	10/24/22	40	T29051518	J02	10/24/22
19	T29051497	B02	10/24/22	41	T29051519	J03	10/24/22
20	T29051498	B03	10/24/22	42	T29051520	J04	10/24/22
21	T29051499	B04	10/24/22	43	T29051521	J05	10/24/22
22	T29051500	B05	10/24/22	44	T29051522	J06	10/24/22

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, 2023.



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

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.

October 25,2022

RE: Brooks - Brooks

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

Site Information:

Customer Info: MSD CONST. Project Name: BROOKS Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: COLUMBIA CO. State: FL

No.	Seal#	Truss Name	Date
45	T29051523	J07	10/24/22
46	T29051524	J08	10/24/22
47	T29051525	J09	10/24/22
48	T29051526	J10	10/24/22
49	T29051527	J11	10/24/22
50	T29051528	J12	10/24/22
51	T29051529	J13	10/24/22
52	T29051530	J14	10/24/22
53	T29051531	M01	10/24/22
54	T29051532	M02	10/24/22
55	T29051533	PB01	10/24/22
56	T29051534	PB02	10/24/22
57	T29051535	PB03	10/24/22
58	T29051536	PB3A	10/24/22
59	T29051537	PB04	10/24/22

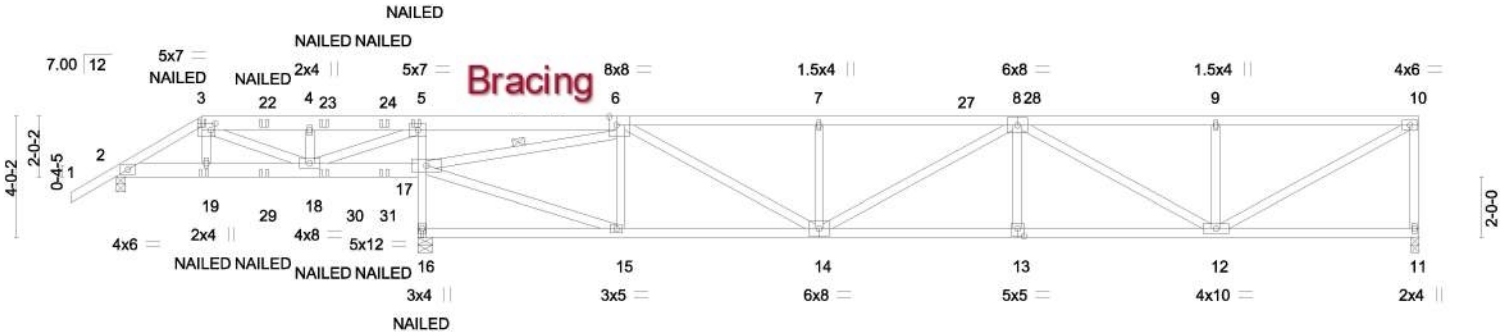
Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A01	Half Hip Girder	1	1	T29051479

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:00:38 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-1Q4Lfujb3OEmdKxh_2Kg1AWMtVsoYiW2JPqtz3yQBqt

-1-6-0	2-10-0	6-5-0	10-0-0	16-8-14	23-3-15	29-11-1	36-6-2	43-3-0
1-6-0	2-10-0	3-7-0	3-7-0	6-8-14	6-7-2	6-7-2	6-7-2	6-8-14

Scale = 1:76.7



2-10-0	6-5-0	10-0-0	10-3-0	16-8-14	23-3-15	29-11-1	36-6-2	43-3-0
2-10-0	3-7-0	3-7-0	0-3-0	6-5-14	6-7-2	6-7-2	6-7-2	6-8-14

Plate Offsets (X,Y)-- [3:0-1-12,0-2-12], [6:0-2-12,Edge], [13:0-2-8,0-3-0]

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	0.90	Vert(LL)	-0.18	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.87	Vert(CT)	-0.45	13-14	>873	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.81	Horz(CT)	-0.05	16	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 258 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
3-6: 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
2-17: 2x6 SP No.2, 13-14: 2x4 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-0-13 oc bracing.
WEBS 1 Row at midpt 6-17

REACTIONS. (size) 11=0-3-0, 2=0-3-7, 16=0-6-0
Max Horz 2=106(LC 23)
Max Uplift 11=-2(LC 24), 2=-42(LC 8), 16=-2(LC 8)
Max Grav 11=1252(LC 17), 2=287(LC 28), 16=1968(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-174/343, 4-5=-174/341, 5-6=0/1128, 6-7=-2535/68, 7-8=-2535/68, 8-9=-1852/41, 9-10=-1852/41, 10-11=-1192/35
BOT CHORD 17-18=-1180/47, 16-17=-1911/35, 5-17=-803/69, 14-15=0/1391, 13-14=0/2569, 12-13=0/2569
WEBS 3-18=-463/20, 5-18=0/920, 6-15=-307/87, 6-14=-39/1307, 7-14=-494/99, 8-12=-823/6, 9-12=-472/97, 10-12=-4/2091, 15-17=0/1502, 6-17=-2605/0

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=43ft; 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
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) Provide adequate drainage to prevent water ponding.
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) 11, 2, 16.
7) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (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: 1-3=-60, 3-10=-60, 2-17=-20, 11-16=-20
Concentrated Loads (lb)
Vert: 19=10(F) 17=10(F) 29=10(F) 30=10(F) 31=10(F)

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

October 25,2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ***ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information*** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

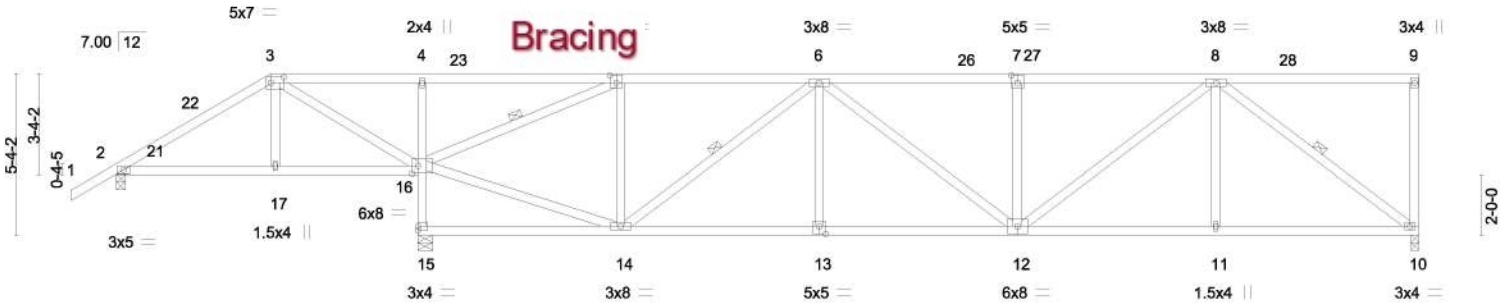
Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A02	Half Hip	1	1	T29051480

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:00:40 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-_pC54alsb?UUse546TM86bbnIlZA0gOLnjJ_1xyQBqr

-1-6-0	5-1-6	10-0-0	16-8-14	23-3-15	29-11-1	36-6-2	43-3-0
1-6-0	5-1-6	4-10-10	6-8-14	6-7-2	6-7-2	6-7-2	6-8-14

Scale = 1:76.7



5-1-6	10-0-0	10-3-0	16-8-14	23-3-15	29-11-1	36-6-2	43-3-0
5-1-6	4-10-10	0-3-0	6-5-14	6-7-2	6-7-2	6-7-2	6-8-14

Plate Offsets (X,Y)-- [3:0-5-4,0-2-4], [5:0-2-8,0-3-0], [7:0-2-8,0-3-0], [13:0-2-8,0-3-0], [16:0-2-4,0-3-0]

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	0.62	Vert(LL)	-0.16	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.81	Vert(CT)	-0.37	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 254 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-16, 6-14, 8-10

REACTIONS. (size) 10=0-3-0, 2=0-3-7, 15=0-6-0
Max Horz 2=147(LC 11)
Max Uplift 2=-38(LC 12)
Max Grav 10=1230(LC 1), 2=215(LC 1), 15=2094(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=0/875, 4-5=0/847, 5-6=-928/41, 6-7=-1833/51, 7-8=-1833/51
BOT CHORD 15-16=-2035/31, 4-16=-417/84, 13-14=0/1781, 12-13=0/1781, 11-12=0/1336, 10-11=0/1336
WEBS 3-16=-902/1, 14-16=0/956, 5-16=-1947/0, 5-14=0/545, 6-14=-1075/31, 7-12=-302/60, 8-12=-1/626, 8-11=0/313, 8-10=-1652/1

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=43ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-9-14, Interior(1) 2-9-14 to 5-1-6, Exterior(2R) 5-1-6 to 11-2-13, Interior(1) 11-2-13 to 43-1-4 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) Provide adequate drainage to prevent water ponding.
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) 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:

October 25,2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ***ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information*** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

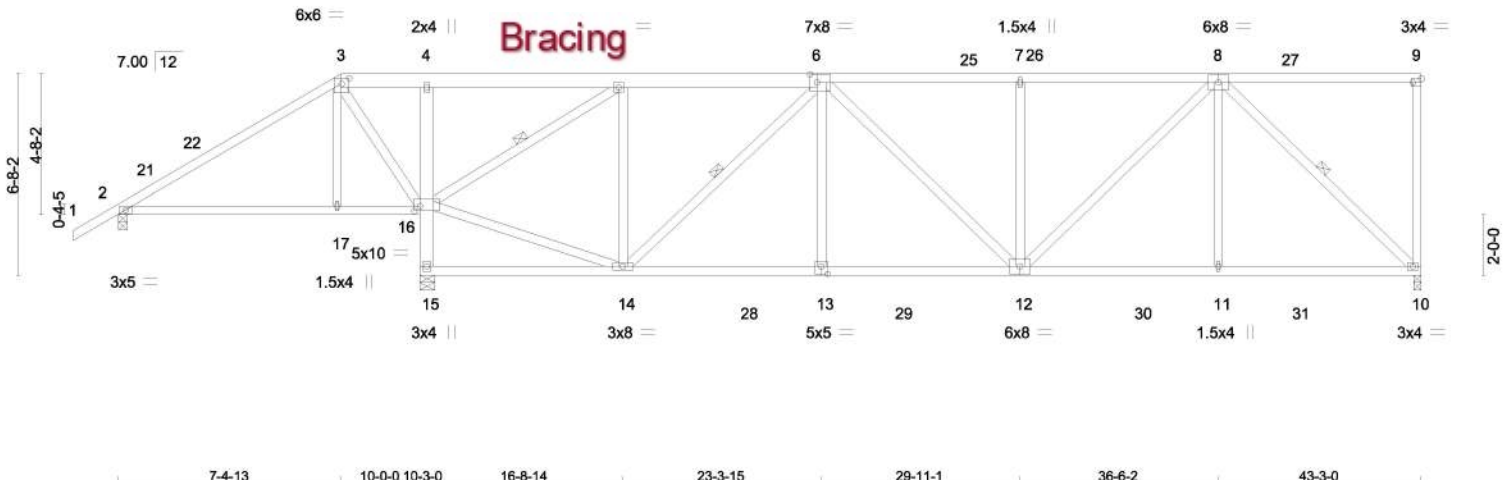
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A03	Half Hip	1	1	T29051481
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:00:42 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-wBKsVGm67dlC5yFTDuOcB0g8C6DiUZbeE1o46qyQBqp

-1-6-0	7-4-13	10-0-0	16-8-14	23-3-15	29-11-1	36-6-2	43-3-0
1-6-0	7-4-13	2-7-3	6-8-14	6-7-2	6-7-2	6-7-2	6-8-14

Scale = 1:76.7



7-4-13	10-0-0 10-3-0	16-8-14	23-3-15	29-11-1	36-6-2	43-3-0
7-4-13	2-7-3 0-3-0	6-5-14	6-7-2	6-7-2	6-7-2	6-8-14

Plate Offsets (X,Y)-- [3:0-3-0,0-2-5], [6:0-2-12,0-3-4], [9:Edge,0-1-8], [13:0-2-8,0-3-0], [16:0-2-4,0-2-0]

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	0.56	Vert(LL)	-0.20	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.87	Vert(CT)	-0.38	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 291 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
3-6: 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-15: 2x6 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-16, 6-14, 8-10

REACTIONS. (size) 10=0-3-0, 2=0-3-7, 15=0-6-0
Max Horz 2=187(LC 11)
Max Uplift 10=-3(LC 12), 2=-44(LC 12)
Max Grav 10=1398(LC 18), 2=216(LC 17), 15=2365(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-65/431, 3-4=0/793, 4-5=0/763, 5-6=-923/77, 6-7=-1737/80, 7-8=-1737/80
BOT CHORD 2-17=-361/69, 16-17=-370/67, 15-16=-2266/22, 13-14=0/1544, 12-13=0/1550, 11-12=0/1197, 10-11=0/1197
WEBS 3-16=-959/65, 14-16=0/892, 5-16=-1930/10, 5-14=0/690, 6-14=-939/0, 6-13=0/315, 7-12=-496/99, 8-12=-31/707, 8-11=0/411, 8-10=-1599/0, 3-17=0/287

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=43ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-9-14, Interior(1) 2-9-14 to 7-4-13, Exterior(2R) 7-4-13 to 13-6-4, Interior(1) 13-6-4 to 43-1-4 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) Provide adequate drainage to prevent water ponding.
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) 10, 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:

October 25,2022

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

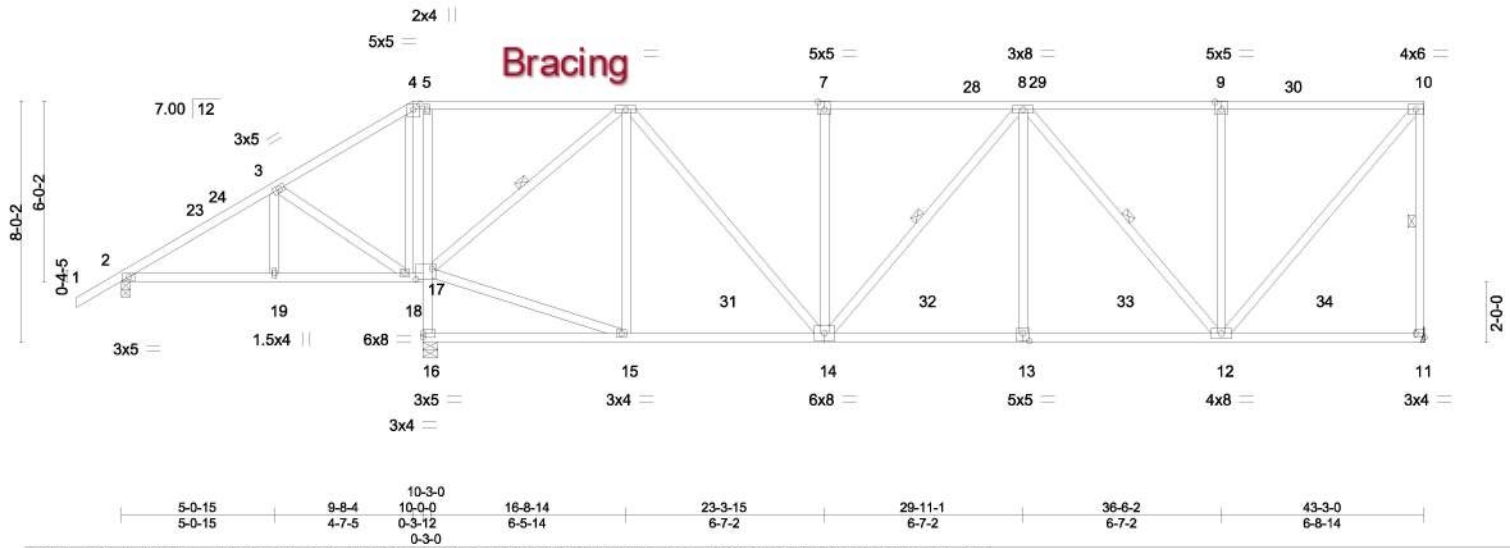
Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A04	Half Hip	1	1	T29051482

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:00:43 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-ONuEicnkuwt3j5pfnbvrkDDHMWYGD1inThYeeGyQBqo

-1-6-0	5-0-15	9-8-4	10-0-0	16-8-14	23-3-15	29-11-1	36-6-2	43-3-0
1-6-0	5-0-15	4-7-5	0-3-12	6-8-14	6-7-2	6-7-2	6-7-2	6-8-14

Scale = 1:76.7



5-0-15	9-8-4	10-3-0 (10-0-0)	16-8-14	23-3-15	29-11-1	36-6-2	43-3-0
5-0-15	4-7-5	0-3-12 (0-3-0)	6-5-14	6-7-2	6-7-2	6-7-2	6-8-14

Plate Offsets (X,Y)-- [4:0-2-8,0-2-1], [7:0-2-8,0-3-0], [9:0-2-8,0-3-0], [11:Edge,0-1-8], [13:0-2-8,0-3-0], [17:0-6-4,0-4-4]

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	0.66	Vert(LL)	-0.21	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.91	Vert(CT)	-0.38	13-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 300 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 10-11, 6-17, 8-14, 8-12

REACTIONS. (size) 11=Mechanical, 2=0-3-7, 16=0-6-0
Max Horz 2=227(LC 11)
Max Uplift 11=-1(LC 12), 2=-36(LC 12)
Max Grav 11=1444(LC 18), 2=267(LC 17), 16=2323(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-50/553, 4-5=-6/451, 5-6=-5/470, 6-7=-1398/80, 7-8=-1398/80, 8-9=-1052/70, 9-10=-1052/70, 10-11=-1319/42
BOT CHORD 17-18=-457/116, 16-17=-2230/32, 5-17=-689/66, 14-15=0/826, 13-14=0/1483, 12-13=0/1483
WEBS 15-17=-8/888, 6-17=-1658/23, 6-14=0/824, 7-14=-306/60, 8-13=0/326, 8-12=-720/25, 9-12=-330/74, 10-12=0/1487, 3-18=-539/61

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=43ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-9-14, Interior(1) 2-9-14 to 9-8-4, Exterior(2R) 9-8-4 to 15-9-10, Interior(1) 15-9-10 to 43-1-4 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) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 2.
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:

October 25,2022

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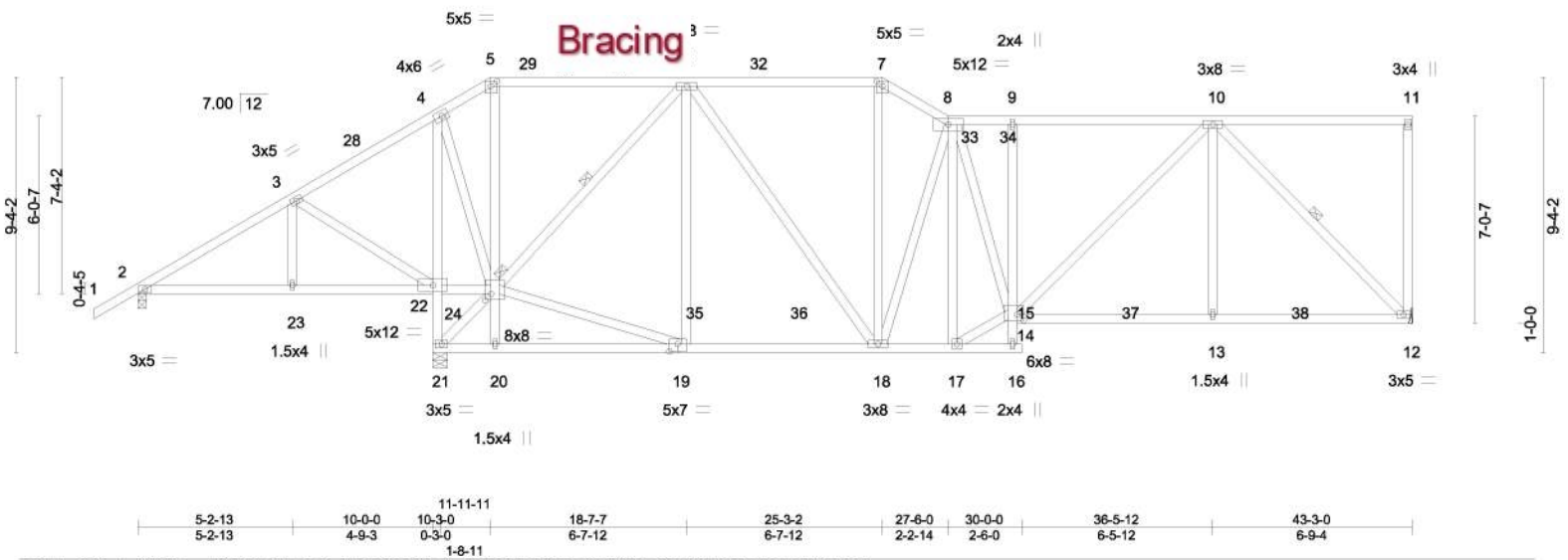
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A05	Roof Special	1	1	T29051483
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:00:46 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-oyZMLdpcBrFdaZYESkTYMsrrjjeUQJxE9fmIFbyQBql

-1-6-0 | 5-2-13 | 10-0-0 | 11-11-11 | 18-7-7 | 25-3-2 | 27-6-0 | 30-0-0 | 36-5-12 | 43-3-0
1-6-0 | 5-2-13 | 4-9-3 | 1-11-11 | 6-7-12 | 6-7-12 | 2-2-14 | 2-6-0 | 6-5-12 | 6-9-4

Scale = 1:78.0



5-2-13 | 10-0-0 | 10-3-0 | 18-7-7 | 25-3-2 | 27-6-0 | 30-0-0 | 36-5-12 | 43-3-0
5-2-13 | 4-9-3 | 0-3-0 | 6-7-12 | 6-7-12 | 2-2-14 | 2-6-0 | 6-5-12 | 6-9-4
11-11-11
1-8-11

Plate Offsets (X,Y)-- [5:0-2-8,0-2-1], [7:0-2-8,0-2-1], [14:0-2-12,0-2-4], [19:0-3-4,0-3-0], [24:0-2-8,0-2-8]

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	0.46	Vert(LL)	-0.15	18-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.69	Vert(CT)	-0.27	18-19	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.04	12	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 345 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, except end verticals.
BOT CHORD Rigid ceiling directly applied. Except:
10-0-0 oc bracing: 14-16
WEBS 1 Row at midpt 10-12, 6-24
JOINTS 1 Brace at Jt(s): 24

REACTIONS. (size) 12=Mechanical, 2=0-3-7, 21=0-6-0
Max Horz 2=231(LC 11)
Max Uplift 2=-36(LC 12)
Max Grav 12=1426(LC 18), 2=335(LC 21), 21=2307(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-90/585, 6-7=-1282/123, 7-8=-1464/125, 8-9=-1680/103, 9-10=-1694/103
BOT CHORD 21-22=-1562/59, 4-22=-1172/62, 20-21=-45/669, 19-20=-44/667, 18-19=-77/865, 17-18=-71/1433, 9-14=-316/73, 13-14=-64/1197, 12-13=-64/1197
WEBS 20-24=0/272, 5-24=-319/56, 6-18=0/653, 7-18=-1/473, 8-18=-744/73, 8-17=-716/21, 14-17=-53/1553, 8-14=-19/714, 10-14=-19/653, 10-13=0/405, 10-12=-1648/28, 3-22=-531/53, 22-24=-467/108, 6-24=-1470/60, 21-24=-1054/49, 4-24=0/893

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=43ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-9-14, Interior(1) 2-9-14 to 11-11-11, Exterior(2R) 11-11-11 to 16-3-9, Interior(1) 16-3-9 to 25-3-2, Exterior(2E) 25-3-2 to 27-6-0, Interior(1) 27-6-0 to 43-1-4 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
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.
9) 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
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A06	Roof Special	1	1	T29051484
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:00:48 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-lLh7lJrtjTVLptica9V0RHw9YXlyuF5WdzFPJUyQBqj

-1-6-0	5-2-13	10-0-0	14-3-2	18-7-7	22-11-11	29-9-7	36-4-7	43-3-0
1-6-0	5-2-13	4-9-3	4-3-2	4-4-5	4-4-5	6-9-11	6-7-1	6-10-9

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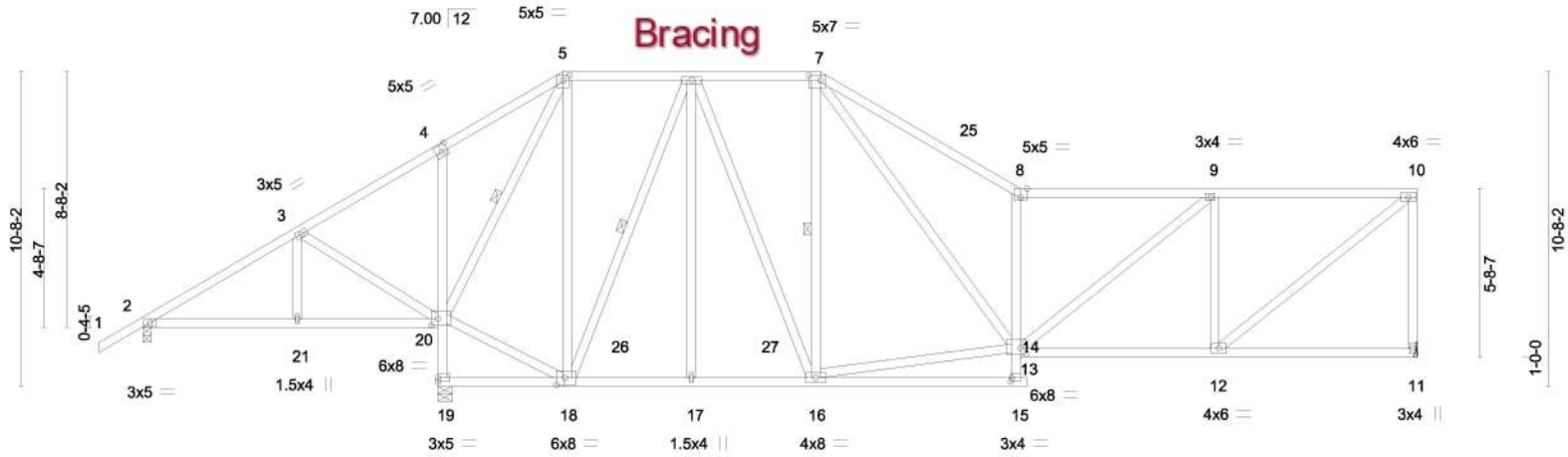

5-2-13	10-0-0	10-3-0	14-3-2	18-7-7	22-11-11	30-0-0	36-4-7	43-3-0
5-2-13	4-9-3	0-3-0	4-0-2	4-4-5	4-4-5	7-0-5	6-4-7	6-10-9

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-2-8,0-2-1], [7:0-4-8,0-2-0], [8:0-2-8,Edge], [13:0-2-4,0-2-4], [15:0-0-8,0-1-8], [18:0-3-8,0-3-0], [20:0-2-12,0-2-12]

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	0.64	Vert(LL)	-0.16	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.75	Vert(CT)	-0.30	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	-0.03	19	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 333 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, except end verticals.
BOT CHORD Rigid ceiling directly applied. Except:
10-0-0 oc bracing: 13-15
WEBS 1 Row at midpt 5-20, 7-16, 6-18

REACTIONS. (size) 11=Mechanical, 2=0-3-7, 19=0-6-0
Max Horz 2=240(LC 11)
Max Uplift 2=-25(LC 12), 19=-13(LC 12)
Max Grav 11=1363(LC 18), 2=328(LC 21), 19=2349(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-172/285, 3-4=-88/643, 4-5=-11/656, 5-6=-323/140, 6-7=-1020/159, 7-8=-2408/206, 8-9=-2044/105, 9-10=-1451/87, 10-11=-1263/58
BOT CHORD 19-20=-2267/145, 17-18=-37/725, 16-17=-37/725, 8-13=-1527/188, 12-13=-50/1407
WEBS 18-20=-35/345, 5-20=-1758/68, 5-18=-30/1090, 7-16=-572/93, 13-16=-69/815, 7-13=-99/1708, 9-13=-23/760, 9-12=-846/107, 10-12=-24/1767, 3-20=-554/57, 6-18=-1141/27, 6-16=-23/705

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=43ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-9-14, Interior(1) 2-9-14 to 14-3-2, Exterior(2R) 14-3-2 to 18-7-7, Interior(1) 18-7-7 to 22-11-11, Exterior(2R) 22-11-11 to 27-3-10, Interior(1) 27-3-10 to 43-1-4 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
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, 19.
9) 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
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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A07	PIGGYBACK BASE	1	1	T29051485

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:00:50 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-hkptA?s7F4l33As?hZXUWi?WjK?DM7dp4HkVOMyQBqh

-1-6-0	5-2-13	10-0-0	14-9-12	22-5-1	30-0-0	32-0-14	37-7-15	43-3-0
1-6-0	5-2-13	4-9-3	4-9-12	7-7-5	7-6-15	2-0-14	5-7-1	5-7-1

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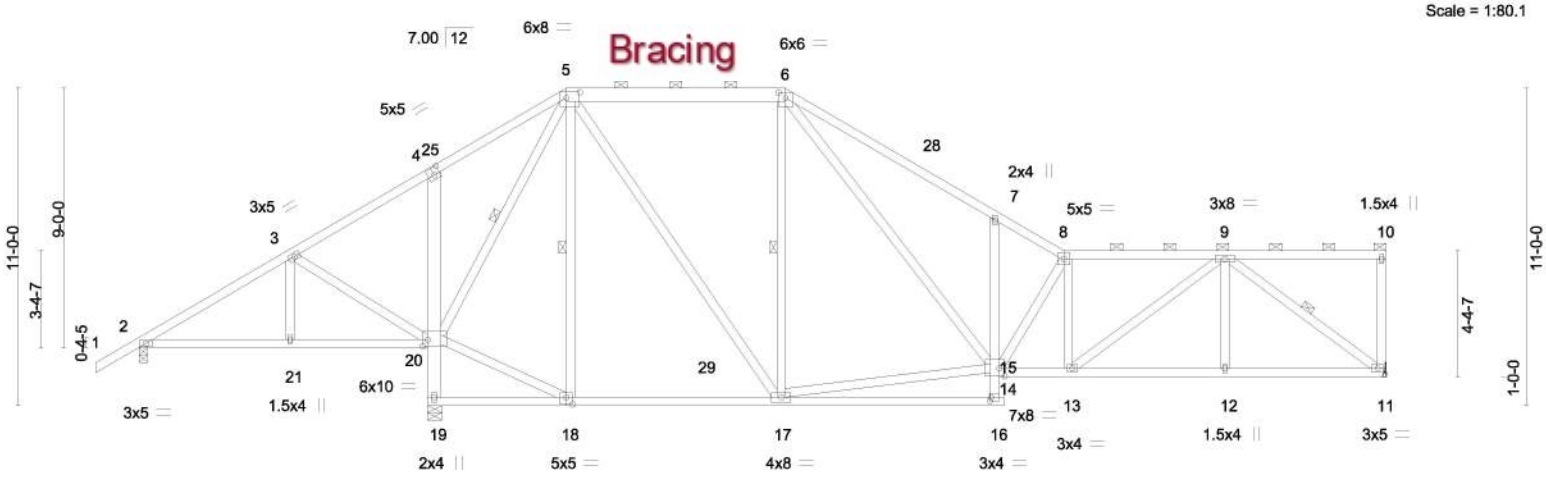

5-2-13	10-0-0	10-3-0	14-9-12	22-5-1	30-0-0	32-0-14	37-7-15	43-3-0
5-2-13	4-9-3	0-3-0	4-6-12	7-7-5	7-6-15	2-0-14	5-7-1	5-7-1

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-5-8,0-2-8], [6:0-3-0,0-2-5], [14:0-2-4,0-3-4], [16:0-0-8,0-1-8], [18:0-2-8,0-3-0], [20:0-2-0,0-2-12]

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	0.53	Vert(LL)	-0.21	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.34	17-18	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.80	Horz(CT)	-0.03	19	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 324 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 5-6: 2x6 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 4-19: 2x6 SP No.2
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-7-7 max.): 5-6, 8-10.
BOT CHORD	Rigid ceiling directly applied. Except: 10-0-0 oc bracing: 14-16
WEBS	1 Row at midpt 5-20, 5-18, 6-17, 9-11

REACTIONS. (size) 2=0-3-7, 19=0-6-0, 11=Mechanical
Max Horz 2=141(LC 11)
Max Uplift 2=-79(LC 22), 19=-26(LC 12)
Max Grav 2=288(LC 21), 19=2436(LC 17), 11=1337(LC 18)

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

TOP CHORD	2-3=-81/413, 3-4=-45/781, 4-5=0/795, 5-6=-896/127, 6-7=-2307/174, 7-8=-2186/53, 8-9=-2341/28
BOT CHORD	2-21=-328/36, 20-21=-328/36, 19-20=-2341/128, 17-18=0/275, 7-14=-363/143, 13-14=-30/2356, 12-13=-21/1541, 11-12=-21/1541
WEBS	3-20=-561/59, 18-20=0/322, 5-20=-1894/57, 5-17=-27/1109, 6-17=-703/129, 14-17=-22/647, 6-14=-105/1700, 8-14=-920/0, 8-13=-417/55, 9-12=0/252, 9-13=-10/1000, 9-11=-1926/26

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=43ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-9-14, Interior(1) 2-9-14 to 14-9-12, Exterior(2R) 14-9-12 to 19-1-11, Interior(1) 19-1-11 to 22-5-1, Exterior(2R) 22-5-1 to 26-8-15, Interior(1) 26-8-15 to 43-1-4 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
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, 19.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Julius Lee PE No. 34869
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October 25,2022

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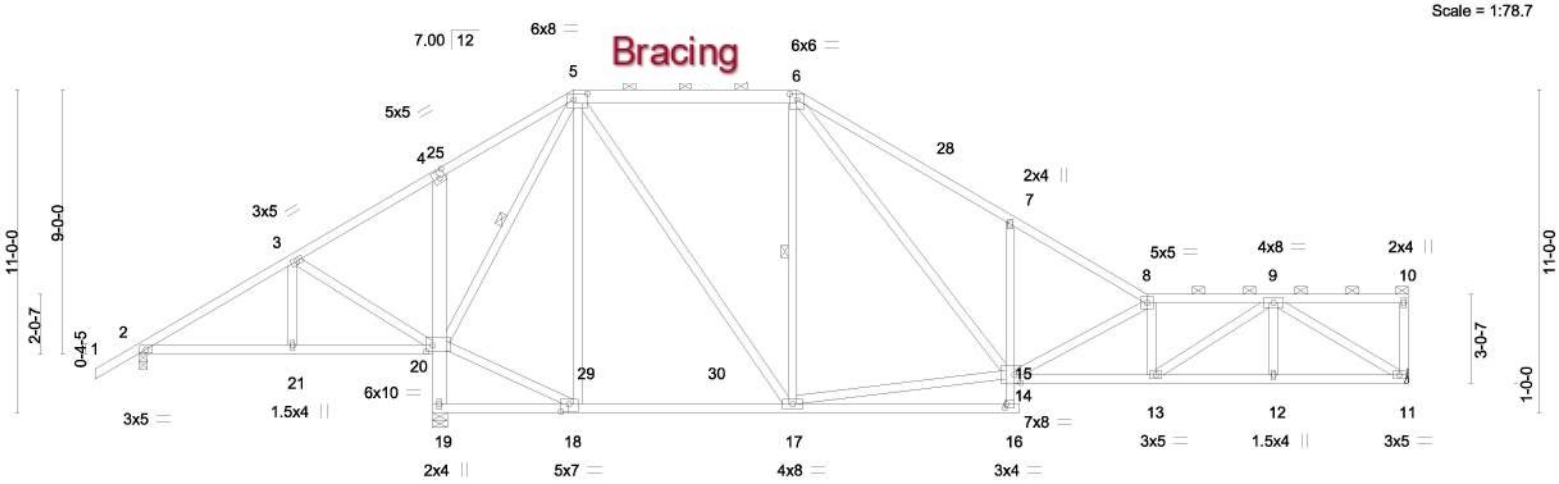
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A08	PIGGYBACK BASE	1	1	T29051486
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:00:52 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-d6webhuNmh?nIU?Op_ayb75sd8gNq_R6XbDcSFyQBqf

-1-6-0	5-2-13	10-0-0	14-9-12	22-5-1	30-0-0	34-4-5	38-7-14	43-3-0
1-6-0	5-2-13	4-9-3	4-9-12	7-7-5	7-6-15	4-4-5	4-3-10	4-7-2

Scale = 1:78.7



5-2-13	10-0-0	10-3-0	14-9-12	22-5-1	30-0-0	34-4-5	38-7-14	43-3-0
5-2-13	4-9-3	0-3-0	4-6-12	7-7-5	7-6-15	4-4-5	4-3-10	4-7-2

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-5-8,0-2-8], [6:0-3-0,0-2-5], [14:0-2-8,0-3-4], [16:0-0-8,0-1-8], [18:0-3-4,0-3-0], [20:0-2-12,0-2-8]

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	0.50	Vert(LL)	-0.23	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.72	Vert(CT)	-0.38	17-18	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	-0.04	19	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 315 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 5-6: 2x6 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 4-19: 2x6 SP No.2
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-3-11 max.): 5-6, 8-10.
BOT CHORD	Rigid ceiling directly applied. Except: 10-0-0 oc bracing: 14-16
WEBS	1 Row at midpt 5-20, 6-17

REACTIONS. (size) 11=Mechanical, 2=0-3-7, 19=0-6-0
Max Horz 2=215(LC 11)
Max Uplift 2=-182(LC 22), 19=-5(LC 12)
Max Grav 11=1312(LC 18), 2=228(LC 21), 19=2572(LC 17)

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

TOP CHORD	2-3=-80/614, 3-4=-48/999, 4-5=0/1013, 5-6=-846/161, 6-7=-2265/225, 7-8=-2189/99, 8-9=-2999/79
BOT CHORD	2-21=-521/93, 20-21=-521/93, 19-20=-2481/131, 7-14=-402/156, 13-14=-43/2985, 12-13=-36/1839, 11-12=-36/1839
WEBS	3-20=-564/59, 5-20=-2117/63, 5-17=-22/1163, 6-17=-731/117, 14-17=-11/651, 6-14=-122/1718, 8-14=-1366/42, 8-13=-573/65, 9-13=-17/1337, 9-11=-2142/36

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=43ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-9-14, Interior(1) 2-9-14 to 14-9-12, Exterior(2R) 14-9-12 to 19-1-11, Interior(1) 19-1-11 to 22-5-1, Exterior(2R) 22-5-1 to 26-8-15, Interior(1) 26-8-15 to 43-1-4 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
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) 19 except (jt=lb) 2=182.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

October 25,2022

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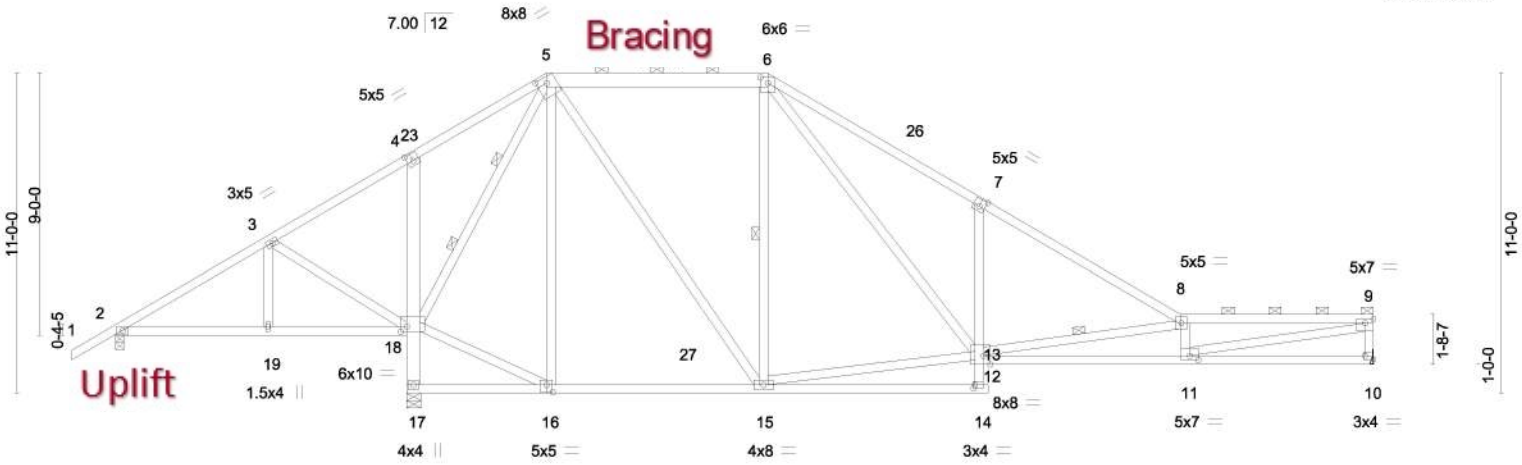
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A09	PIGGYBACK BASE	1	1	T29051487
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:00:54 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-ZV2O0MwelJFVXo9mwPcQgYA6QxKTlu?P?vijX7yQBqd

-1-6-0	5-2-13	10-0-0	14-9-12	22-5-1	30-0-0	36-7-11	43-3-0
1-6-0	5-2-13	4-9-3	4-9-12	7-7-5	7-6-15	6-7-11	6-7-5

Scale = 1:79.4



5-2-13	10-0-0	10-3-0	14-9-12	22-5-1	30-0-0	36-7-11	43-3-0
5-2-13	4-9-3	0-3-0	4-6-12	7-7-5	7-6-15	6-7-11	6-7-5

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-4-0,0-2-6], [6:0-3-0,0-2-5], [7:0-2-8,0-3-0], [9:Edge,0-1-12], [10:Edge,0-1-8], [11:0-3-8,0-1-12], [12:0-2-12,Edge], [14:0-0-8,0-1-8], [16:0-2-8,0-3-0], [18:0-2-8,0-2-0]

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	0.87	Vert(LL)	-0.38	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.81	Vert(CT)	-0.72	11-12	>549	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	-0.08	17	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 306 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 5-6: 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 4-17: 2x6 SP No.2, 10-12: 2x4 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 5-6, 8-9.
BOT CHORD Rigid ceiling directly applied. Except: 10-0-0 oc bracing: 12-14
WEBS 1 Row at midpt 6-15, 8-12
2 Rows at 1/3 pts 5-18

REACTIONS. (size) 10=Mechanical, 2=0-3-7, 17=0-6-0
Max Horz 2=200(LC 11)
Max Uplift 2=-624(LC 24), 17=-1(LC 12)
Max Grav 10=1166(LC 18), 17=3171(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-68/1536, 3-4=-36/1948, 4-5=0/1983, 5-6=-541/159, 6-7=-1761/184, 7-8=-1782/68, 8-9=-4088/82, 9-10=-1032/48
BOT CHORD 2-19=-1368/107, 18-19=-1368/107, 17-18=-3078/126, 15-16=-321/113, 7-12=-370/135, 11-12=-64/4133
WEBS 3-18=-577/59, 16-18=-274/113, 5-18=-3057/76, 5-16=0/321, 5-15=-31/1366, 6-15=-852/119, 12-15=0/468, 6-12=-78/1550, 8-12=-2768/105, 8-11=-668/105, 9-11=-63/3936

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=43ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-9-14, Interior(1) 2-9-14 to 14-9-12, Exterior(2R) 14-9-12 to 19-1-11, Interior(1) 19-1-11 to 22-5-1, Exterior(2R) 22-5-1 to 26-8-15, Interior(1) 26-8-15 to 43-1-4 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
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) 17 except (jt=lb) 2=624.
9) 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.
10) 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
16023 Swingley Ridge Rd
Chesterfield, MO 63017

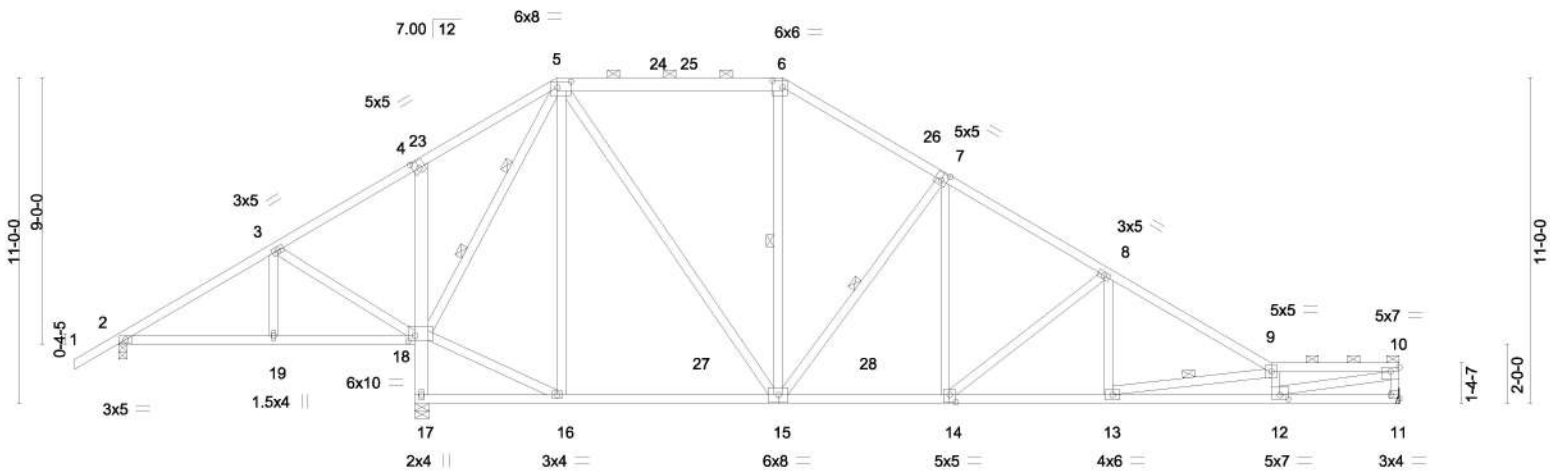
Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A10	PIGGYBACK BASE	1	1	T29051488

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:00:56 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-WuA8R2xuqwVDn5J92qeumzFYjl0SmqEiSCBqb0yQBqb

-1-6-0	5-2-13	10-0-0	14-9-12	22-5-1	27-11-1	33-5-2	38-11-2	43-3-0
1-6-0	5-2-13	4-9-3	4-9-12	7-7-5	5-6-0	5-6-0	5-6-0	4-3-14

Scale = 1:78.0



5-2-13	10-0-0	10-3-0	14-9-12	22-5-1	27-11-1	33-5-2	38-11-2	43-3-0
5-2-13	4-9-3	0-3-0	4-6-12	7-7-5	5-6-0	5-6-0	5-6-0	4-3-14

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-5-8,0-2-8], [6:0-4-0,0-2-12], [7:0-2-8,0-3-0], [10:Edge,0-1-12], [11:Edge,0-1-8], [12:0-3-8,0-1-12], [14:0-2-8,0-3-0], [18:0-2-12,0-2-4]

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	0.50	Vert(LL)	-0.25	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.47	12-13	>844	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	-0.06	17	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 302 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 5-6: 2x6 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 4-17: 2x6 SP No.2, 11-14: 2x4 SP No.1
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-9-3 max.): 5-6, 9-10.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-15, 7-15, 9-13 2 Rows at 1/3 pts 5-18

REACTIONS. (size) 11=Mechanical, 2=0-3-7, 17=0-6-0
Max Horz 2=206(LC 11)
Max Uplift 2=-327(LC 22)
Max Grav 11=1298(LC 18), 2=148(LC 21), 17=2788(LC 17)

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

TOP CHORD	2-3=-44/931, 3-4=-12/1305, 4-5=0/1348, 5-6=-738/175, 6-7=-878/158, 7-8=-1583/124, 8-9=-2425/90, 9-10=-4056/88, 10-11=-1164/42
BOT CHORD	2-19=-825/112, 18-19=-825/112, 17-18=-2754/95, 14-15=0/1209, 13-14=-23/2043, 12-13=-72/4168
WEBS	3-18=-565/58, 5-18=-2516/55, 5-16=0/348, 5-15=-44/1169, 7-15=-946/77, 7-14=0/845, 8-14=-1034/74, 8-13=0/683, 9-13=-2166/72, 9-12=-965/82, 10-12=-70/3929

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=43ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-9-14, Interior(1) 2-9-14 to 14-9-12, Exterior(2R) 14-9-12 to 19-1-11, Interior(1) 19-1-11 to 22-5-1, Exterior(2R) 22-5-1 to 26-8-15, Interior(1) 26-8-15 to 43-1-4 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
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) except (jt=lb) 2=327.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

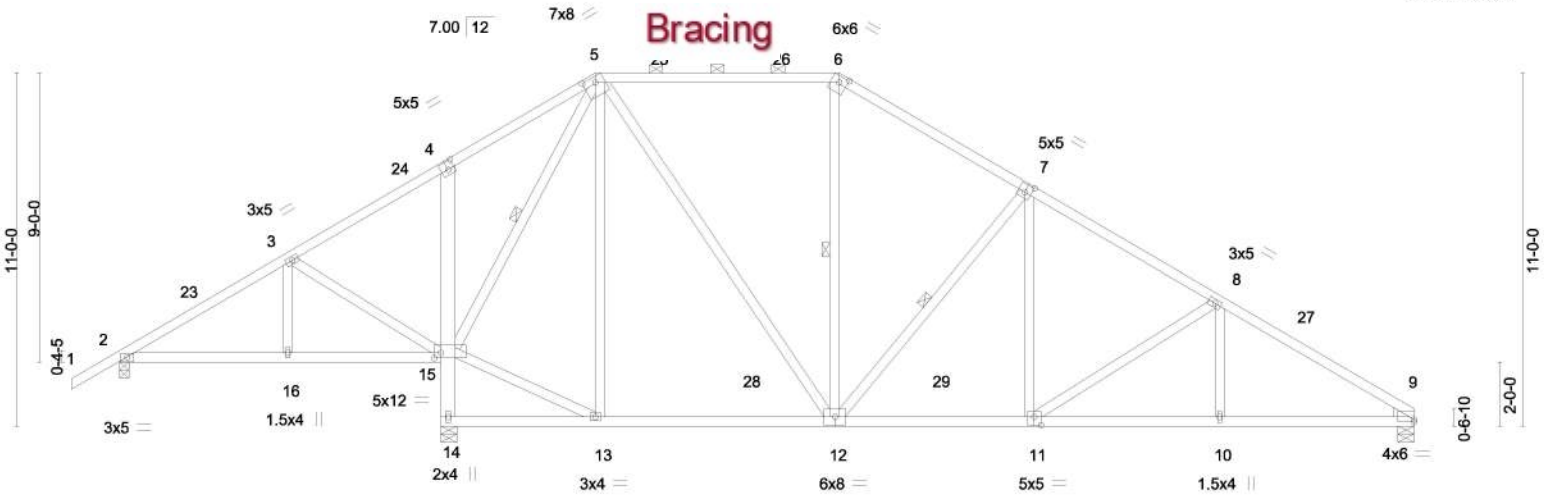
Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A11	PIGGYBACK BASE	1	1	T29051489

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:00:58 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-SGIvskz8MXmw0PTX9FgNrOLqOZinEns?wWgwguyQBqZ

-1-6-0	5-2-13	10-0-0	14-9-12	22-5-1	28-4-3	34-3-5	40-4-0
1-6-0	5-2-13	4-9-3	4-9-12	7-7-5	5-11-2	5-11-2	6-0-11

Scale = 1:72.0



5-2-13	10-0-0	10-3-0	14-9-12	22-5-1	28-4-3	34-3-5	40-4-0
5-2-13	4-9-3	0-3-0	4-6-12	7-7-5	5-11-2	5-11-2	6-0-11

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-4-8,0-2-0], [6:0-3-0,0-2-5], [7:0-2-8,0-3-0], [9:0-0-0,0-1-1], [11:0-2-8,0-3-0], [15:0-2-8,0-2-0]

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	0.74	Vert(LL)	-0.19	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.79	Vert(CT)	-0.33	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 272 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-14: 2x6 SP No.2
WEBS 2x4 SP No.2
WEDGE
Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-6-8 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-15, 6-12, 7-12

REACTIONS. (size) 2=0-3-7, 14=0-6-0, 9=0-6-0
Max Horz 2=189(LC 11)
Max Uplift 2=-42(LC 12), 9=-1(LC 12)
Max Grav 2=378(LC 21), 14=2122(LC 17), 9=1338(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-270/107, 3-4=0/473, 4-5=0/493, 5-6=-884/136, 6-7=-1050/123, 7-8=-1619/76, 8-9=-2130/33
BOT CHORD 14-15=-2088/9, 12-13=0/409, 11-12=0/1263, 10-11=0/1759, 9-10=0/1759
WEBS 3-15=-554/44, 13-15=0/494, 5-15=-1550/0, 5-13=0/260, 5-12=-19/840, 7-12=-722/58, 7-11=0/542, 8-11=-573/63, 8-10=0/250

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=40ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-6-6, Interior(1) 2-6-6 to 14-9-12, Exterior(2R) 14-9-12 to 20-6-3, Interior(1) 20-6-3 to 22-5-1, Exterior(2R) 22-5-1 to 28-3-5, Interior(1) 28-3-5 to 40-4-0 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.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
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Date:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A12	PIGGYBACK BASE	3	1	T29051490

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:00 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-OfPfHQ_Pu90eGjdwHgjrwpQAuMNFihLHNq91knyQBqX

-1-6-0	5-2-13	10-0-0	14-9-12	22-5-1	28-4-3	34-3-5	40-4-0	41-10-0
1-6-0	5-2-13	4-9-3	4-9-12	7-7-5	5-11-2	5-11-2	6-0-11	1-6-0

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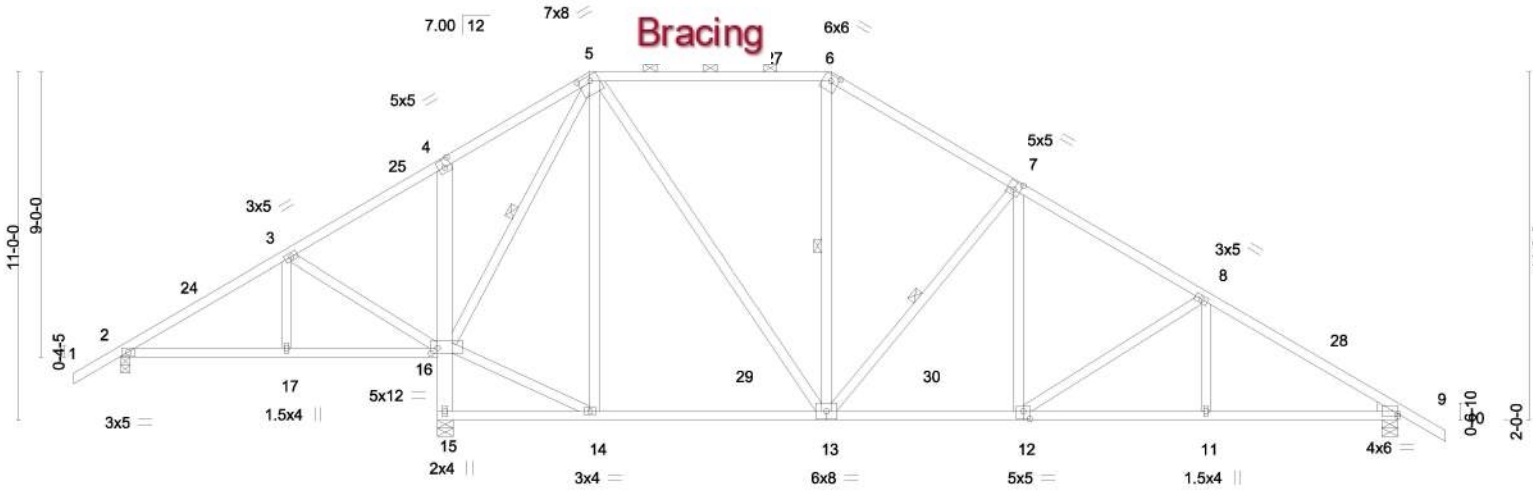

5-2-13	10-0-0	10-3-0	14-9-12	22-5-1	28-4-3	34-3-5	40-4-0
5-2-13	4-9-3	0-3-0	4-6-12	7-7-5	5-11-2	5-11-2	6-0-11

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-4-8,0-2-0], [6:0-3-0,0-2-5], [7:0-2-8,0-3-0], [9:Edge,0-1-1], [12:0-2-8,0-3-0], [16:0-2-8,0-2-0]

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	0.74	Vert(LL)	-0.19	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.79	Vert(CT)	-0.33	13-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 274 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.2
WEDGE
Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-6-12 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-16, 6-13, 7-13

REACTIONS. (size) 2=0-3-7, 15=0-6-0, 9=0-6-0
Max Horz 2=194(LC 11)
Max Uplift 2=-47(LC 12), 9=-43(LC 12)
Max Grav 2=377(LC 21), 15=2128(LC 17), 9=1420(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-268/115, 3-4=0/482, 4-5=0/502, 5-6=-881/141, 6-7=-1046/129, 7-8=-1611/80, 8-9=-2112/31
BOT CHORD 15-16=-2093/0, 13-14=0/412, 12-13=0/1253, 11-12=0/1737, 9-11=0/1737
WEBS 3-16=-555/44, 14-16=0/497, 5-16=-1554/0, 5-14=0/261, 5-13=-17/838, 7-13=-718/56, 7-12=0/536, 8-12=-559/54

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=40ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-6-6, Interior(1) 2-6-6 to 14-9-12, Exterior(2R) 14-9-12 to 20-6-3, Interior(1) 20-6-3 to 22-5-1, Exterior(2R) 22-5-1 to 28-3-5, Interior(1) 28-3-5 to 41-10-0 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.
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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Date:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A13	PIGGYBACK BASE	1	1	T29051491
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:03 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-pE5ovR1HB4OD7ALVyoGYYR2iUaOwv2Ik3oOhL6yQBqU

-1-6-0	5-2-13	10-0-0	14-9-12	21-5-15	24-9-2	34-8-8	39-11-12	42-4-0	43-10-0
1-6-0	5-2-13	4-9-3	4-9-12	6-8-3	3-3-3	9-11-6	5-3-4	2-4-4	1-6-0

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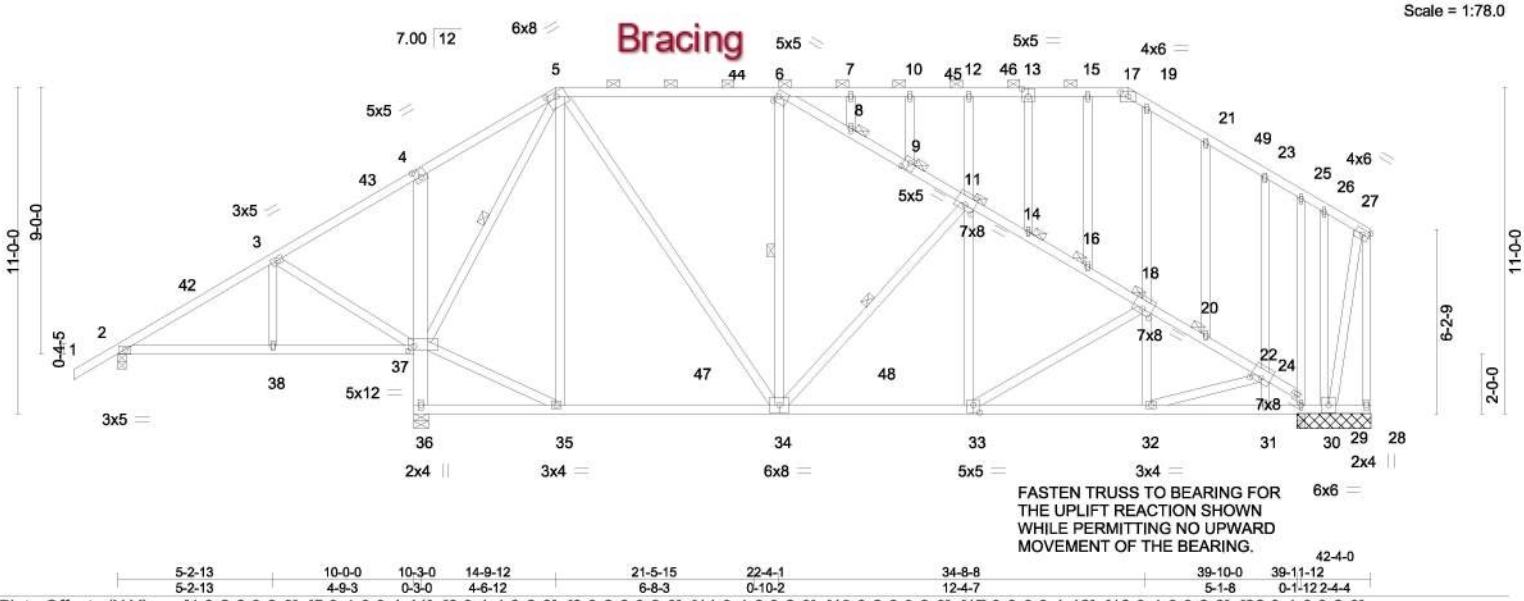

5-2-13	10-0-0	10-3-0	14-9-12	21-5-15	22-4-1	34-8-8	39-10-0	39-11-12	42-4-0
5-2-13	4-9-3	0-3-0	4-6-12	6-8-3	0-10-2	12-4-7	5-1-8	0-1-12	2-4-4

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-4-0,0-1-11], [6:0-1-4,0-2-8], [9:0-2-8,0-3-0], [11:0-4-0,0-2-0], [13:0-2-8,0-3-0], [17:0-3-0,0-1-12], [18:0-4-0,0-2-0], [22:0-4-0,0-2-0], [33:0-2-8,0-3-0], [37:0-2-8,0-2-0]

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	0.65	Vert(LL)	-0.20	34-35	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.85	Vert(CT)	-0.36	33-34	>992	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.05	24	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 405 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-36: 2x6 SP No.2, 28-33: 2x4 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-7-10 max.): 5-17, 6-24.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-37, 6-34, 11-34
JOINTS 1 Brace at Jt(s): 9, 11, 14, 16, 18, 20, 8

REACTIONS. All bearings 2-6-0 except (jt=length) 2=0-3-7, 36=0-6-0.
(lb) - Max Horz 2=263(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 24 except 29=-1632(LC 19)
Max Grav All reactions 250 lb or less at joint(s) except 2=341(LC 21), 36=2162(LC 17), 28=972(LC 19), 30=1263(LC 19), 30=1119(LC 1), 24=832(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-68/482, 4-5=-2/499, 5-6=-882/131, 27-28=-831/0, 6-8=-782/0, 8-9=-814/0, 9-11=-821/0, 11-14=-1229/0, 14-16=-1263/0, 16-18=-1277/0, 18-20=-1456/0, 20-22=-1487/0, 22-24=-384/7, 23-25=-378/74
BOT CHORD 36-37=-2129/17, 34-35=-12/412, 33-34=-1/1241, 32-33=0/1461, 31-32=-29/457, 30-31=-29/457
WEBS 3-37=-555/44, 35-37=-5/499, 5-37=-1518/0, 5-35=0/263, 5-34=-3/798, 24-25=-585/8, 11-12=-253/51, 11-33=0/359, 22-23=0/258, 22-31=-562/13, 27-29=0/776, 11-34=-568/4, 22-32=0/1051

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) -1-6-0 to 2-8-13, Interior(1) 2-8-13 to 14-9-12, Exterior(2R) 14-9-12 to 20-9-10, Interior(1) 20-9-10 to 34-1-9, Exterior(2R) 34-1-9 to 39-11-12, Interior(1) 39-11-12 to 42-2-4 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
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 1.5x4 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, with BCDL = 10.0psf.
8) Bearing at joint(s) 24 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 24 except (jt=lb) 29=1632.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 25,2022

Continued on page 2

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A13	PIGGYBACK BASE	1	1	T29051491
					Job Reference (optional)

NOTES-

10) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) This truss has large uplift reaction at jt. 19 from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A14	Piggyback Base	1	1	T29051492

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:05 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-IcDYK72XihexMUVu3DJ0ds73fN3RNzb1X6toQ?yQBqS

-1-6-0	5-2-13	10-0-0	14-9-12	21-5-15	28-0-5	34-8-8	42-4-0	43-10-0
1-6-0	5-2-13	4-9-3	4-9-12	6-8-3	6-6-7	6-8-3	7-7-8	1-6-0

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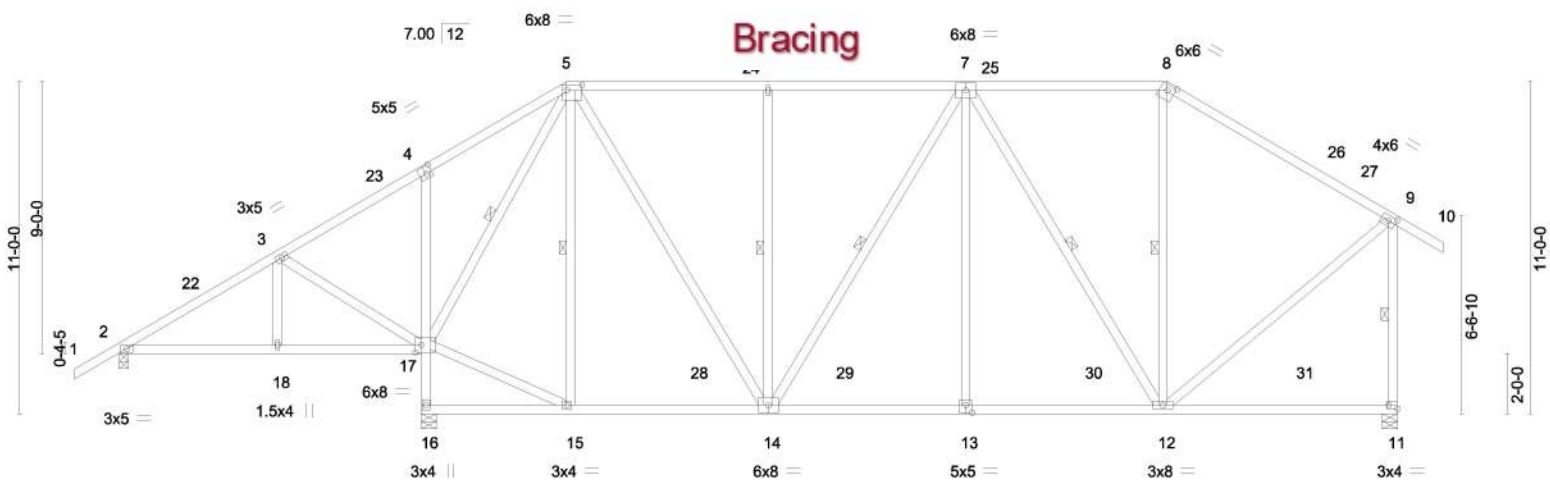

5-2-13	10-0-0	10-3-0	14-9-12	21-5-15	28-0-5	34-8-8	42-4-0
5-2-13	4-9-3	0-3-0	4-6-12	6-8-3	6-6-7	6-8-3	7-7-8

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-6-0,0-2-4], [8:0-3-0,0-2-5], [9:0-2-14,0-2-0], [11:Edge,0-1-8], [13:0-2-8,0-3-0], [17:0-2-8,0-3-0]

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)	-0.21	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.91	Vert(CT)	-0.36	13-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 321 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-17, 5-15, 6-14, 7-14, 7-12, 8-12, 9-11

REACTIONS. (size) 2=0-3-7, 16=0-6-0, 11=0-6-0
Max Horz 2=272(LC 11)
Max Uplift 2=-42(LC 12), 11=-40(LC 12)
Max Grav 2=445(LC 17), 16=2094(LC 17), 11=1607(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-443/43, 4-5=-49/251, 5-6=-1057/141, 6-7=-1057/141, 7-8=-895/134, 8-9=-1113/122, 9-11=-1459/83
BOT CHORD 2-18=-45/391, 17-18=-45/391, 16-17=-2046/19, 14-15=0/572, 13-14=0/1111, 12-13=0/1111
WEBS 3-17=-548/42, 15-17=0/636, 5-17=-1371/0, 5-14=-13/907, 6-14=-472/90, 7-13=0/331, 7-12=-526/2, 9-12=0/1040

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) -1-6-0 to 2-8-13, Interior(1) 2-8-13 to 14-9-12, Exterior(2R) 14-9-12 to 20-9-10, Interior(1) 20-9-10 to 34-8-8, Exterior(2R) 34-8-8 to 40-8-5, Interior(1) 40-8-5 to 43-10-0 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, 11.
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.

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Date:

October 25,2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

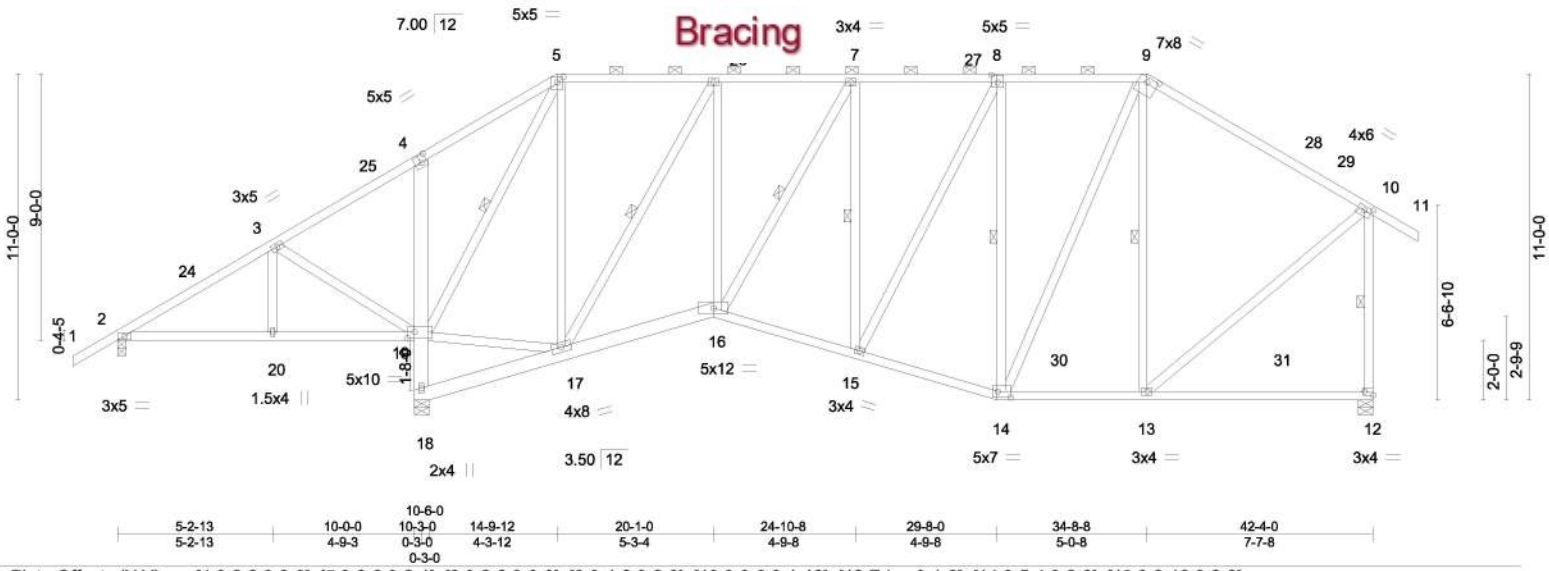
Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A15	PIGGYBACK BASE	1	1	T29051493

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:07 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-h?KIlp4oElufbnfGBeLUiHCPEBqfrrhJ_QMvUtyQBqQ

-1-6-0	5-2-13	10-0-0	14-9-12	20-1-0	24-10-8	29-8-0	34-8-8	42-4-0	43-10-0
1-6-0	5-2-13	4-9-3	4-9-12	5-3-4	4-9-8	4-9-8	5-0-8	7-7-8	1-6-0

Scale = 1:77.9



5-2-13	10-0-0	14-9-12	20-1-0	24-10-8	29-8-0	34-8-8	42-4-0
5-2-13	4-9-3	4-3-12	5-3-4	4-9-8	4-9-8	5-0-8	7-7-8

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-2-8,0-2-1], [8:0-2-8,0-3-0], [9:0-4-8,0-2-0], [10:0-3-0,0-1-12], [12:Edge,0-1-8], [14:0-5-4,0-2-8], [19:0-2-12,0-2-8]

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	0.54	Vert(LL)	-0.12	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-0.22	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.05	12	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 351 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-18,16-18: 2x6 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-3-1 max.): 5-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-17, 7-16, 7-15, 8-14, 9-13, 10-12, 5-19

REACTIONS. (size) 2=0-3-7, 18=0-6-0, 12=0-6-0
Max Horz 2=272(LC 11)
Max Uplift 2=-38(LC 12), 12=-38(LC 12)
Max Grav 2=347(LC 18), 18=2141(LC 17), 12=1521(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-254/69, 3-4=-73/431, 4-5=-8/441, 5-6=-491/112, 6-7=-1085/88, 7-8=-1151/114, 8-9=-999/133, 9-10=-1036/122, 10-12=-1365/84
BOT CHORD 18-19=-2056/27, 16-17=0/1185, 15-16=0/1206, 14-15=0/1033, 13-14=0/783
WEBS 3-19=-553/44, 5-17=0/945, 6-17=-1275/0, 7-15=-271/28, 8-15=0/389, 8-14=-577/22, 9-14=0/472, 9-13=-391/62, 10-13=0/945, 6-16=0/858, 17-19=0/531, 5-19=-1566/0

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) -1-6-0 to 2-8-13, Interior(1) 2-8-13 to 14-9-12, Exterior(2R) 14-9-12 to 20-9-10, Interior(1) 20-9-10 to 34-8-8, Exterior(2R) 34-8-8 to 40-8-5, Interior(1) 40-8-5 to 43-10-0 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) Bearing at joint(s) 18 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) 2, 12.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

October 25,2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ***ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information*** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A16	PIGGYBACK BASE	5	1	T29051494

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:09 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-dOS3AV52mw8Nr5pfl3NynilfJ_W9JlFcSkr0ZmyQBqO

-1-6-0 | 5-2-13 | 10-0-0 | 14-9-12 | 20-1-0 | 24-10-8 | 29-8-0 | 34-8-8 | 42-4-0
1-6-0 | 5-2-13 | 4-9-3 | 4-9-12 | 5-3-4 | 4-9-8 | 4-9-8 | 5-0-8 | 7-7-8

Scale = 1:77.8

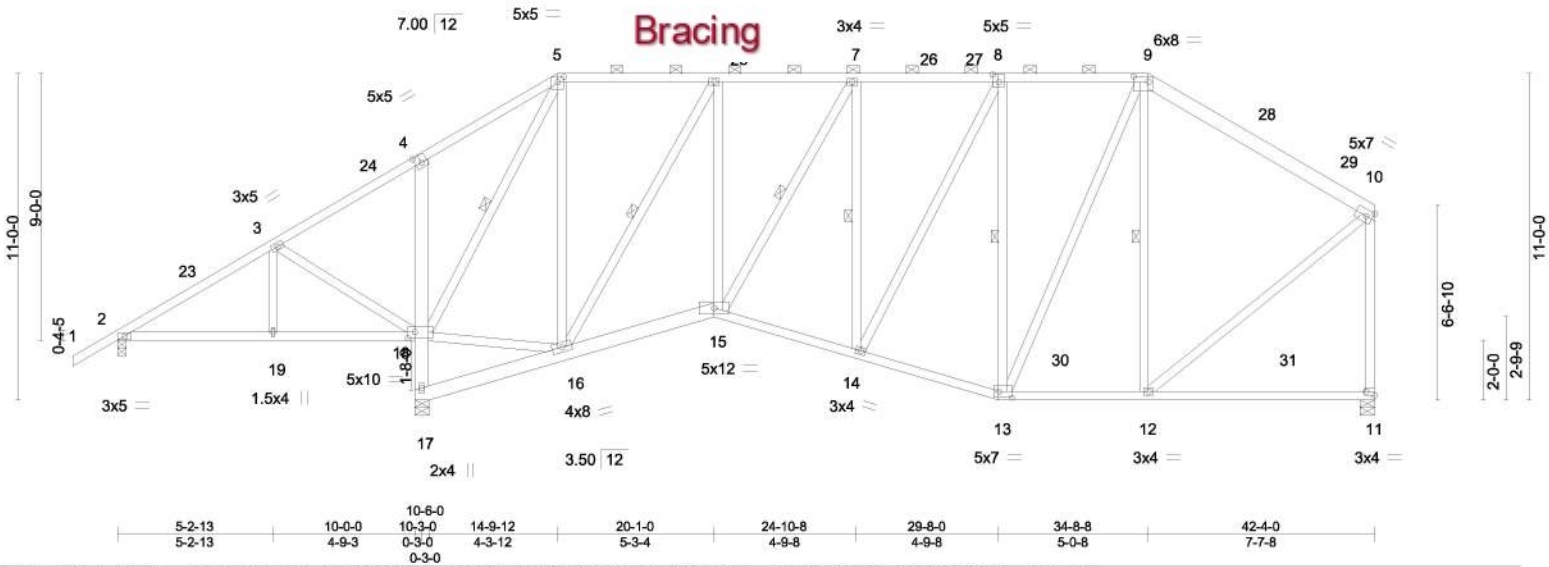


Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-2-8,0-2-1], [8:0-2-8,0-3-0], [9:0-6-0,0-2-4], [11:Edge,0-1-8], [13:0-5-4,0-2-8], [18:0-2-12,0-2-8]

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	0.95	Vert(LL)	-0.12	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-0.22	11-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.05	11	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 356 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 9-10: 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 4-17,15-17: 2x6 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-2-15 max.): 5-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-16, 7-15, 7-14, 8-13, 9-12, 5-18

REACTIONS. (size) 2=0-3-7, 17=0-6-0, 11=0-6-0
Max Horz 2=266(LC 11)
Max Uplift 2=-30(LC 12), 17=-7(LC 12)
Max Grav 2=353(LC 17), 17=2133(LC 17), 11=1430(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-264/58, 3-4=-87/415, 4-5=-20/425, 5-6=-496/108, 6-7=-1092/80, 7-8=-1156/102, 8-9=-1003/118, 9-10=-1039/100, 10-11=-1276/44
BOT CHORD 17-18=-2048/36, 15-16=-1/1186, 14-15=-3/1211, 13-14=-17/1037, 12-13=-19/786
WEBS 3-18=-553/44, 5-16=0/944, 6-16=-1277/0, 7-14=-273/34, 8-14=0/389, 8-13=-574/25, 9-13=0/469, 9-12=-393/80, 10-12=0/953, 16-18=-11/531, 5-18=-1557/0, 6-15=0/860

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) -1-6-0 to 2-8-13, Interior(1) 2-8-13 to 14-9-12, Exterior(2R) 14-9-12 to 20-9-10, Interior(1) 20-9-10 to 34-8-8, Exterior(2R) 34-8-8 to 40-8-5, Interior(1) 40-8-5 to 42-2-4 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
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) Bearing at joint(s) 17 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) 2, 17.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	A17	PIGGYBACK BASE GIRDE	1	1	T29051495
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:12 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-2z8BoW7w3rWxiZXE_BxfPLwFKCaXW5T38i3g95yQBqL

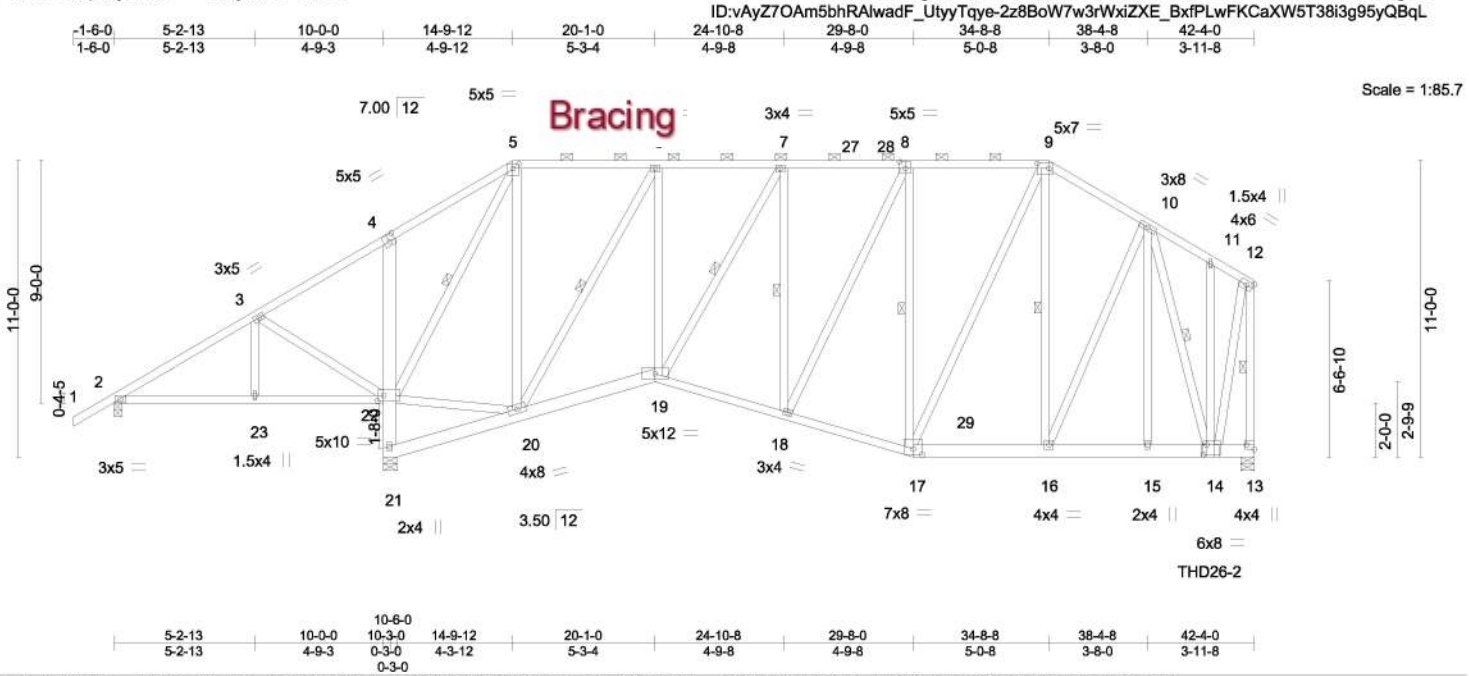

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [5:0-2-8,0-2-1], [8:0-2-8,0-3-0], [9:0-5-4,0-2-4], [13:Edge,0-3-8], [14:0-1-8,0-4-4], [17:0-4-0,0-2-8], [22:0-2-12,0-2-8]

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	0.58	Vert(LL)	-0.08	18-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.43	Vert(CT)	-0.15	18-19	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.05	13	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 401 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
2-22,17-19: 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-8-6 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-10 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 5-0-9 oc bracing.
WEBS 1 Row at midpt 6-20, 7-19, 7-18, 8-17, 9-16, 12-13, 5-22, 10-14

REACTIONS. (size) 2=0-3-7, 21=0-6-0, 13=0-6-0
Max Horz 2=265(LC 24)
Max Uplift 2=-39(LC 25), 21=-10(LC 8), 13=-43(LC 8)
Max Grav 2=337(LC 13), 21=2203(LC 29), 13=2103(LC 30)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-72/472, 4-5=-17/477, 5-6=-485/100, 6-7=-1110/84, 7-8=-1192/104, 8-9=-1052/121, 9-10=-1060/123, 10-11=-535/113, 11-12=-550/98, 12-13=-1943/72
BOT CHORD 21-22=-2120/33, 19-20=0/1204, 18-19=0/1247, 17-18=0/1102, 16-17=0/850, 15-16=-5/679, 14-15=-5/679
WEBS 3-22=-559/43, 5-20=0/996, 6-20=-1337/0, 8-18=0/371, 8-17=-554/39, 9-17=-32/460, 10-16=-59/528, 6-19=0/900, 20-22=-6/520, 5-22=-1634/0, 12-14=0/1651, 10-14=-1047/0

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 21 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) 2, 21, 13.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Use MiTek THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 40-8-8 from the left end to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) 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

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

October 25,2022

Continued on page 2

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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: 1-5=-60, 5-9=-60, 9-12=-60, 22-24=-20, 19-21=-20, 17-19=-20, 13-17=-20
   Concentrated Loads (lb)
   Vert: 14=-708(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

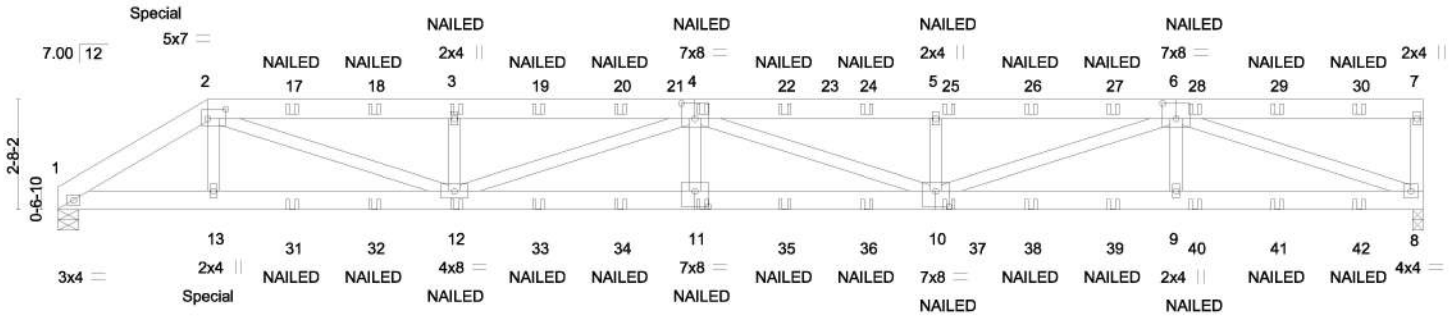
Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	B01	Half Hip Girder	1	2	T29051496

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:18 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-t6VT2aChfhH5QU?NKS13fcAOKdc9wbxxWdW_NkyQBqF

3-7-11	9-7-13	15-6-3	21-4-9	27-2-14	33-3-0
3-7-11	6-0-2	5-10-6	5-10-6	5-10-6	6-0-2

Scale = 1:56.3



3-7-11	9-7-13	15-6-3	21-4-9	27-2-14	33-3-0
3-7-11	6-0-2	5-10-6	5-10-6	5-10-6	6-0-2

Plate Offsets (X,Y)-- [2:0-5-4,0-2-12], [4:0-4-0,0-4-8], [6:0-4-0,0-4-8], [10:0-4-0,0-4-8], [11:0-4-0,0-4-8]

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)	-0.17	11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	-0.35	11	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.45	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 433 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 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.

"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.

REACTIONS. (size) 1=0-6-0, 8=0-3-0
Max Horz 1=66(LC 7)
Max Uplift 1=-89(LC 8), 8=-66(LC 8)
Max Grav 1=1418(LC 36), 8=1366(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2546/183, 2-3=-4286/266, 3-4=-4286/266, 4-5=-4729/290, 5-6=-4729/290
BOT CHORD 1-13=-129/2181, 12-13=-128/2194, 11-12=-251/5106, 10-11=-251/5106, 9-10=-103/2964, 8-9=-103/2964
WEBS 2-12=-101/2362, 3-12=-389/120, 4-12=-936/30, 4-11=0/253, 4-10=-418/22, 5-10=-398/121, 6-10=-154/1887, 6-9=0/281, 6-8=-3086/126

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: 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=33ft; eave=4ft; 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) 1, 8.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 139 lb down and 74 lb up at 3-7-11 on top chord, and 64 lb down and 46 lb up at 3-7-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: October 25,2022

LOAD CASE(S) Standard

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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MiTek
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Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-7=-60, 8-14=-20
   Concentrated Loads (lb)
   Vert: 2=-2(F) 13=-62(F) 12=-2(F) 3=-2(F) 4=-2(F) 11=-2(F) 17=-2(F) 18=-2(F) 19=-2(F) 20=-2(F) 22=-2(F) 24=-2(F) 25=-2(F) 26=-2(F) 27=-2(F) 28=-2(F) 29=-2(F) 30=-2(F) 31=-2(F) 32=-2(F) 33=-2(F) 34=-2(F) 35=-2(F) 36=-2(F) 37=-2(F) 38=-2(F) 39=-2(F) 40=-2(F) 41=-2(F) 42=-2(F)

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	B02	PIGGYBACK BASE	1	1	T29051497

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:20 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-pVdDTFExAlXpfn8mSt4Xk1FfPQl0OpcEzx?5SdyQBqD

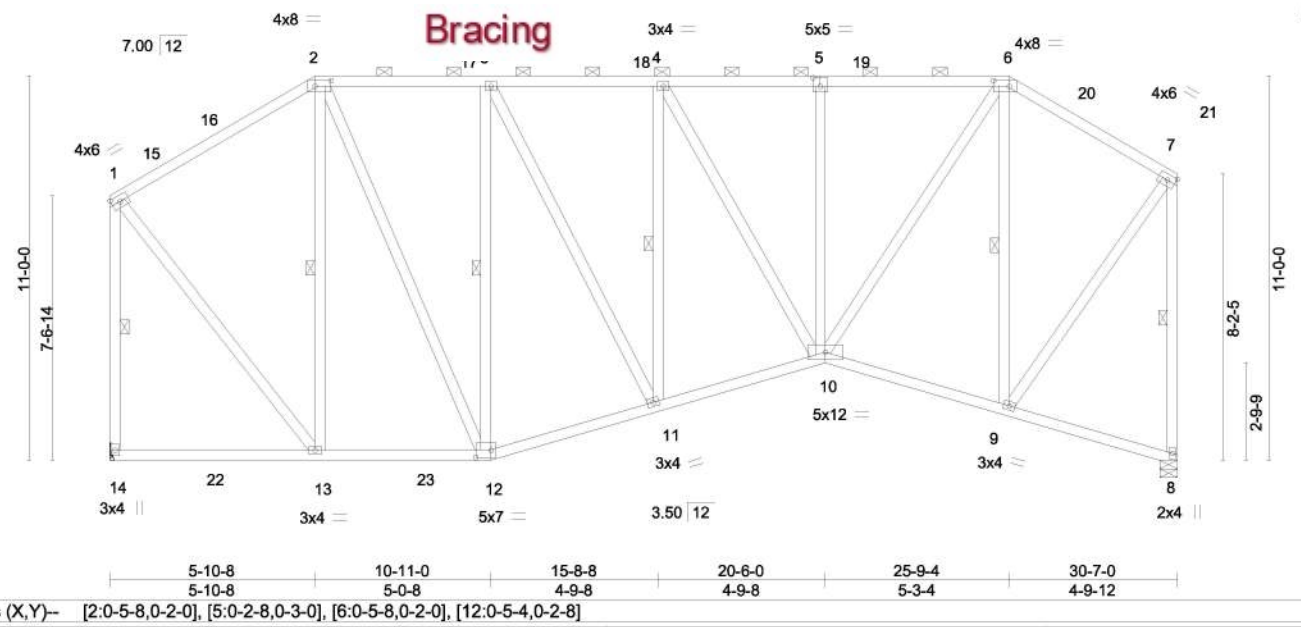

Plate Offsets (X,Y)-- [2:0-5-8,0-2-0], [5:0-2-8,0-3-0], [6:0-5-8,0-2-0], [12:0-5-4,0-2-8]

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	0.51	Vert(LL)	-0.06	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.40	Vert(CT)	-0.12	10-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 271 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, except end verticals, and 2-0-0 oc purlins (4-10-10 max.): 2-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-13, 3-12, 4-11, 6-9, 1-14, 7-8

REACTIONS. (size) 14=Mechanical, 8=0-6-0
Max Horz 14=274(LC 11)
Max Grav 14=1369(LC 18), 8=1314(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-831/110, 2-3=-910/117, 3-4=-1120/100, 4-5=-1135/75, 5-6=-1131/74, 6-7=-769/98, 1-14=-1253/39, 7-8=-1246/44
BOT CHORD 13-14=-247/266, 12-13=-148/714, 11-12=-119/1021, 10-11=-108/1245, 9-10=-93/665
WEBS 2-13=-553/96, 2-12=-22/679, 3-12=-714/25, 3-11=0/493, 4-11=-370/53, 5-10=-253/51, 6-10=-35/1038, 6-9=-805/123, 1-13=-15/990, 7-9=-42/1019

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=31ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-2-7, Interior(1) 3-2-7 to 5-10-8, Exterior(2R) 5-10-8 to 10-2-6, Interior(1) 10-2-6 to 25-9-4, Exterior(2R) 25-9-4 to 30-1-2, Interior(1) 30-1-2 to 30-5-4 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
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) 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.
9) 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.
10) 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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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	B03	PIGGYBACK BASE GIRDE	1	1	T29051498
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:21 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-HhBbhbEaxcfgHxjy?abmHEonsqdG7GpNCble_3yQBqC

3-11-8	7-7-8	12-8-0	17-5-8	22-3-0	27-6-4	32-4-0
3-11-8	3-8-0	5-0-8	4-9-8	4-9-8	5-3-4	4-9-12

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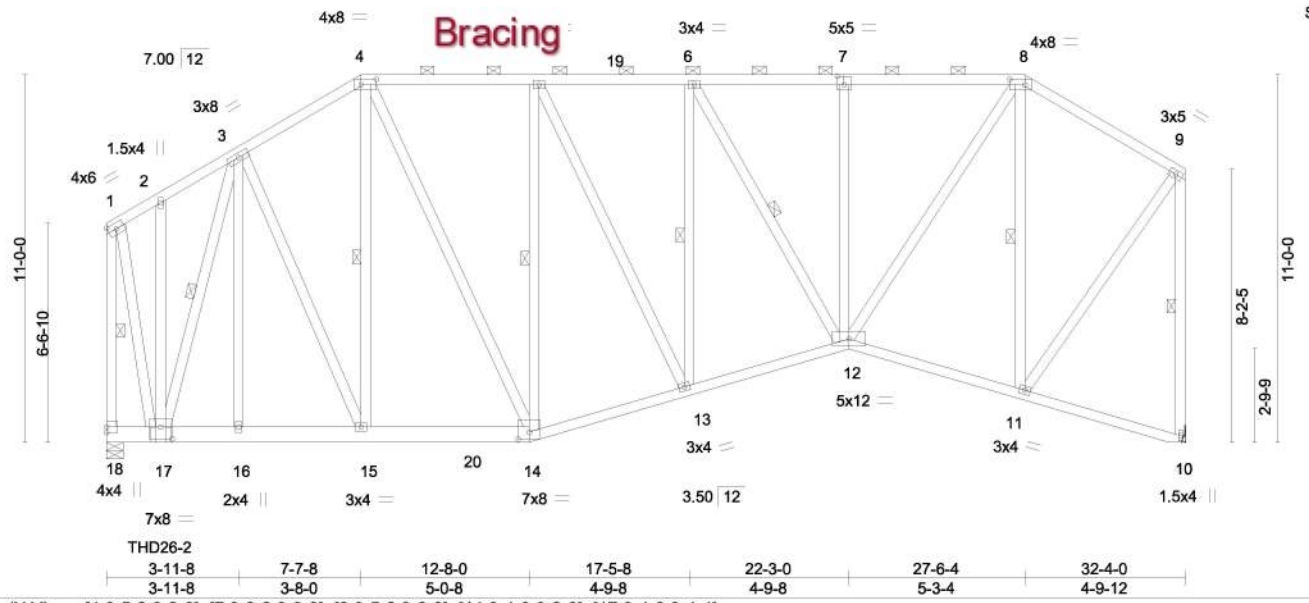

3-11-8	7-7-8	12-8-0	17-5-8	22-3-0	27-6-4	32-4-0
3-11-8	3-8-0	5-0-8	4-9-8	4-9-8	5-3-4	4-9-12

Plate Offsets (X,Y)-- [4:0-5-8,0-2-0], [7:0-2-8,0-3-0], [8:0-5-8,0-2-0], [14:0-4-0,0-2-8], [17:0-4-0,0-4-4]

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	0.66	Vert(LL)	-0.08	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.46	Vert(CT)	-0.14	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.38	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 328 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
14-18: 2x6 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-3 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-2 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-15, 5-14, 6-13, 6-12, 8-11, 1-18, 9-10, 3-17

REACTIONS. (size) 18=0-6-0, 10=Mechanical
Max Horz 18=277(LC 7)
Max Uplift 18=-42(LC 8), 10=-3(LC 8)
Max Grav 18=2138(LC 29), 10=1422(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-559/98, 2-3=-541/113, 3-4=-1091/123, 4-5=-1105/123, 5-6=-1291/104, 6-7=-1270/80, 7-8=-1266/79, 8-9=-833/98, 1-18=-1977/71, 9-10=-1358/15
BOT CHORD 17-18=-254/186, 16-17=-138/802, 15-16=-138/802, 14-15=-92/963, 13-14=-71/1243, 12-13=-69/1422, 11-12=-63/720
WEBS 3-15=-71/580, 4-15=-288/123, 4-14=-41/593, 5-14=-674/38, 5-13=-8/438, 6-13=-306/72, 7-12=-261/53, 8-12=-25/1188, 8-11=-888/82, 9-11=-3/1111, 1-17=0/1706, 3-17=-1115/0

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=32ft; eave=4ft; 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
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) 18, 10.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Use MiTek THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 1-7-8 from the left end to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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LOAD CASE(S) Standard

Continued on page 2

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16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	B03	PIGGYBACK BASE GIRDE	1	1	T29051498
					Job Reference (optional)

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, 8-9=-60, 14-18=-20, 12-14=-20, 10-12=-20
   Concentrated Loads (lb)
   Vert: 17=-707(B)

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	B04	PIGGYBACK BASE	1	1	T29051499
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:23 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-D4IM6HGqTDvNWFtL7?dEMft7keIKbAbggvEl2yyQBqA

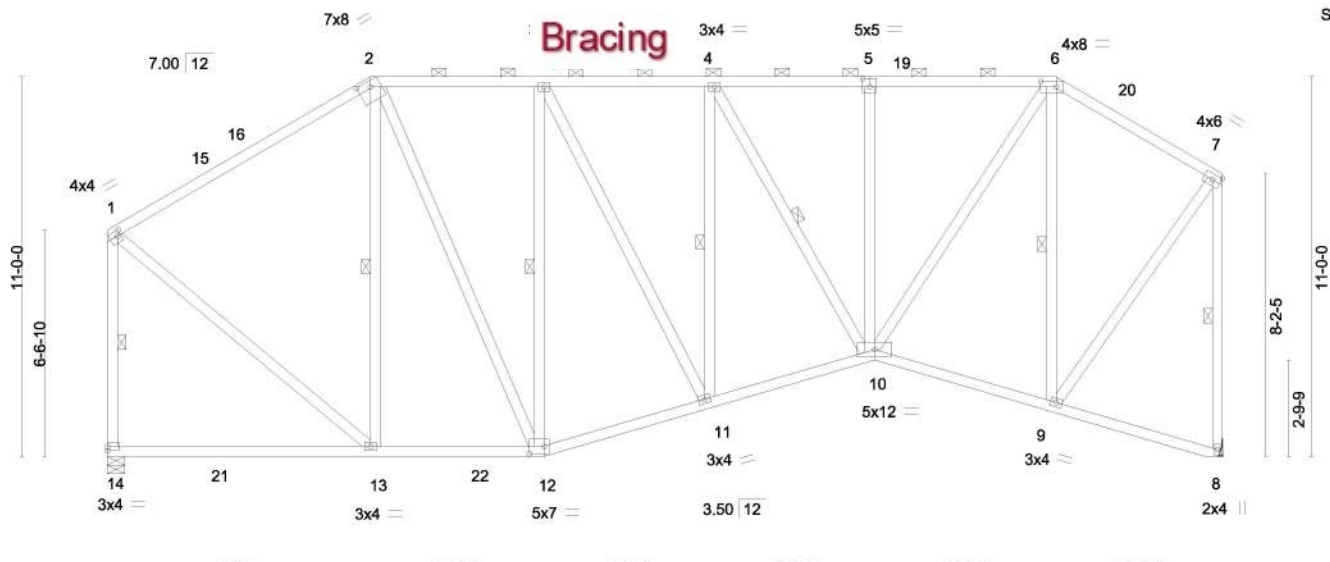

Plate Offsets (X,Y)-- [1:0-1-4,0-1-12], [2:0-4-8,0-2-0], [5:0-2-8,0-3-0], [6:0-5-8,0-2-0], [12:0-5-4,0-2-8]

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	0.63	Vert(LL)	-0.12	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.55	Vert(CT)	-0.22	13-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 276 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, except end verticals, and 2-0-0 oc purlins (4-7-14 max.): 2-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-13, 3-12, 4-11, 4-10, 6-9, 1-14, 7-8

REACTIONS. (size) 14=0-6-0, 8=Mechanical
Max Horz 14=277(LC 11)
Max Uplift 8=-1(LC 12)
Max Grav 14=1457(LC 17), 8=1389(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1059/101, 2-3=-1044/119, 3-4=-1240/102, 4-5=-1229/76, 5-6=-1225/76, 6-7=-815/99, 1-14=-1301/43, 7-8=-1321/41
BOT CHORD 12-13=-133/898, 11-12=-106/1163, 10-11=-98/1370, 9-10=-90/706
WEBS 2-13=-428/89, 2-12=-18/569, 3-12=-685/17, 3-11=0/457, 4-11=-340/58, 5-10=-252/51, 6-10=-28/1141, 6-9=-868/119, 1-13=0/1021, 7-9=-38/1084

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=32ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-4-9, Interior(1) 3-4-9 to 7-7-8, Exterior(2R) 7-7-8 to 12-2-6, Interior(1) 12-2-6 to 27-6-4, Exterior(2E) 27-6-4 to 32-2-4 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
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) 8.
9) 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.
10) 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
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	B05	PIGGYBACK BASE	1	1	T29051500
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:25 2022 Page 1
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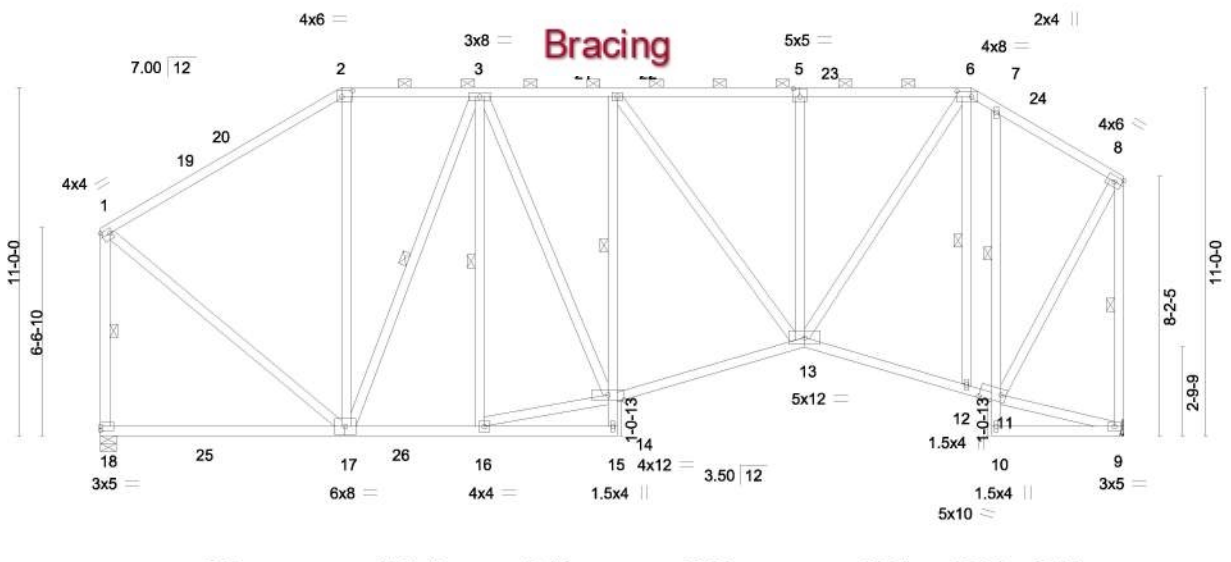

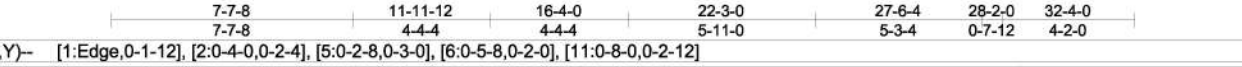

Plate Offsets (X,Y)-- [1:Edge,0-1-12], [2:0-4-0,0-2-4], [5:0-2-8,0-3-0], [6:0-5-8,0-2-0], [11:0-8-0,0-2-12]

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	0.63	Vert(LL)	-0.20	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.83	Vert(CT)	-0.36	17-18	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 304 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, except end verticals, and 2-0-0 oc purlins (4-3-1 max.): 2-6.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 4-14, 7-11
WEBS 1 Row at midpt 1-18, 8-9, 3-16, 3-17, 6-12

REACTIONS. (size) 18=0-6-0, 9=Mechanical
Max Horz 18=275(LC 11)
Max Uplift 9=-1(LC 12)
Max Grav 18=1452(LC 17), 9=1389(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1032/106, 2-3=-825/123, 3-4=-1200/108, 4-5=-1238/76, 5-6=-1233/75, 6-7=-900/82, 7-8=-727/98, 1-18=-1266/51, 8-9=-1393/41
BOT CHORD 16-17=-96/1080, 4-14=-428/56, 13-14=-100/1347, 12-13=-88/684, 11-12=-74/518, 7-11=-574/60, 9-10=-272/33
WEBS 1-17=0/984, 3-17=-638/0, 14-16=-77/1100, 3-14=0/461, 5-13=-300/57, 6-12=-474/71, 6-13=-22/1214, 9-11=-89/308, 8-11=-47/1198

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=32ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-4-9, Interior(1) 3-4-9 to 7-7-8, Exterior(2R) 7-7-8 to 11-11-12, Interior(1) 11-11-12 to 27-6-4, Exterior(2E) 27-6-4 to 32-2-4 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
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) 9.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Julius Lee PE No. 34869
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	B06	PIGGYBACK BASE	3	1	T29051501
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:27 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-6rYsxfJKXRPp?sB6MriAWV1nwFZhXvdGaXCzBjyQBq6

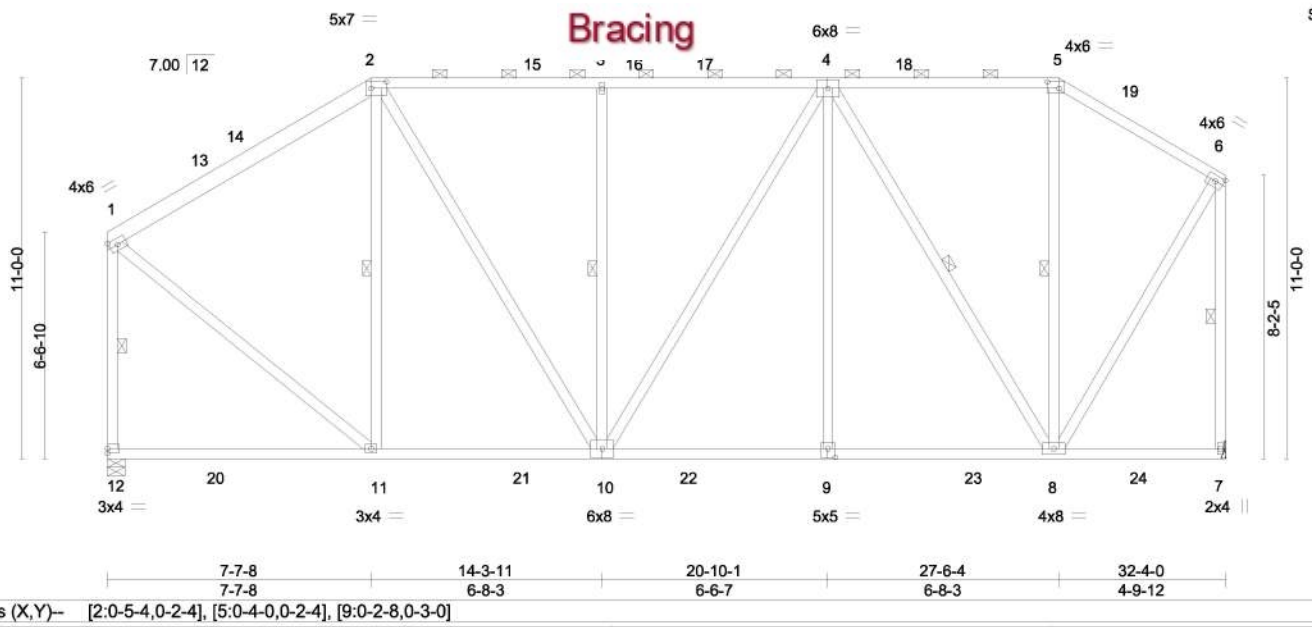

Plate Offsets (X,Y)-- [2:0-5-4,0-2-4], [5:0-4-0,0-2-4], [9:0-2-8,0-3-0]

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	0.75	Vert(LL)	-0.22	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.91	Vert(CT)	-0.36	9-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 271 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
1-2: 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-9-15 max.): 2-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-11, 3-10, 4-8, 5-8, 1-12, 6-7

REACTIONS. (size) 12=0-6-0, 7=Mechanical
Max Horz 12=275(LC 11)
Max Uplift 7=-1(LC 12)
Max Grav 12=1512(LC 17), 7=1510(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1113/98, 2-3=-1151/123, 3-4=-1151/123, 4-5=-656/115, 5-6=-800/114, 1-12=-1367/41, 6-7=-1429/35
BOT CHORD 10-11=-127/940, 9-10=-69/1091, 8-9=-69/1091
WEBS 2-11=-405/103, 2-10=-16/594, 3-10=-464/89, 4-9=0/341, 4-8=-876/9, 1-11=0/1085, 6-8=-21/1182

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=32ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-4-9, Interior(1) 3-4-9 to 7-7-8, Exterior(2R) 7-7-8 to 12-2-6, Interior(1) 12-2-6 to 27-6-4, Exterior(2E) 27-6-4 to 32-2-4 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
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) 7.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Julius Lee PE No. 34869
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Date:

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	B07	PIGGYBACK BASE	2	1	T29051502

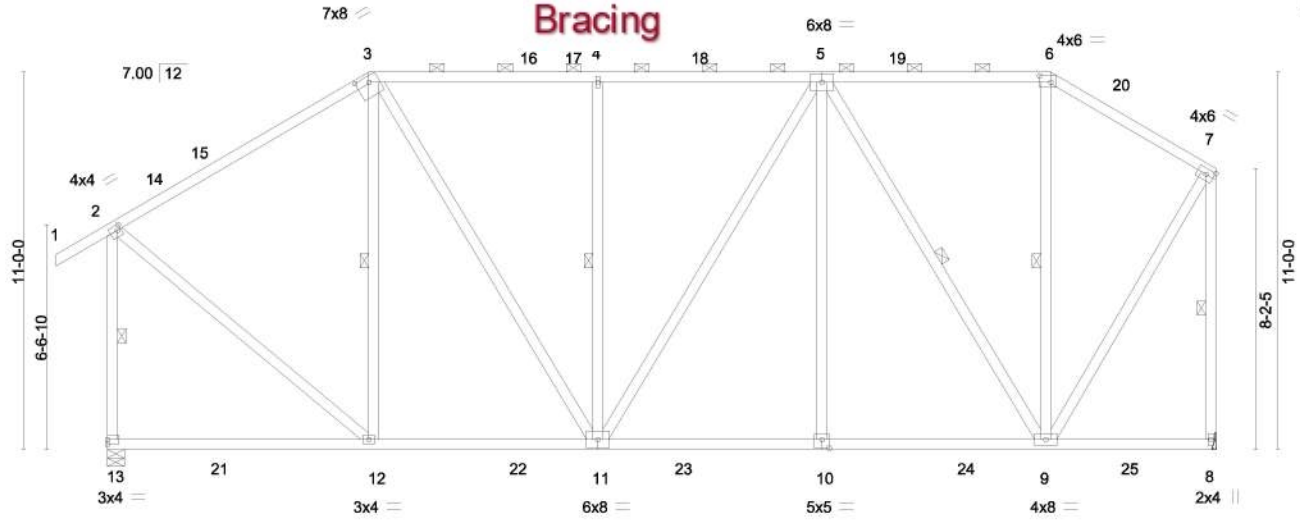
Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:28 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-a26F9_KzlIXgd0mlwYDP3jaygfvwGMuPpBxWk9yQBq5

-1-6-0	7-7-8	14-3-11	20-10-1	27-6-4	32-4-0
1-6-0	7-7-8	6-8-3	6-6-7	6-8-3	4-9-12

Bracing

Scale = 1:67.4



7-7-8	14-3-11	20-10-1	27-6-4	32-4-0
7-7-8	6-8-3	6-6-7	6-8-3	4-9-12

Plate Offsets (X,Y)-- [2:0-1-4,0-1-12], [3:0-4-8,0-2-0], [6:0-4-0,0-2-4], [10:0-2-8,0-3-0]

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	0.75	Vert(LL)	-0.22	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.91	Vert(CT)	-0.36	10-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 266 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, except end verticals, and 2-0-0 oc purlins (4-9-15 max.): 3-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-12, 4-11, 5-9, 6-9, 2-13, 7-8

REACTIONS. (size) 13=0-6-0, 8=Mechanical
Max Horz 13=288(LC 11)
Max Uplift 13=-33(LC 12), 8=-6(LC 12)
Max Grav 13=1604(LC 17), 8=1509(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1111/116, 3-4=-1148/132, 4-5=-1148/132, 5-6=-654/118, 6-7=-798/116, 2-13=-1456/77, 7-8=-1426/40
BOT CHORD 12-13=-258/253, 11-12=-134/938, 10-11=-71/1090, 9-10=-71/1090
WEBS 3-12=-404/84, 3-11=-9/598, 4-11=-469/88, 5-10=0/341, 5-9=-874/12, 2-12=0/1086, 7-9=-23/1181

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=32ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-8-13, Interior(1) 1-8-13 to 7-7-8, Exterior(2R) 7-7-8 to 12-2-6, Interior(1) 12-2-6 to 27-6-4, Exterior(2E) 27-6-4 to 32-2-4 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
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) 13, 8.
9) 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.
10) 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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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	B08	PIGGYBACK BASE	1	1	T29051503

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:31 2022 Page 1
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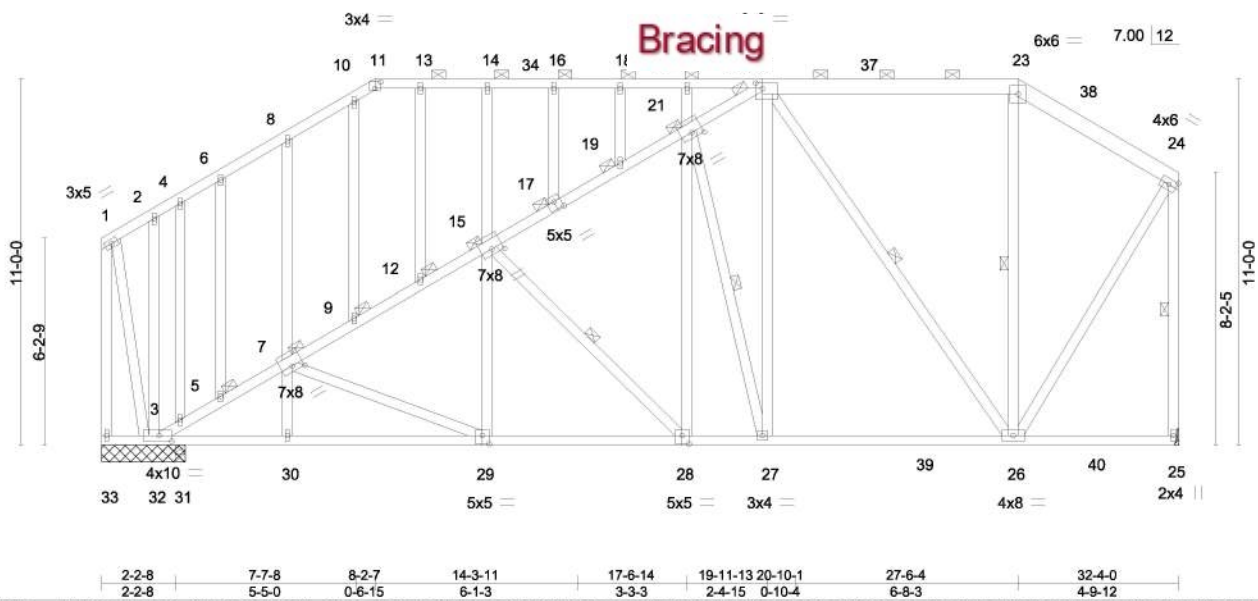

Plate Offsets (X,Y)-- [7:0-4-0,0-2-0], [11:0-2-0,0-2-5], [15:0-4-0,0-2-0], [17:0-2-8,0-3-0], [21:0-4-0,0-2-0], [22:0-2-8,0-2-0], [28:0-2-8,0-3-0], [29:0-2-8,0-3-0], [32:0-4-8,0-2-0]

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	0.42	Vert(LL)	-0.14	28-29	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.29	28-29	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.06	25	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 368 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 23-24,22-23: 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-23, 22-32.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 23-26, 24-25, 15-28, 21-27, 22-26
JOINTS 1 Brace at Jt(s): 19, 17, 15, 12, 9, 7, 5, 21, 22

REACTIONS. All bearings 2-6-0 except (jt=length) 25=Mechanical, 31=0-3-8.
(lb) - Max Horz 33=274(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) except 32=-231(LC 12)
Max Grav All reactions 250 lb or less at joint(s) except 33=876(LC 18), 25=1420(LC 19), 32=303(LC 17), 31=449(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 22-23=-624/112, 23-24=-759/110, 1-33=-847/0, 24-25=-1339/25, 3-32=-1918/0, 3-5=-1892/0, 5-7=-1877/0, 7-9=-1622/0, 9-12=-1615/0, 12-15=-1603/0, 15-17=-1196/0, 17-19=-1199/0, 19-21=-1159/0, 21-22=-1019/0, 2-4=-266/44, 4-6=-289/65, 6-8=-275/86, 8-10=-285/124
BOT CHORD 32-33=-253/221, 31-32=-2/1821, 30-31=-2/1821, 29-30=-2/1821, 28-29=-9/1564, 27-28=-48/1188, 26-27=-54/1059
WEBS 24-26=-23/1110, 14-15=-288/56, 15-29=0/298, 1-32=0/805, 21-28=0/455, 7-29=-268/0, 15-28=-531/0, 22-27=0/918, 21-27=-646/13, 22-26=-778/0

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=32ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-6-14, Interior(1) 3-6-14 to 8-2-7, Exterior(2R) 8-2-7 to 12-9-5, Interior(1) 12-9-5 to 27-6-4, Exterior(2E) 27-6-4 to 32-2-4 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
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 1.5x4 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, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 231 lb uplift at joint 32.
10) 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.
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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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	C01	PIGGYBACK BASE SUPPO	1	1	T29051504
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:33 2022 Page 1
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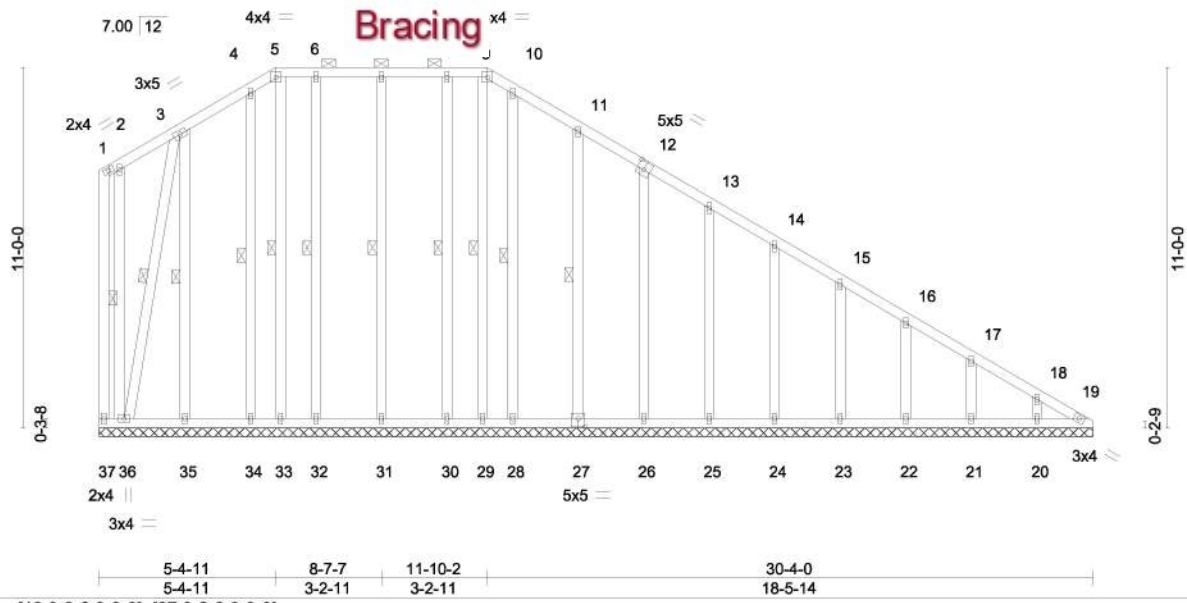

Plate Offsets (X,Y)-- [12:0-2-8,0-3-0], [27:0-2-8,0-3-0]

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	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01	19	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 308 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, and 2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-37, 6-32, 4-34, 3-35, 8-30, 5-33, 9-29, 11-27, 10-28, 7-31, 3-36

REACTIONS. All bearings 30-4-0.
(lb) - Max Horz 37=-284(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 37, 32, 34, 36, 35, 33, 29, 27, 26, 25, 24, 22, 23, 21, 20, 31, 19
Max Grav All reactions 250 lb or less at joint(s) 37, 32, 34, 36, 35, 30, 33, 29, 27, 28, 26, 25, 24, 22, 23, 21, 20, 31, 19

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 18-19=-252/196
BOT CHORD 36-37=-194/250

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=30ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-2-2, Interior(1) 3-2-2 to 5-4-11, Exterior(2R) 5-4-11 to 8-7-7, Interior(1) 8-7-7 to 11-10-2, Exterior(2R) 11-10-2 to 14-7-7, Interior(1) 14-7-7 to 30-1-15 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) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
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) 37, 32, 34, 36, 35, 33, 29, 27, 26, 25, 24, 22, 23, 21, 20, 31, 19.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	C02	PIGGYBACK BASE	2	1	T29051505

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:35 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-tO1udOPMevQgy5ofqWr2rBNDrTKAPZ2RQn8OUFyQBq_

4-9-12	12-5-1	18-4-3	24-3-5	30-4-0	31-10-0
4-9-12	7-7-5	5-11-2	5-11-2	6-0-11	1-6-0

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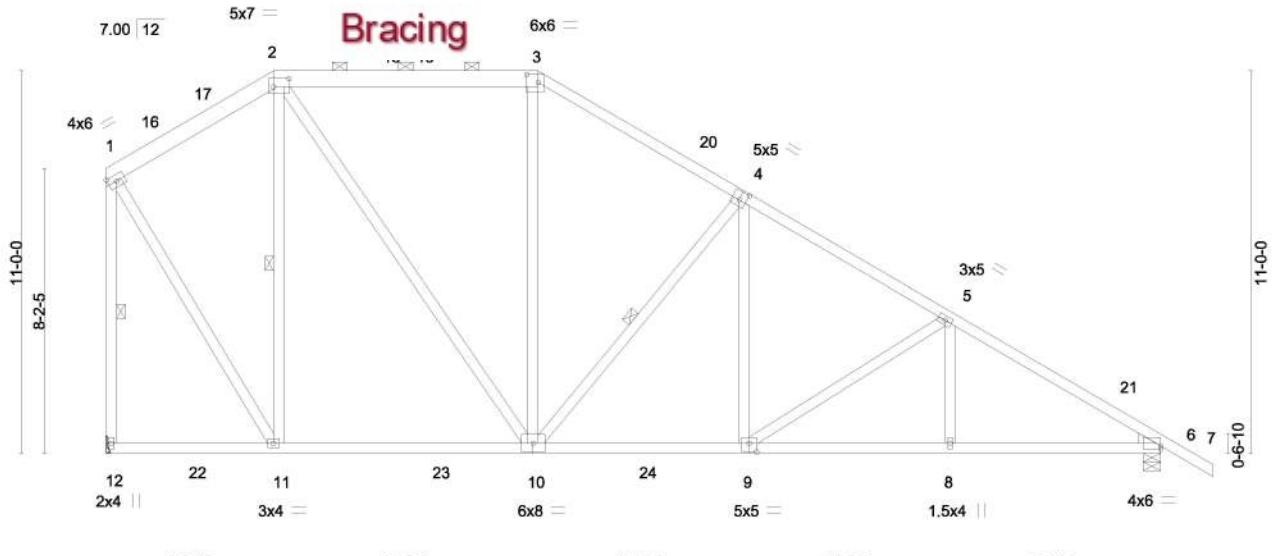

4-9-12	12-5-1	18-4-3	24-3-5	30-4-0
4-9-12	7-7-5	5-11-2	5-11-2	6-0-11

Plate Offsets (X,Y)-- [2:0-5-4,0-2-12], [3:0-4-0,0-2-12], [4:0-2-8,0-3-0], [6:0-0-0,0-1-1], [9:0-2-8,0-3-0]

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	0.50	Vert(LL)	-0.19	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.32	10-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 223 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-11, 4-10, 1-12

REACTIONS. (size) 12=Mechanical, 6=0-6-0
Max Horz 12=-295(LC 10)
Max Uplift 12=-3(LC 12), 6=-33(LC 12)
Max Grav 12=1423(LC 18), 6=1469(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-736/118, 2-3=-975/124, 3-4=-1153/109, 4-5=-1713/61, 5-6=-2207/13, 1-12=-1353/35
BOT CHORD 10-11=0/666, 9-10=0/1365, 8-9=0/1820, 6-8=0/1820
WEBS 2-11=-633/138, 2-10=-43/750, 3-10=0/258, 4-10=-708/55, 4-9=0/529, 5-9=-545/55, 1-11=-39/1117

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=30ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-2-2, Interior(1) 3-2-2 to 4-9-12, Exterior(2R) 4-9-12 to 9-1-4, Interior(1) 9-1-4 to 12-5-1, Exterior(2R) 12-5-1 to 16-8-9, Interior(1) 16-8-9 to 31-10-0 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) 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) 12, 6.
9) 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.
10) 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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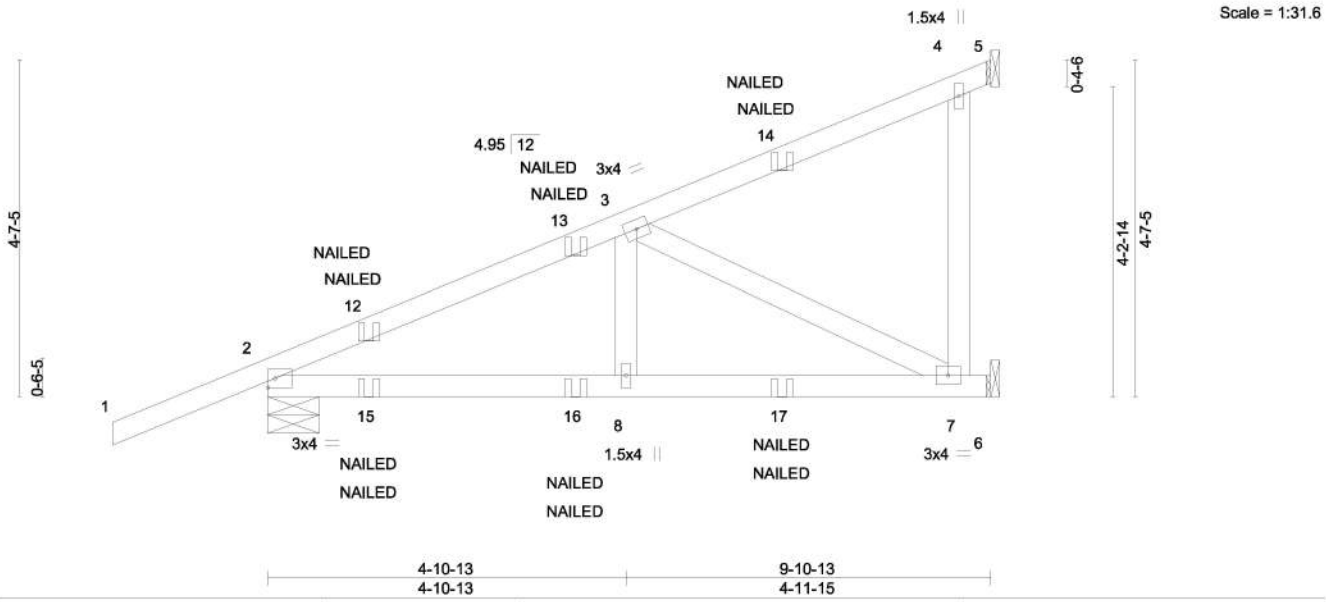
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	CJ01	Diagonal Hip Girder	2	1	T29051506

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:37 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-pm8e23RcAWgOCPy1xxtWwcSYGH4TtWXku5dVX8yQBpy



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)	-0.05	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.56	Vert(CT)	-0.12	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.27	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 50 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 2=0-8-8, 6=Mechanical
Max Horz 2=129(LC 24)
Max Uplift 2=-110(LC 8), 6=-124(LC 8)
Max Grav 5=208(LC 3), 2=477(LC 1), 6=361(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-647/18
BOT CHORD 2-8=-68/547, 7-8=-68/547
WEBS 3-7=-610/76

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; 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
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=110, 6=124.
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, 6-9=-20
Concentrated Loads (lb)
Vert: 12=60(F=30, B=30) 14=-95(F=-51, B=-44) 15=59(F=29, B=29) 16=-1(F=-0, B=-0) 17=-60(F=-33, B=-27)

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	CJ02	Diagonal Hip Girder	1	1	T29051507

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:39 2022 Page 1
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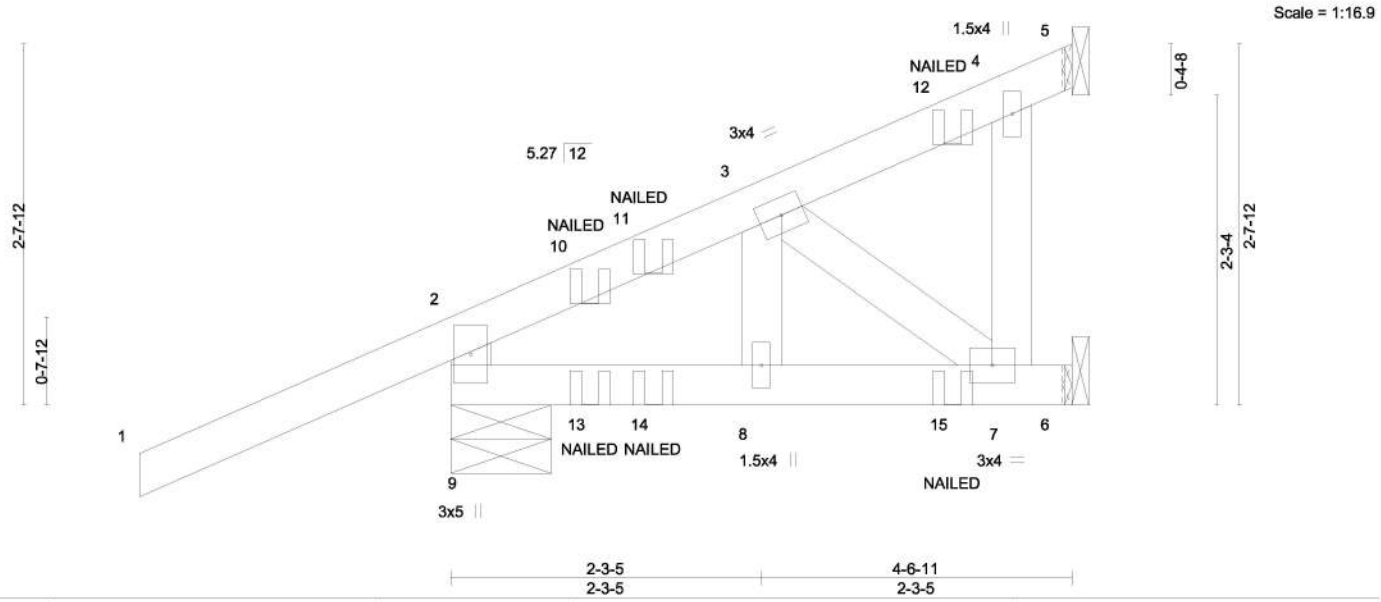

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.45	Vert(LL)	-0.05	8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.26	Vert(CT)	-0.05	8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	-0.05	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 26 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 4-6-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=0-8-14, 5=Mechanical, 6=Mechanical
Max Horz 9=93(LC 8)
Max Uplift 9=-116(LC 8), 5=-3(LC 5), 6=-22(LC 8)
Max Grav 9=316(LC 28), 5=58(LC 24), 6=97(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-286/143

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; 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
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) 5, 6 except (jt=lb) 9=116.
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: 1-2=-60, 2-5=-60, 6-9=-20
Concentrated Loads (lb)
Vert: 10=59(F) 13=31(F) 15=4(F)

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	CJ03	Diagonal Hip Girder	1	1	T29051508
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:40 2022 Page 1
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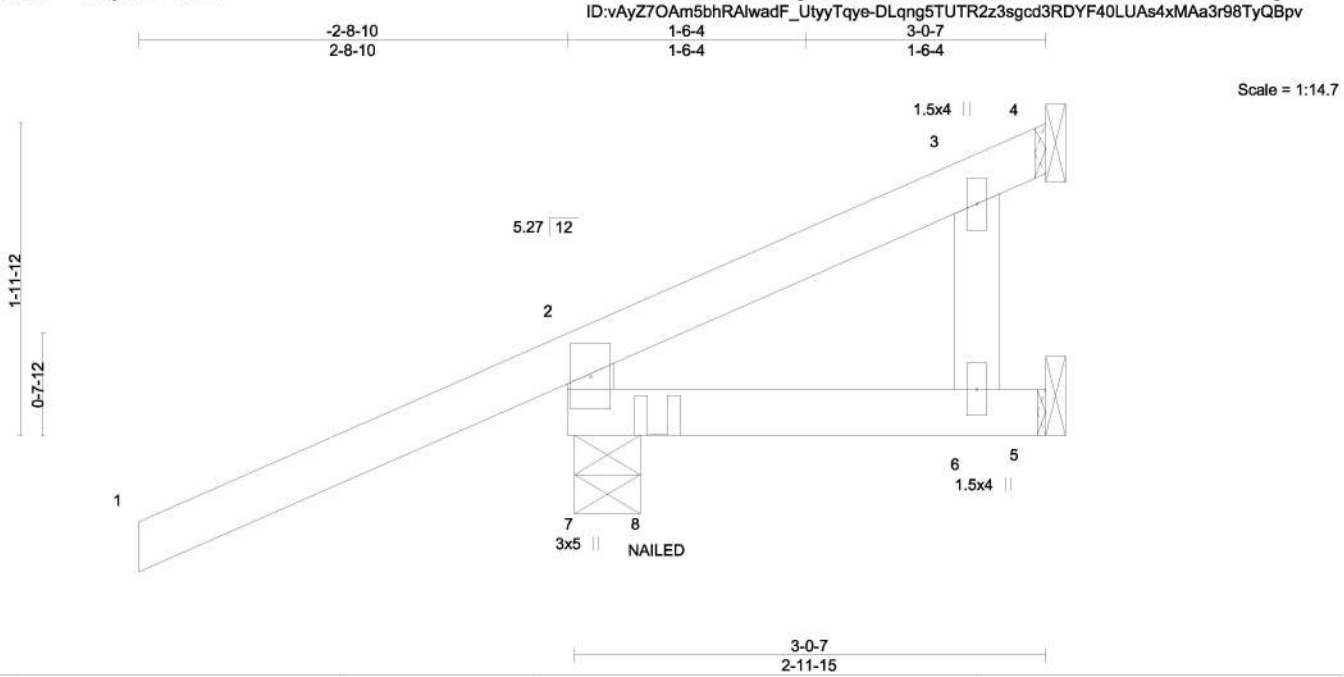

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.64	Vert(LL)	0.01	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.19	Vert(CT)	0.01	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.01	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 16 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 3-0-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-5-0, 4=Mechanical, 5=Mechanical
Max Horz 7=68(LC 8)
Max Uplift 7=-116(LC 8), 5=-6(LC 21)
Max Grav 7=354(LC 1), 4=41(LC 3), 5=20(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-312/105

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; 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
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) 5 except (jt=lb) 7=116.
7) "NAILED" indicates 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: 1-2=-60, 2-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 8=22(B)

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

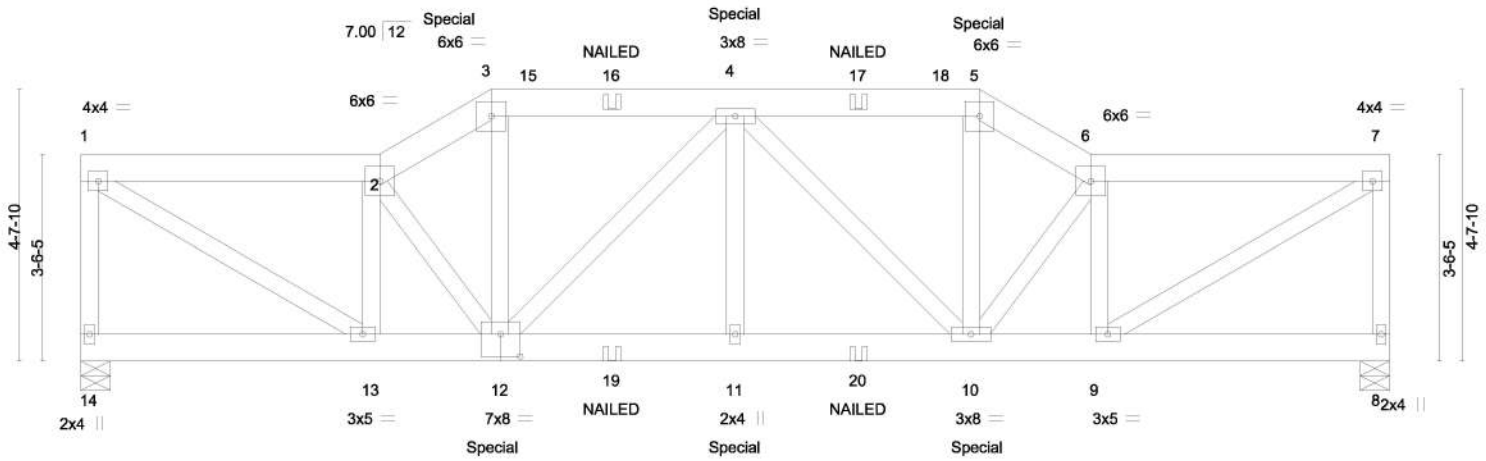
Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	D01	Roof Special Girder	1	2	T29051509

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:43 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-ewWvI7WNmMQYwKPBIC_wAtigshBtHCydG04ployQBps

5-1-3	7-0-0	11-2-0	15-4-0	17-2-13	22-4-0
5-1-3	1-10-13	4-2-0	4-2-0	1-10-13	5-1-3

Scale = 1:39.4



5-1-3	7-0-0	11-2-0	15-4-0	17-2-13	22-4-0
5-1-3	1-10-13	4-2-0	4-2-0	1-10-13	5-1-3

Plate Offsets (X,Y)-- [12:0-4-0,0-4-8]

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	0.11	Vert(LL)	-0.05	11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.30	Vert(CT)	-0.09	11	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 359 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 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.

REACTIONS. (size) 14=0-6-0, 8=0-6-0
Max Horz 14=-105(LC 23)
Max Uplift 14=-142(LC 8), 8=-142(LC 8)
Max Grav 14=1851(LC 1), 8=1851(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-14=-1775/166, 1-2=-2554/242, 2-3=-3012/314, 3-4=-2644/286, 4-5=-2646/281, 5-6=-3017/308, 6-7=-2554/244, 7-8=-1775/167
BOT CHORD 12-13=-236/2630, 11-12=-273/3076, 10-11=-273/3076, 9-10=-224/2630
WEBS 1-13=-249/2985, 2-13=-1603/195, 3-12=-100/1007, 4-12=-676/36, 4-11=0/440, 4-10=-672/43, 5-10=-97/1009, 6-9=-1612/184, 7-9=-250/2984

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=24ft; eave=4ft; 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) 14=142, 8=142.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 278 lb down and 47 lb up at 7-0-0, 128 lb down and 75 lb up at 11-0-12, and 128 lb down and 75 lb up at 11-3-4, and 278 lb down and 47 lb up at 15-4-0 on top chord, and 392 lb down and 133 lb up at 7-0-0, 86 lb down at 11-0-12, and 86 lb down at 11-3-4, and 392 lb down and 133 lb up at 15-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

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Continued on page 2

LOAD CASE(S) Standard

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Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-3=-60, 3-5=-60, 5-6=-60, 6-7=-60, 8-14=-20
   Concentrated Loads (lb)
   Vert: 3=-202(B) 5=-202(B) 12=-392(B) 11=-120(B) 4=-256(B) 10=-392(B) 16=-128(B) 17=-128(B) 19=-60(B) 20=-60(B)

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	D02	Roof Special	1	1	T29051510
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:44 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-673lWTW?XgYPXT_NsvV9i5FkC5Uf0f4mVgpMHEyQBpr

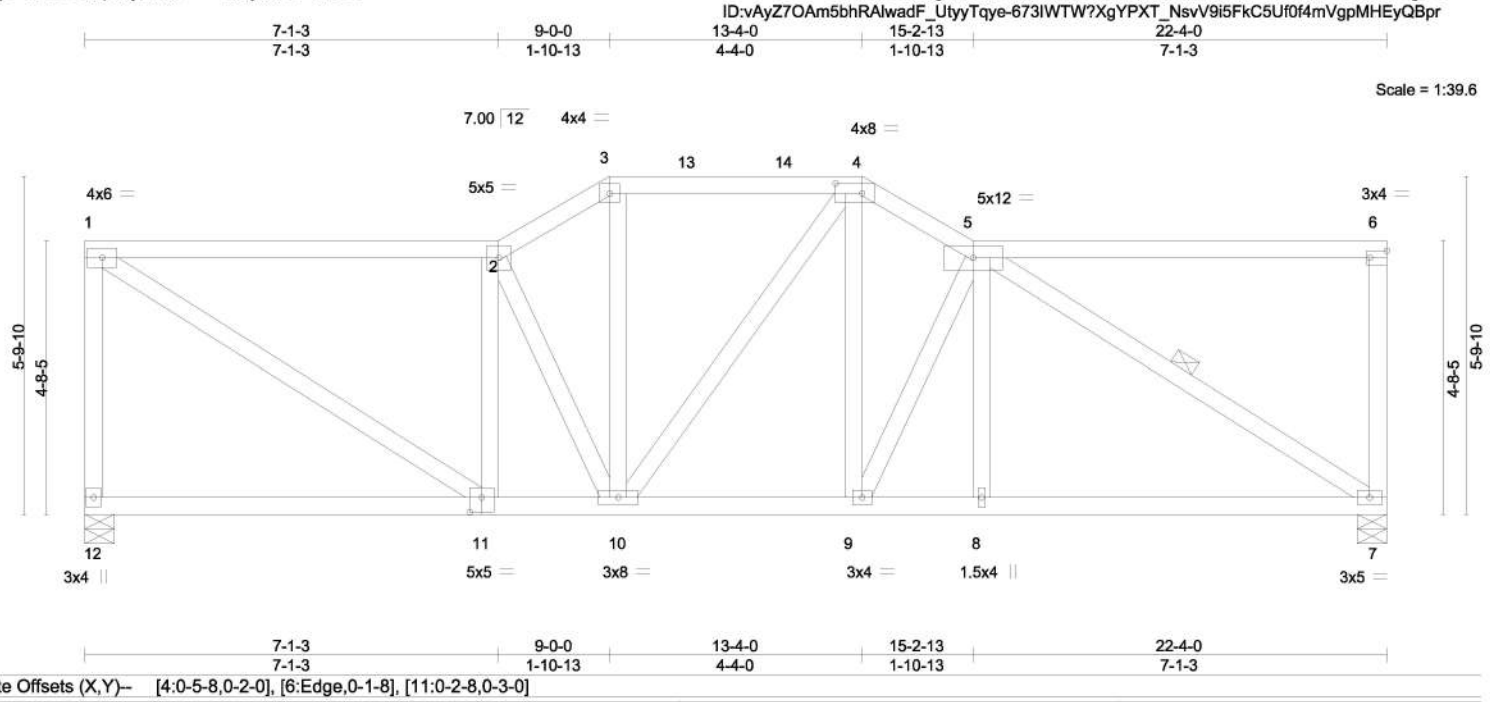

Plate Offsets (X,Y)-- [4:0-5-8,0-2-0], [6:Edge,0-1-8], [11:0-2-8,0-3-0]

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	0.52	Vert(LL)	-0.09	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.46	Vert(CT)	-0.19	11-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 154 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-7

REACTIONS. (size) 12=0-6-0, 7=0-6-0
Max Horz 12=-143(LC 10)
Max Grav 12=882(LC 1), 7=882(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-12=-804/79, 1-2=-951/64, 2-3=-1041/75, 3-4=-862/72, 4-5=-1039/68
BOT CHORD 10-11=-140/986, 9-10=-98/859, 8-9=-92/997, 7-8=-89/1001
WEBS 1-11=-69/1082, 2-11=-528/83, 2-10=-326/65, 3-10=0/361, 4-9=-12/365, 5-9=-359/36, 5-7=-1130/64

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=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 9-0-0, Exterior(2R) 9-0-0 to 12-0-0, Interior(1) 12-0-0 to 13-4-0, Exterior(2E) 13-4-0 to 15-2-13, Interior(1) 15-2-13 to 22-2-4 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
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) 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.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	D03	Roof Special	1	1	T29051511
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:46 2022 Page 1
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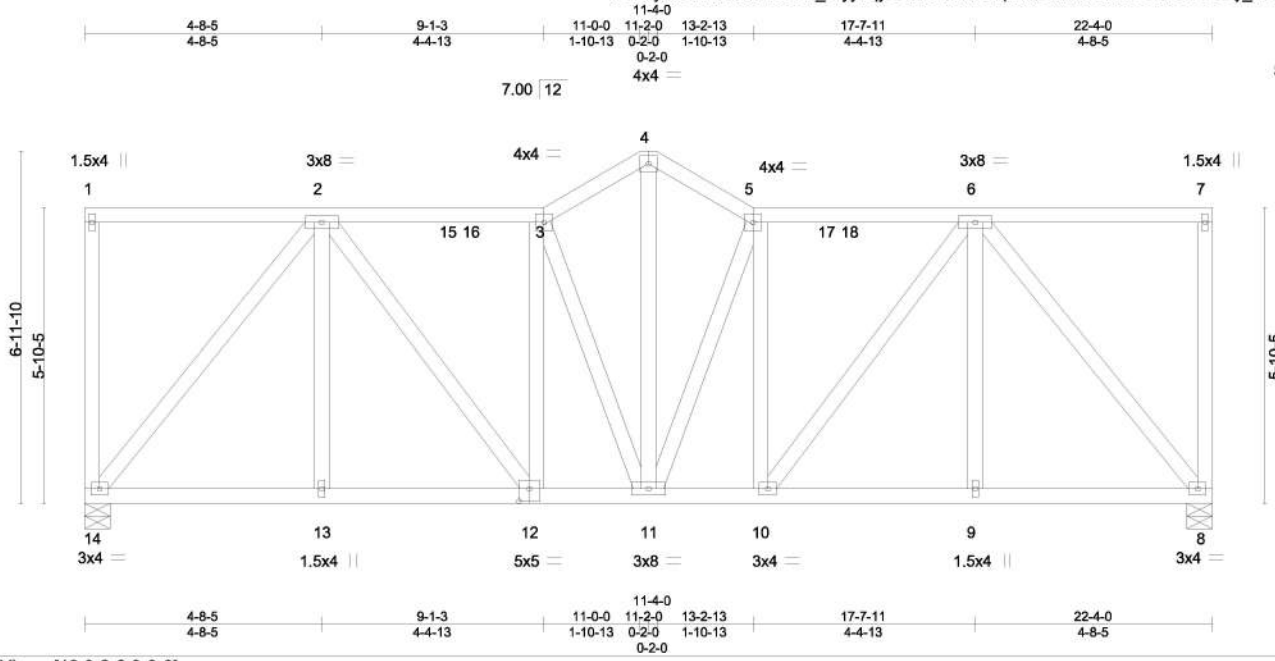

Plate Offsets (X,Y)-- [12:0-2-8,0-3-0]

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	0.23	Vert(LL)	-0.03	11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.25	Vert(CT)	-0.06	11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 181 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 14=0-6-0, 8=0-6-0
Max Horz 14=-176(LC 10)
Max Uplift 14=-3(LC 8), 8=-3(LC 9)
Max Grav 14=882(LC 1), 8=882(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-832/55, 3-4=-862/72, 4-5=-861/72, 5-6=-842/53
BOT CHORD 13-14=-151/602, 12-13=-151/602, 11-12=-137/846, 10-11=-110/849, 9-10=-79/601, 8-9=-79/601
WEBS 3-12=-258/62, 4-11=-42/671, 3-11=-348/64, 5-11=-357/50, 2-14=-934/50, 2-12=-41/388, 6-10=-48/397, 6-8=-934/58

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=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-2-0, Exterior(2E) 11-2-0 to 13-2-13, Interior(1) 13-2-13 to 22-2-4 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
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) 14, 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.

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

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	D04	Flat	1	1	T29051512
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:48 2022 Page 1
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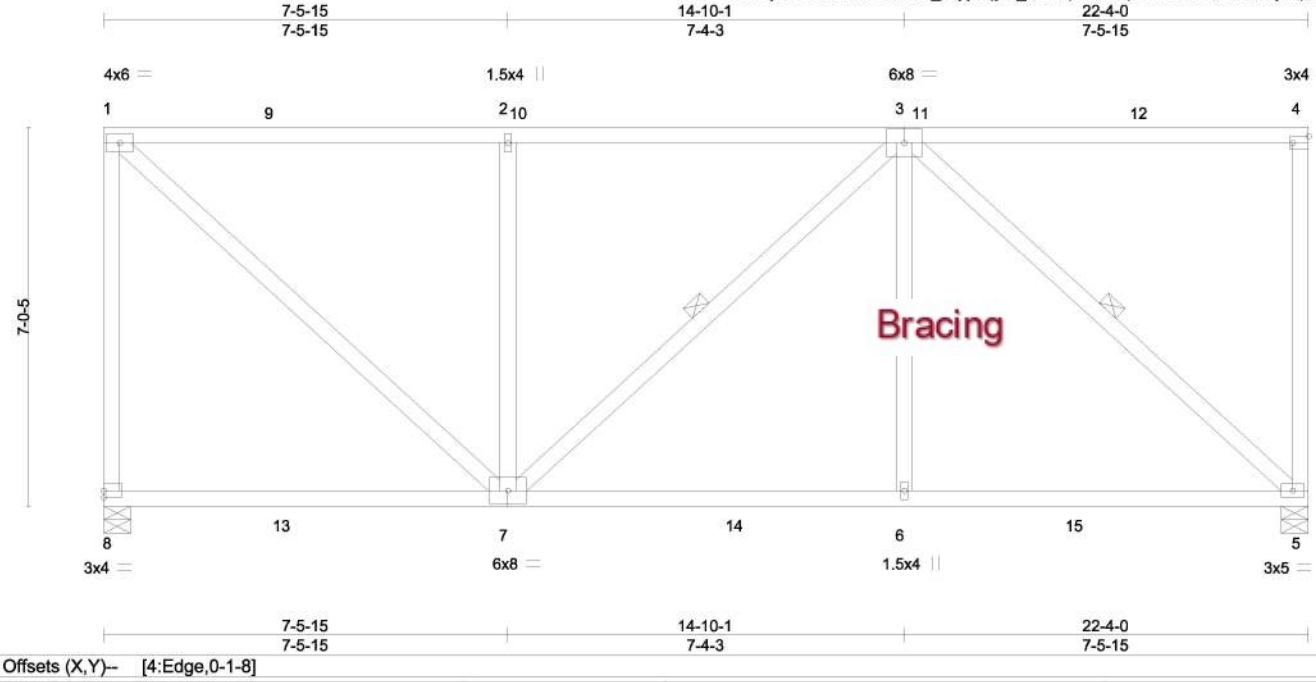

Plate Offsets (X,Y)-- [4:Edge,0-1-8]

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	0.79	Vert(LL)	-0.19	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.73	Vert(CT)	-0.33	7-8	>814	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 147 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-7, 3-5

REACTIONS. (size) 8=0-6-0, 5=0-6-0
Max Horz 8=189(LC 11)
Max Uplift 8=-29(LC 8), 5=-29(LC 9)
Max Grav 8=1039(LC 18), 5=1030(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-855/354, 1-2=-804/259, 2-3=-804/259
BOT CHORD 6-7=-271/824, 5-6=-271/824
WEBS 1-7=-359/1037, 2-7=-530/319, 3-6=0/466, 3-5=-1053/281

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; Encl., GCpi=0.18; MWFRS (directional) and C-C Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 19-2-4, Corner(3) 19-2-4 to 22-2-4 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) Provide adequate drainage to prevent water ponding.
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) 8, 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
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Date:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	D05	Flat Girder	1	2	T29051513

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:50 2022 Page 1
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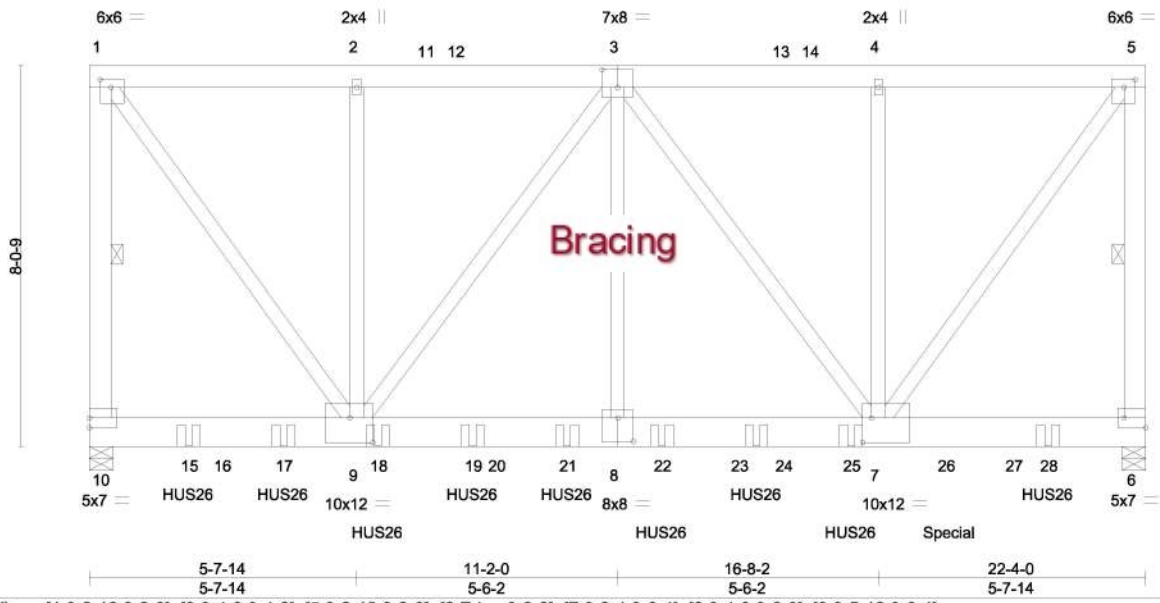

Plate Offsets (X,Y)-- [1:0-2-12,0-2-0], [3:0-4-0,0-4-8], [5:0-2-12,0-2-0], [6:Edge,0-2-8], [7:0-2-4,0-6-4], [8:0-4-0,0-6-0], [9:0-5-12,0-6-4]

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	0.40	Vert(LL)	-0.12	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.21	8-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 473 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
1-10,5-6: 2x6 SP No.2, 1-9,5-7: 2x4 SP No.1

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.
WEBS 1 Row at midpt 1-10, 5-6

REACTIONS. (size) 10=0-6-0, 6=0-6-0
Max Horz 10=-211(LC 6)
Max Uplift 10=-42(LC 4)
Max Grav 10=8273(LC 2), 6=9126(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-7236/48, 1-2=-5170/70, 2-3=-5170/70, 3-4=-5614/0, 4-5=-5614/0, 5-6=-7842/0
BOT CHORD 8-9=-49/6701, 7-8=-49/6701
WEBS 1-9=-27/8731, 2-9=-330/128, 3-9=-2589/0, 3-8=-4/3300, 3-7=-1839/156, 4-7=-324/134, 5-7=0/9467

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.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 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) 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; 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
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) 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, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
9) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 4-2-0 oc max. starting at 2-1-4 from the left end to 20-3-4 to connect truss(es) to front face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1372 lb down at 18-1-4, and 1353 lb down and 23 lb up at 18-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

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LOAD CASE(S) Standard

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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MiTek
16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	D05	Flat Girder	1	2	T29051513

Job Reference (optional)

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-5=-60, 6-10=-20
   Concentrated Loads (lb)
   Vert: 15=-1294(F) 17=-1262(F) 18=-1262(F) 19=-1262(F) 21=-1262(F) 22=-1262(F) 24=-1259(F) 25=-1259(F) 26=-2413(F) 28=-1185(F)

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Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	G01	GABLE	1	2	T29051514

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:54 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-p2g4cteGAkp_k0IIR0hV6CfNN7oeMDoEoEEudfyQBph

-1-6-0 | 12-1-0 | 16-10-0 | 24-2-0 | 25-8-0
1-6-0 | 12-1-0 | 4-9-0 | 7-4-0 | 1-6-0

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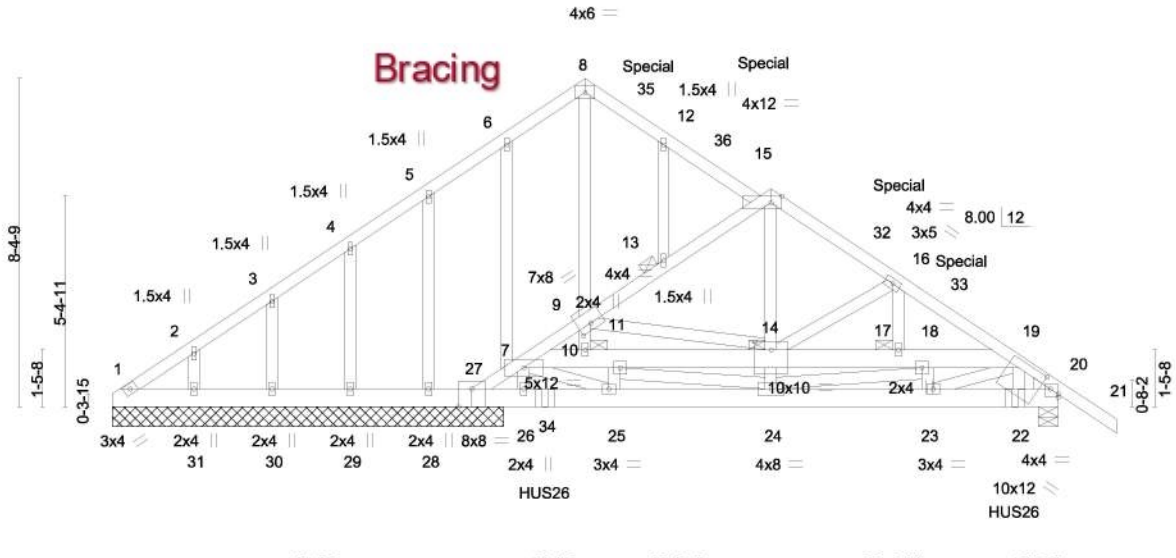

10-6-2 | 12-1-0 | 16-10-0 | 23-1-14 | 24-2-0
10-6-2 | 1-6-14 | 4-9-0 | 6-3-14 | 1-0-2

Plate Offsets (X,Y)-- [9:0-4-0,0-2-0], [14:0-5-0,0-2-8], [15:0-3-4,Edge], [20:0-0-0,0-0-15], [22:0-2-14,0-2-8], [27:0-4-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.86	Vert(LL)	-0.04	24	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.86	Vert(CT)	-0.07	24	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.03	20	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 455 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
8-15,15-27: 2x4 SP No.1, 7-19: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2
WEDGE
Right: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 13, 14, 10, 17

REACTIONS. All bearings 10-0-0 except (jt=length) 20=0-6-0.
(lb) - Max Horz 1=-157(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 29, 30, 31 except 28=-1185(LC 20)
Max Grav All reactions 250 lb or less at joint(s) 29, 30, 31 except 1=449(LC 2), 20=4643(LC 2), 27=4904(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 15-16=-3733/0, 16-19=-4968/0, 19-20=-5024/0, 1-2=-722/0, 2-3=-715/0, 3-4=-728/0, 4-5=-668/0, 5-6=-802/0, 6-8=-612/0, 8-12=-947/101, 12-15=-1118/12, 7-27=-4103/0, 7-9=-4404/0, 9-13=-2859/0, 13-15=-2262/0, 11-14=-374/0, 14-17=-1041/0, 17-18=-1041/0, 18-19=-374/0
BOT CHORD 1-31=0/574, 30-31=0/574, 29-30=0/574, 28-29=0/574, 27-28=0/574, 26-27=0/3825, 25-26=0/3816, 24-25=0/4893, 23-24=0/4358, 22-23=0/3438, 20-22=0/3469
WEBS 8-9=-579/0, 12-13=-1054/0, 6-7=-7/352, 5-28=-340/2, 14-15=0/1196, 9-10=-432/0, 14-16=-1488/0, 9-14=-2074/0, 18-24=0/692, 7-26=-293/83, 7-25=0/1227, 19-23=0/1048

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 0-3-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 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=24ft; eave=2ft; 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) 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.
6) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
7) Provide adequate drainage to prevent water ponding.
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.

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: October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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) 29, 30, 31 except (jt=lb) 28=1185.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
14) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 12-0-0 oc max. starting at 11-0-12 from the left end to 23-0-12 to connect truss(es) to back face of bottom chord.
15) Fill all nail holes where hanger is in contact with lumber.
16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1397 lb down at 13-0-12, 1318 lb down at 15-0-12, and 1248 lb down at 19-0-12, and 1100 lb down at 21-0-12 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: 15-19=-60, 19-21=-60, 1-20=-20, 1-8=-60, 8-15=-60
   Concentrated Loads (lb)
   Vert: 22=-1112(B) 32=-1119(B) 33=-981(B) 34=-1224(B) 35=-1197(B) 36=-1178(B)

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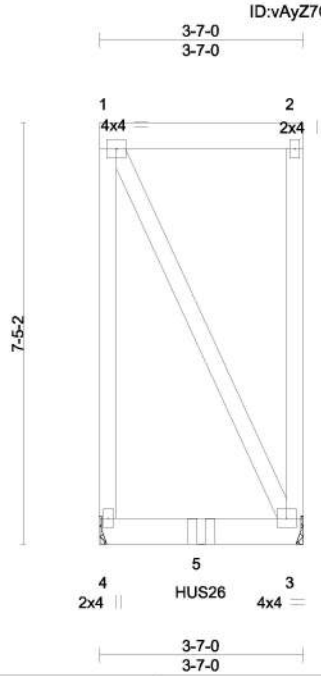
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	GDR	Flat Girder	1	2	T29051515

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:56 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-lQoq1ZgXiM3i_JvhZRjzBdktmxYvqAhXFYj?iXyQBpf



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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	0.16	Vert(LL)	-0.02	3-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.62	Vert(CT)	-0.03	3-4	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.05	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 94 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 3=Mechanical
Max Horz 4=-195(LC 4)
Max Uplift 4=-35(LC 4), 3=-34(LC 5)
Max Grav 4=860(LC 26), 3=860(LC 25)

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

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 0-7-0 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) 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; 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
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) 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) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 3.
10) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent at 1-9-8 from the left end to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-60, 3-4=-20
Concentrated Loads (lb)
Vert: 5=-1192(B)

Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
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October 25,2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	H01	Common Supported Gable	1	1	T29051516

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:57 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-DdMCEvg9TfBZbTTt68ECkqH2tL0eZd6gUCTYE_yQBpe

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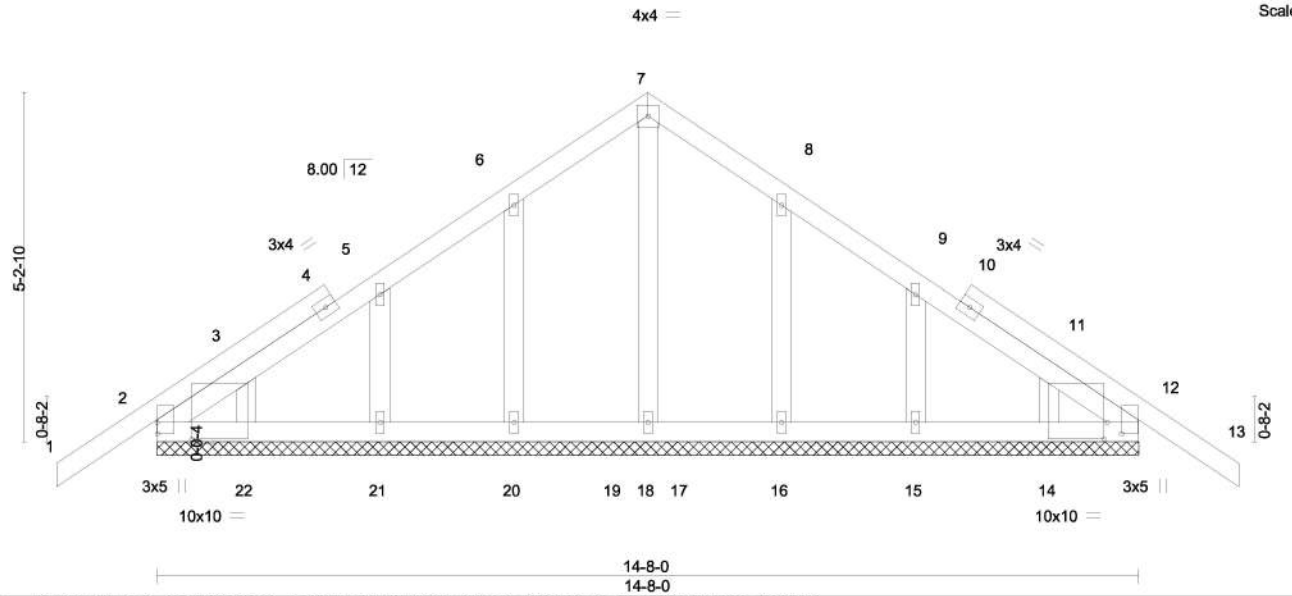

Plate Offsets (X,Y)-- [2:0-2-0,0-0-1], [8:0-0-0,0-0-0], [9:0-0-0,0-0-0], [12:0-2-0,0-2-9], [14:0-0-10,0-3-0], [22:0-6-4,0-3-0]

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	0.14	Vert(LL)	-0.01	13	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.01	Vert(CT)	-0.01	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 89 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E
OTHERS 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 14-8-0.
(lb) - Max Horz 2=102(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 20, 21, 22, 16, 15, 14
Max Grav All reactions 250 lb or less at joint(s) 2, 12, 18, 20, 21, 22, 16, 15, 14

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Corner(3E) -1-6-0 to 1-3-13, Exterior(2N) 1-3-13 to 7-4-0, Corner(3R) 7-4-0 to 10-4-0, Exterior(2N) 10-4-0 to 16-2-0 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) 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 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
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) Solid blocking is required on both sides of the truss at joint(s), 12.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 20, 21, 22, 16, 15, 14.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J01	Jack-Open	6	1	T29051517

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:58 2022 Page 1
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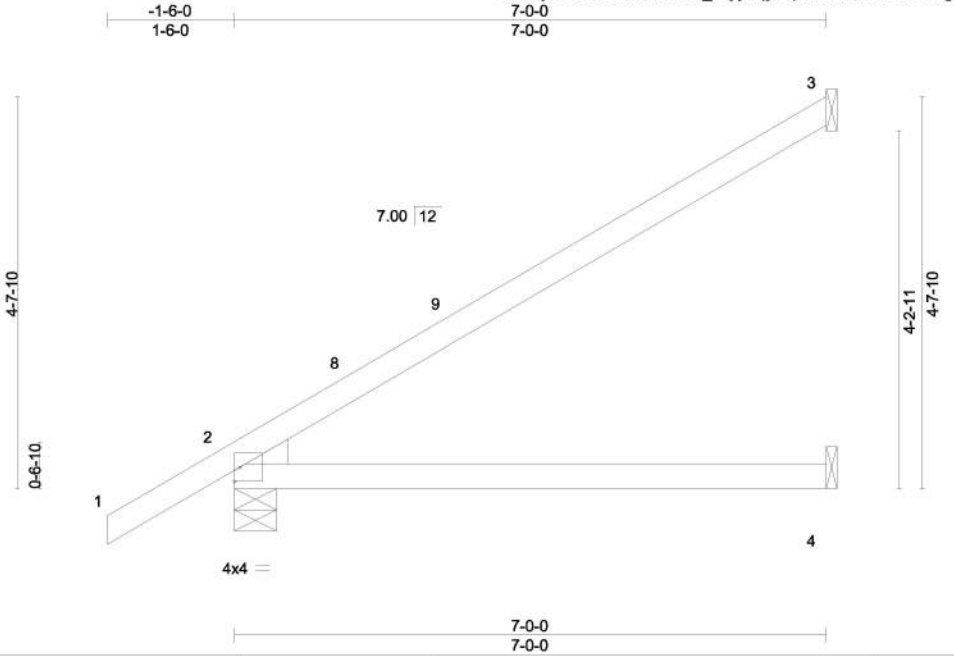

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.61	Vert(LL)	-0.09	4-7	>897	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.52	Vert(CT)	-0.22	4-7	>383	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 26 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3

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

REACTIONS. (size) 3=Mechanical, 2=0-6-0, 4=Mechanical
Max Horz 2=129(LC 12)
Max Uplift 3=-55(LC 12), 2=-10(LC 12)
Max Grav 3=188(LC 1), 2=377(LC 1), 4=126(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; 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; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 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:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J02	Jack-Open	3	1	T29051518

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:01:59 2022 Page 1
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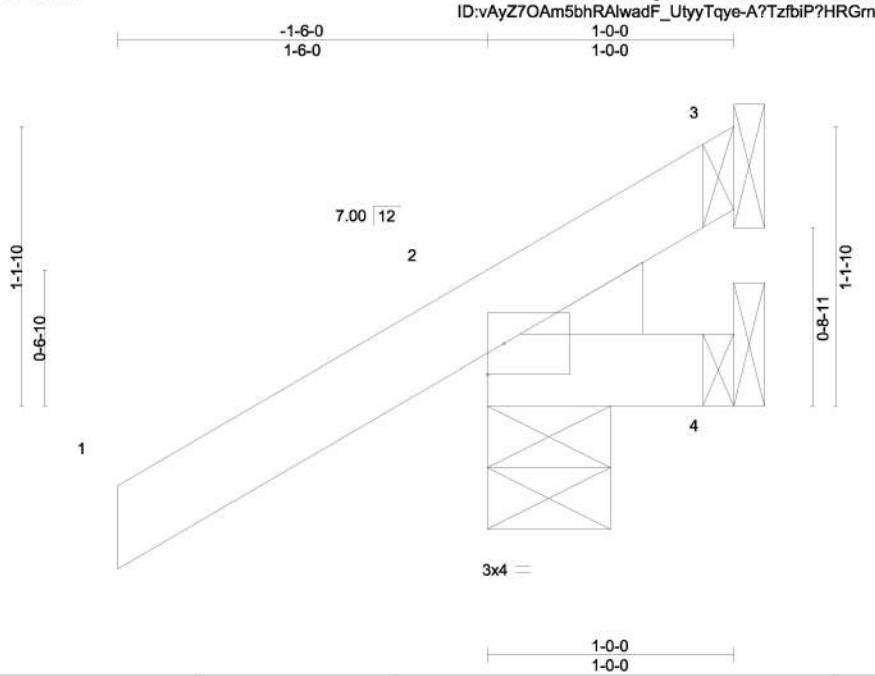

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.05	Vert(CT)	0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 7 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3

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=0-6-0, 4=Mechanical
Max Horz 2=46(LC 12)
Max Uplift 3=-8(LC 1), 2=-64(LC 12), 4=-21(LC 1)
Max Grav 3=8(LC 12), 2=198(LC 1), 4=19(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; Encl., GCpi=0.18; 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, 2, 4.

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Date:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J03	Jack-Open	3	1	T29051519

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:01 2022 Page 1
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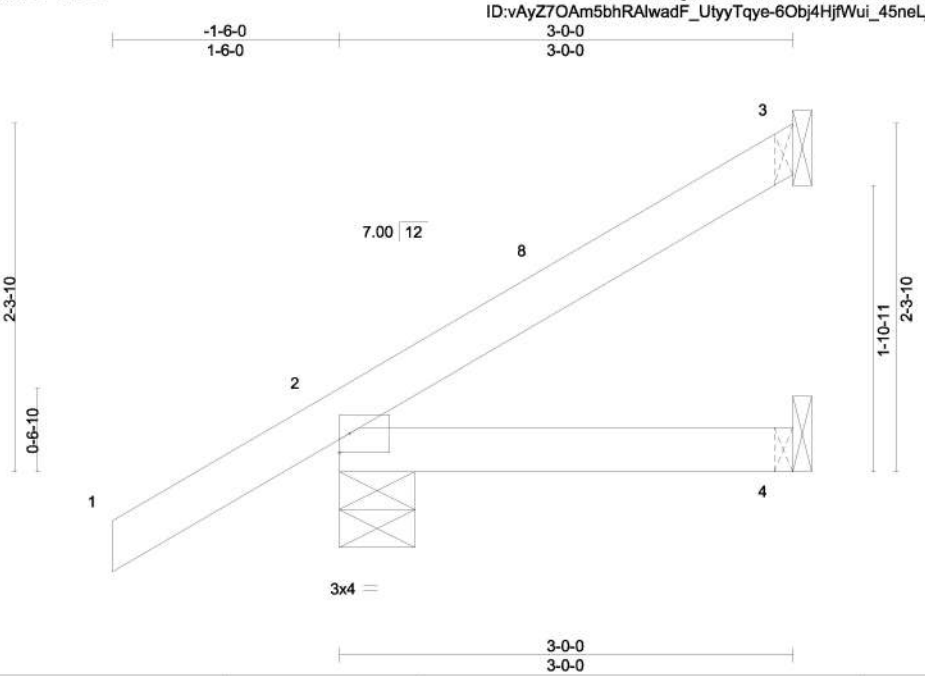

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	-0.00	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-6-0, 4=Mechanical
Max Horz 2=73(LC 12)
Max Uplift 3=-19(LC 12), 2=-33(LC 12)
Max Grav 3=68(LC 17), 2=230(LC 1), 4=52(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; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 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.

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Date:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J04	Jack-Open	2	1	T29051520
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:02 2022 Page 1
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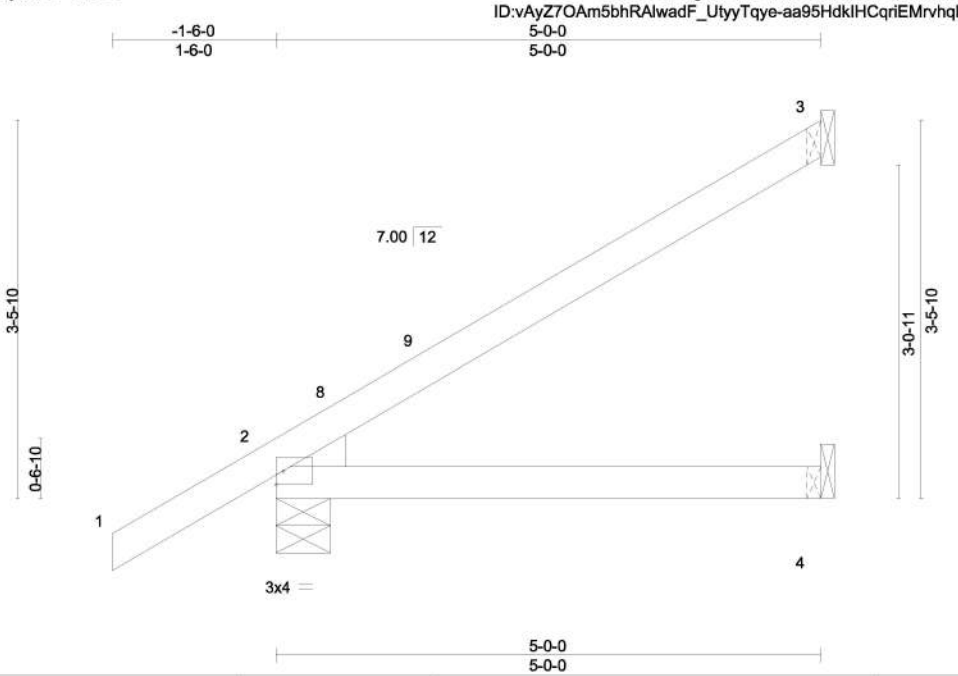

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.29	Vert(LL)	-0.02	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.25	Vert(CT)	-0.06	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 20 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3

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

REACTIONS. (size) 3=Mechanical, 2=0-6-0, 4=Mechanical
Max Horz 2=101(LC 12)
Max Uplift 3=-37(LC 12), 2=-20(LC 12)
Max Grav 3=129(LC 1), 2=301(LC 1), 4=90(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; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J05	Jack-Open	1	1	T29051521
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:03 2022 Page 1
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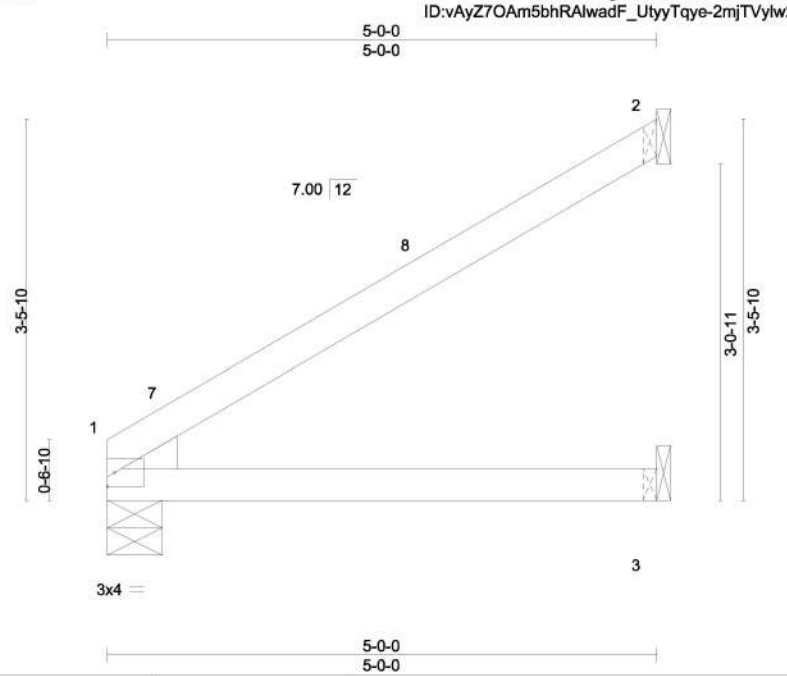

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.32	Vert(LL)	-0.02	3-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.26	Vert(CT)	-0.06	3-6	>996	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	1	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 17 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3

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

REACTIONS. (size) 1=0-6-0, 2=Mechanical, 3=Mechanical
Max Horz 1=69(LC 12)
Max Uplift 2=-41(LC 12)
Max Grav 1=198(LC 1), 2=136(LC 1), 3=92(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; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 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) 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
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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J06	Jack-Open	1	1	T29051522
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:04 2022 Page 1
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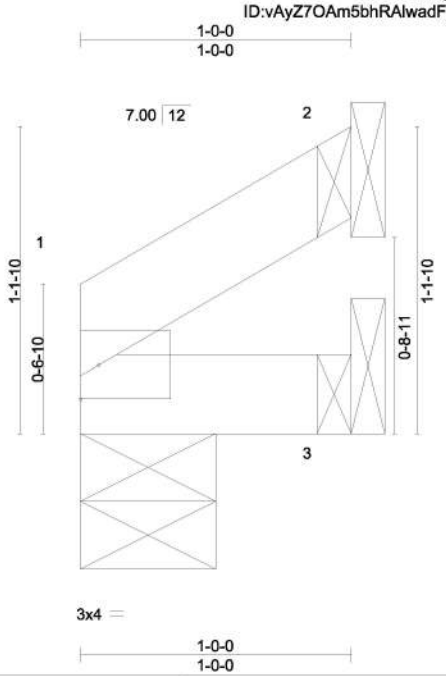

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.01	Vert(LL)	-0.00	6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.01	Vert(CT)	-0.00	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 3 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) 1=0-6-0, 2=Mechanical, 3=Mechanical
Max Horz 1=14(LC 12)
Max Uplift 2=-9(LC 12)
Max Grav 1=40(LC 1), 2=26(LC 17), 3=19(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; Encl., GCpi=0.18; 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) 2.

Julius Lee PE No. 34869
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MiTek
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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J07	Jack-Open	1	1	T29051523
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:06 2022 Page 1
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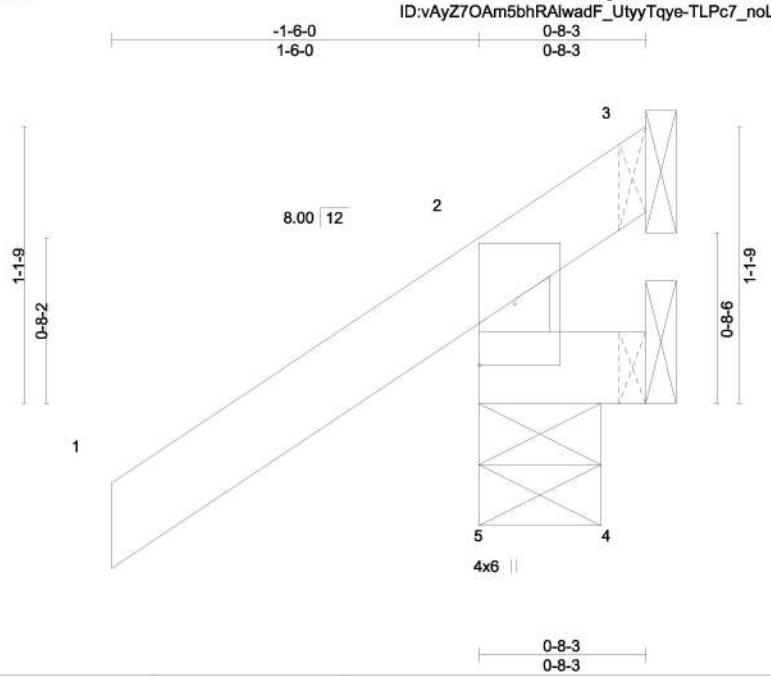

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.20	Vert(LL)	0.00	5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MR							Weight: 6 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 0-8-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-6-0, 3=Mechanical, 4=Mechanical
Max Horz 5=57(LC 12)
Max Uplift 5=-98(LC 12), 3=-97(LC 1), 4=-37(LC 1)
Max Grav 5=275(LC 1), 3=51(LC 12), 4=7(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; Encl., GCpi=0.18; 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) 5, 3, 4.

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

October 25,2022

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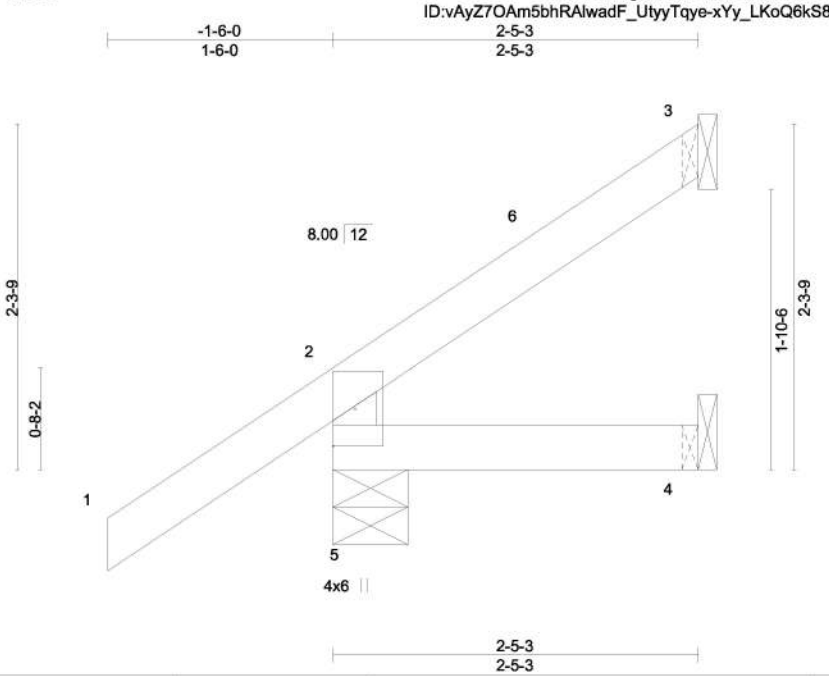
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J08	Jack-Open	1	1	T29051524
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:07 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-xYy_LKoQ6kS8o0EoiEQY8xhmkNRTv889nlu4bPyQBpU



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	0.18	Vert(LL)	-0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.05	Vert(CT)	-0.00	4-5	>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-MR							Weight: 11 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 2-5-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-6-0, 3=Mechanical, 4=Mechanical
Max Horz 5=85(LC 12)
Max Uplift 5=-37(LC 12), 3=-15(LC 12)
Max Grav 5=224(LC 1), 3=45(LC 17), 4=38(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; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 2-4-7 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) 5, 3.

Julius Lee PE No. 34869
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J09	Jack-Open	1	1	T29051525

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:08 2022 Page 1
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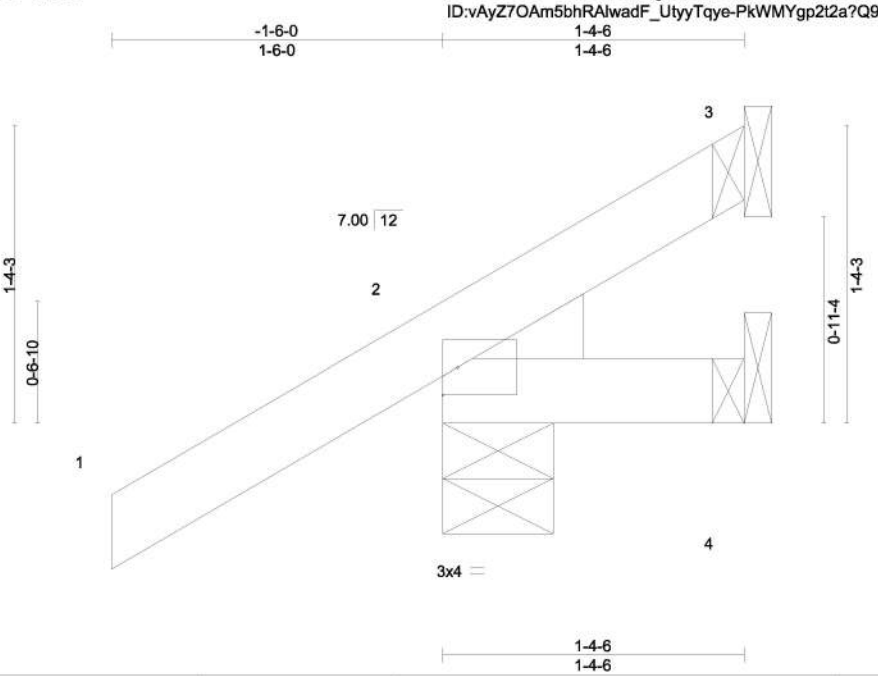

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.05	Vert(CT)	0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 8 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-4-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-6-0, 4=Mechanical
Max Horz 2=51(LC 12)
Max Uplift 3=-5(LC 9), 2=-53(LC 12), 4=-8(LC 1)
Max Grav 3=14(LC 17), 2=194(LC 1), 4=17(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; Encl., GCpi=0.18; 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, 2, 4.

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

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J10	Jack-Open	15	1	T29051526
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:09 2022 Page 1
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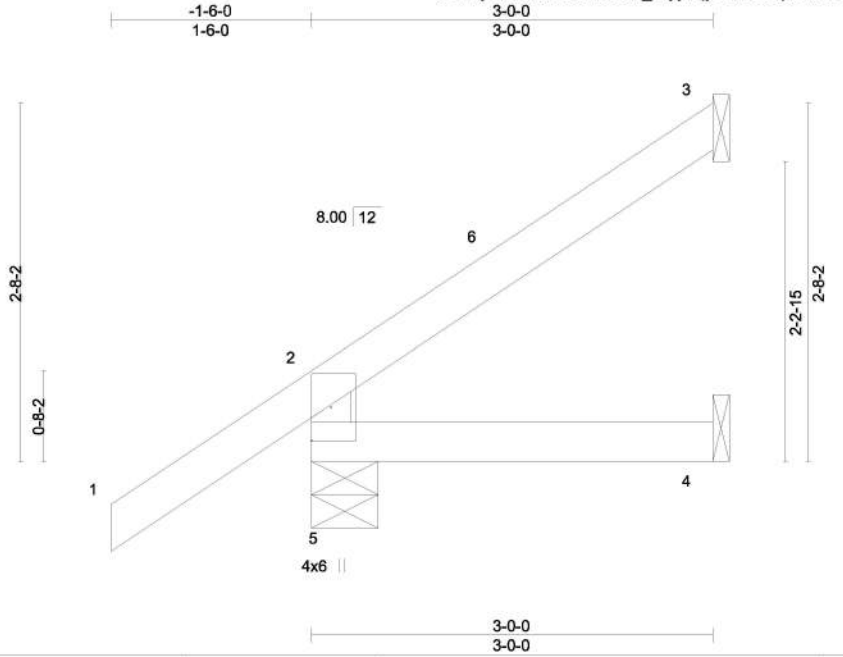

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.18	Vert(LL)	-0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MR							Weight: 13 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 3-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-6-0, 3=Mechanical, 4=Mechanical
Max Horz 5=94(LC 12)
Max Uplift 5=-31(LC 12), 3=-22(LC 12)
Max Grav 5=240(LC 1), 3=65(LC 17), 4=49(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; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 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) 5, 3.

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

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J11	Jack-Closed	1	1	T29051527

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:10 2022 Page 1
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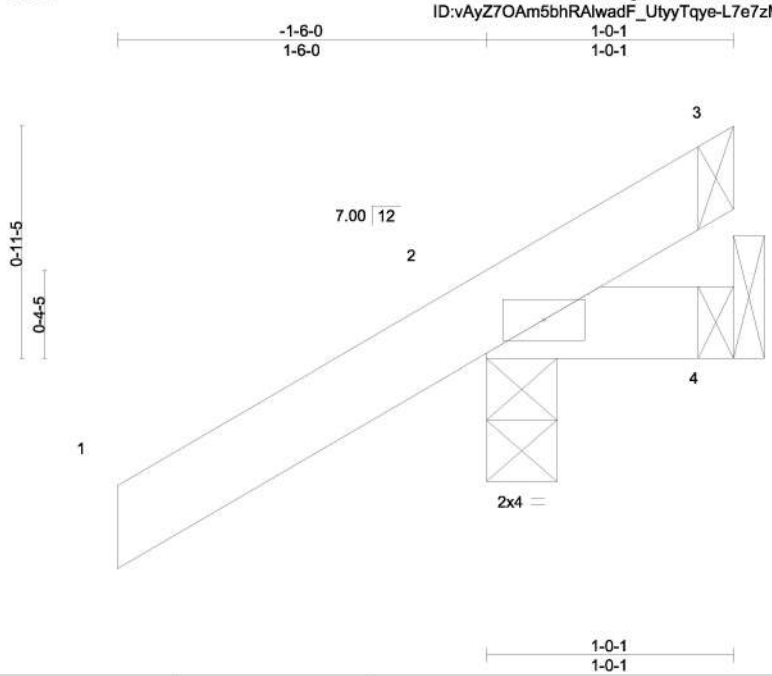

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 6 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-7, 4=Mechanical
Max Horz 2=50(LC 12)
Max Uplift 2=-73(LC 12), 4=-28(LC 1)
Max Grav 2=198(LC 1), 4=29(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; Encl., GCpi=0.18; 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) 2, 4.

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

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J12	Jack-Open	5	1	T29051528
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:11 2022 Page 1
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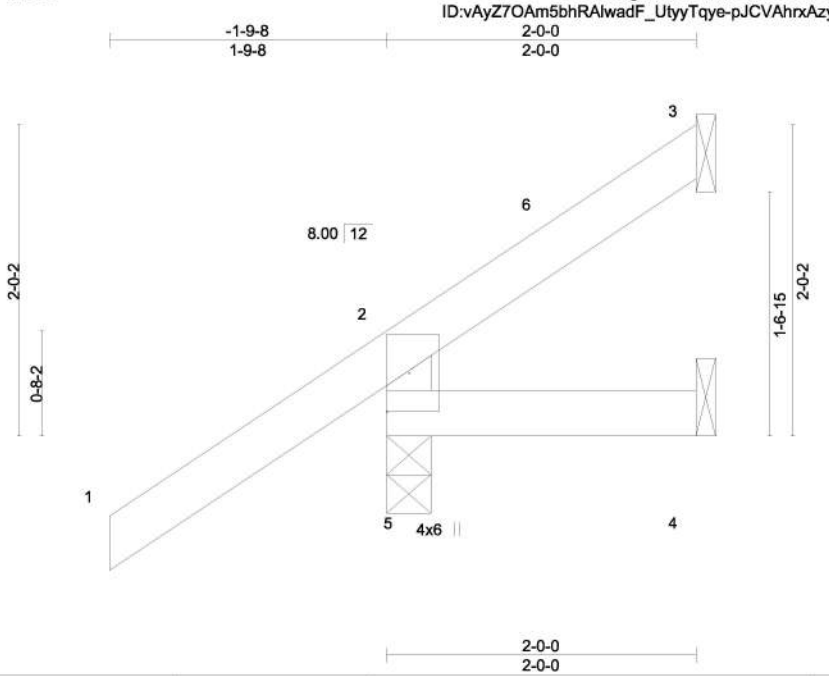

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.26	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MR							Weight: 10 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 2-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-7, 3=Mechanical, 4=Mechanical
Max Horz 5=86(LC 12)
Max Uplift 5=-60(LC 12), 3=-11(LC 9), 4=-3(LC 1)
Max Grav 5=251(LC 1), 3=20(LC 17), 4=27(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; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-9-8 to 1-2-8, Interior(1) 1-2-8 to 1-11-14 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) 5, 3, 4.

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

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J13	Roof Special	1	1	T29051529
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:13 2022 Page 1
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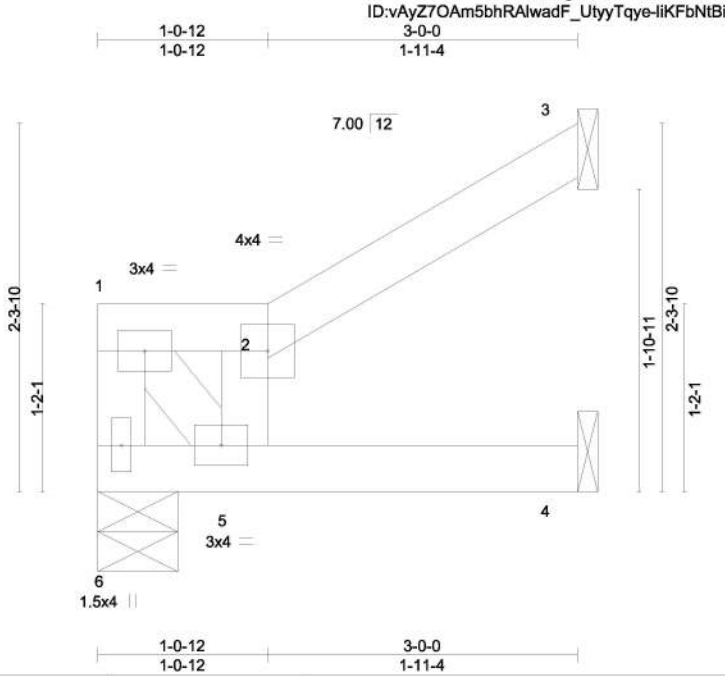

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.05	Vert(LL)	-0.01	5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 6=0-6-0, 3=Mechanical, 4=Mechanical
Max Horz 6=43(LC 12)
Max Uplift 3=-19(LC 12)
Max Grav 6=112(LC 1), 3=56(LC 1), 4=65(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; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 1-0-12, Interior(1) 1-0-12 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) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.

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

October 25,2022

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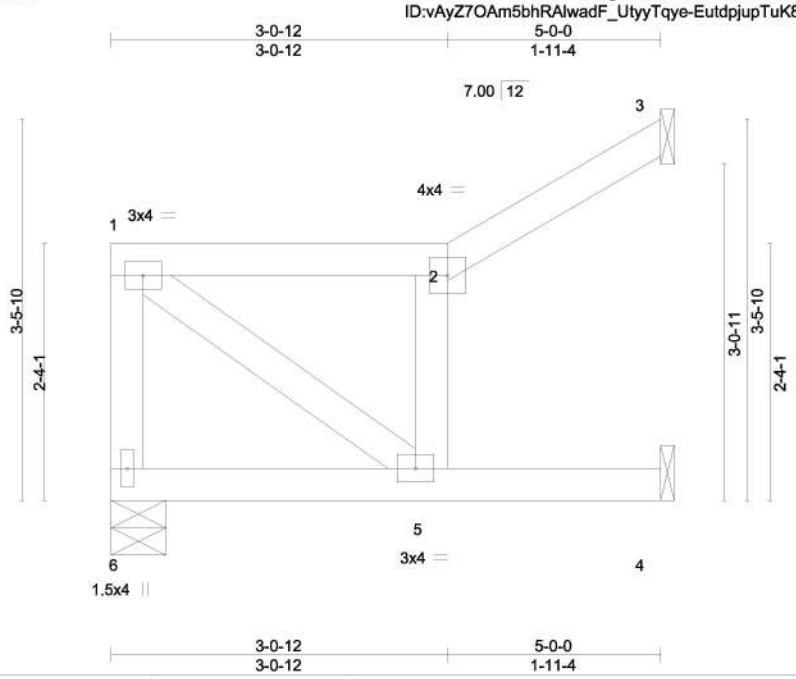
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	J14	Roof Special	1	1	T29051530

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:14 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-EutdpjupTuK884H8cC2BwQUyhBid2JZBOL5yLVyQBpN



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)	0.06	5-6	>920	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	-0.11	5-6	>528	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.01	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
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=0-6-0, 3=Mechanical, 4=Mechanical
Max Horz 6=66(LC 12)
Max Uplift 3=-19(LC 12), 4=-4(LC 12)
Max Grav 6=192(LC 1), 3=56(LC 1), 4=135(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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-0-12, Interior(1) 3-0-12 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) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
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.

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Date:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	M01	GABLE	2	1	T29051531

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:15 2022 Page 1
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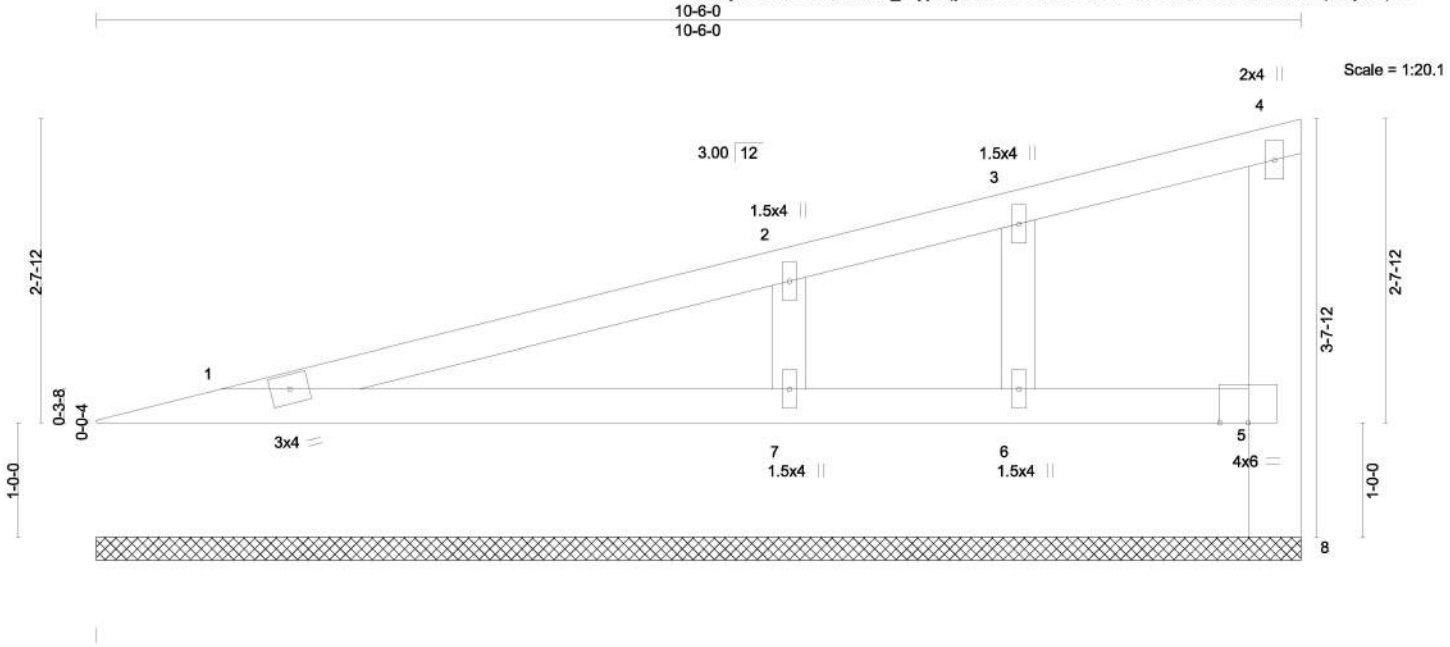

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 41 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x6 SP No.2
OTHERS	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.

VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

REACTIONS. All bearings 10-6-0.
(lb) - Max Horz 1=91(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 7
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 7=410(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-7=-294/246

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=2ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Corner(3E) 1-1-3 to 4-1-3, Exterior(2N) 4-1-3 to 10-3-4 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) 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) Bearing at joint(s) 8, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 6, 7.
11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	M02	Monopitch	16	1	T29051532

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:16 2022 Page 1
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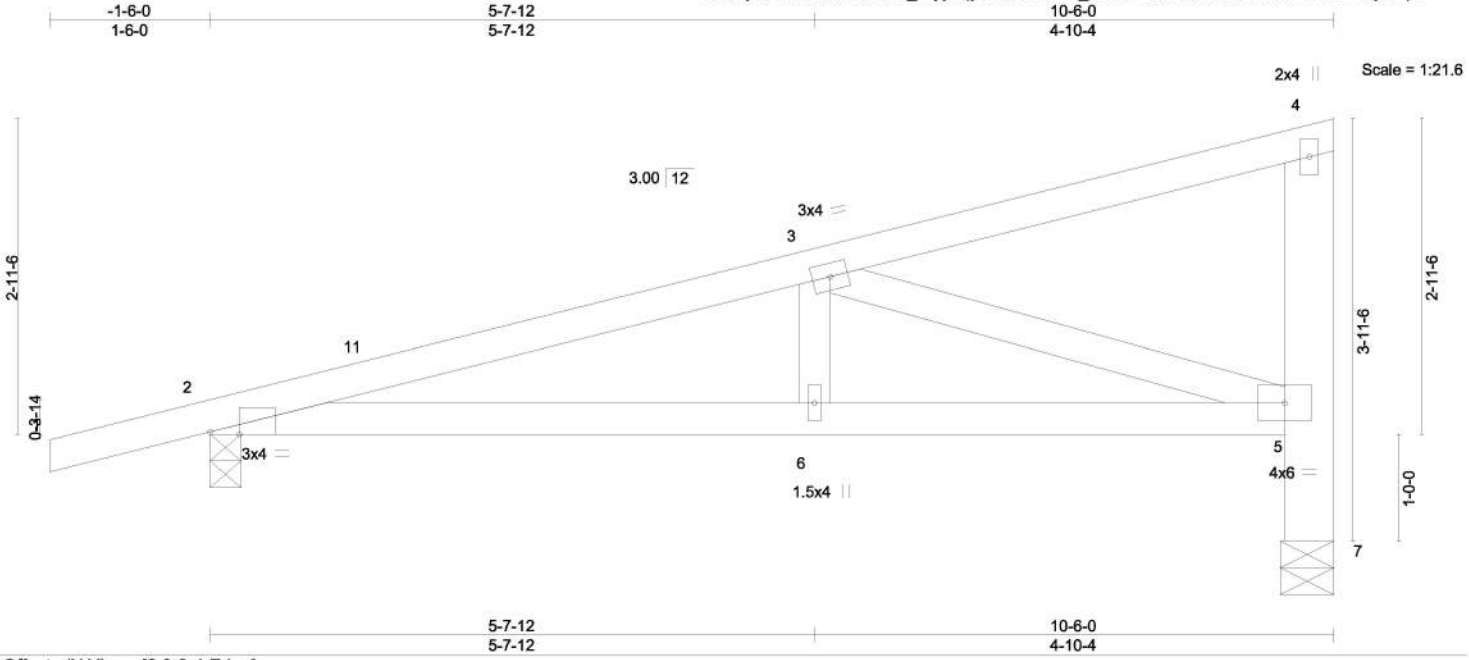

Plate Offsets (X,Y)-- [2:0-3-4,Edge]

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	0.24	Vert(LL)	-0.03	6-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.35	Vert(CT)	-0.08	6-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 50 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

REACTIONS. (size) 2=0-3-7, 7=0-6-0
Max Horz 2=103(LC 11)
Max Uplift 2=-37(LC 12)
Max Grav 2=507(LC 1), 7=404(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-874/158, 5-7=-404/102
BOT CHORD 2-6=-246/829, 5-6=-246/829
WEBS 3-5=-830/197

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; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 10-3-4 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) Bearing at joint(s) 7 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 capable of withstanding 100 lb uplift at joint(s) 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.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
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October 25,2022

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	PB01	GABLE	1	1	T29051533
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:17 2022 Page 1
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3-9-10 | 7-7-5
3-9-10 | 3-9-10

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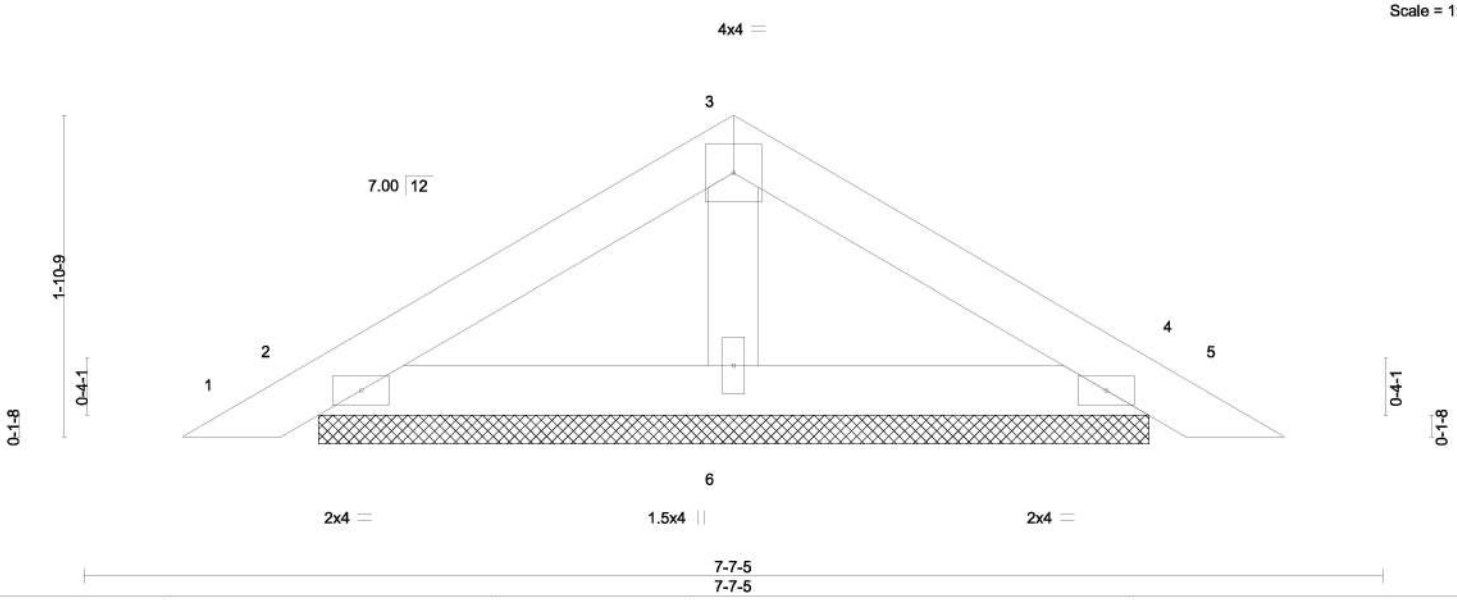

7-7-5
7-7-5

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.10	Vert(LL)	0.00	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	0.00	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-P							Weight: 20 lb	FT = 20%

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

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

REACTIONS. (size) 2=4-10-6, 4=4-10-6, 6=4-10-6
Max Horz 2=-30(LC 10)
Max Uplift 2=-25(LC 12), 4=-25(LC 12)
Max Grav 2=134(LC 1), 4=134(LC 1), 6=182(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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Corner(3E) 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) 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, 4.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	PB02	Piggyback	9	1	T29051534
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:18 2022 Page 1
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3-9-10 | 7-7-5
3-9-10 | 3-9-10

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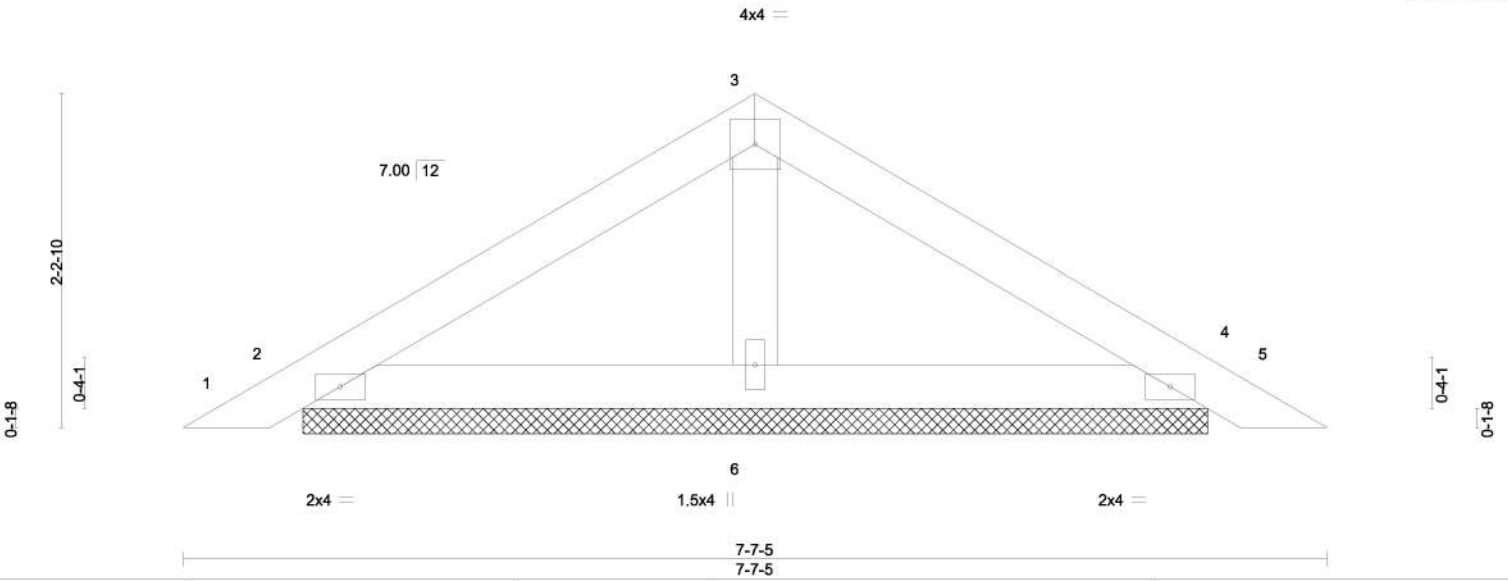

7-7-5
7-7-5

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	0.00	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	0.01	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-P							Weight: 24 lb	FT = 20%

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

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

REACTIONS. (size) 2=6-0-4, 4=6-0-4, 6=6-0-4
Max Horz 2=36(LC 11)
Max Uplift 2=-27(LC 12), 4=-27(LC 12)
Max Grav 2=157(LC 1), 4=157(LC 1), 6=227(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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-3-8 to 3-3-8, Interior(1) 3-3-8 to 3-9-10, Exterior(2R) 3-9-10 to 6-9-12, Interior(1) 6-9-12 to 7-3-13 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) 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.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 25,2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	PB03	Piggyback	18	1	T29051535
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:20 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-22Fv3mya2k5Is?klzT9bAhkxHcnxS_63mHYGY8yQBpH

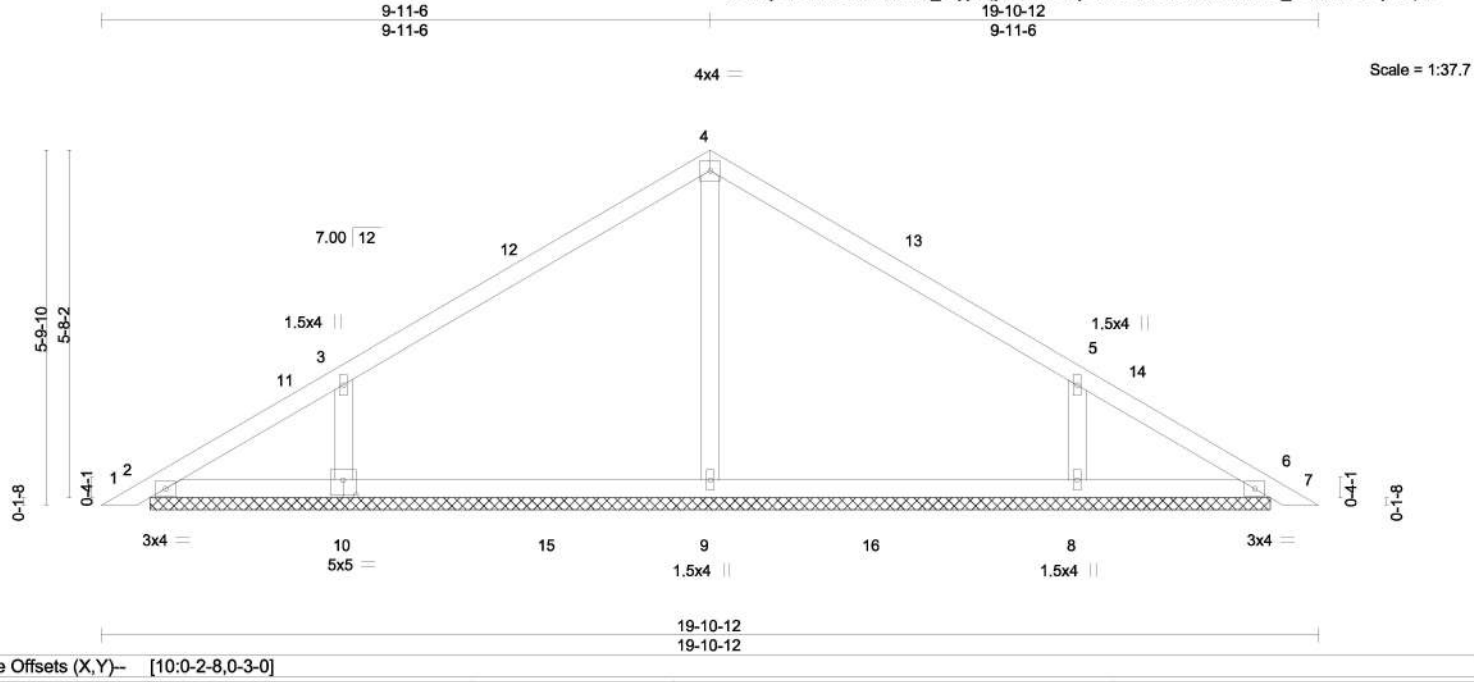

Plate Offsets (X,Y)-- [10:0-2-8,0-3-0]

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	0.38	Vert(LL)	-0.00	7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.40	Vert(CT)	-0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 74 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 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 18-3-11.
(lb) - Max Horz 2=98(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 10, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 9=572(LC 17), 10=477(LC 17), 8=513(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-9=-290/16, 3-10=-353/127, 5-8=-350/128

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=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-3-8 to 3-3-8, Interior(1) 3-3-8 to 9-11-6, Exterior(2R) 9-11-6 to 12-11-6, Interior(1) 12-11-6 to 19-7-4 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
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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 8.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Date:

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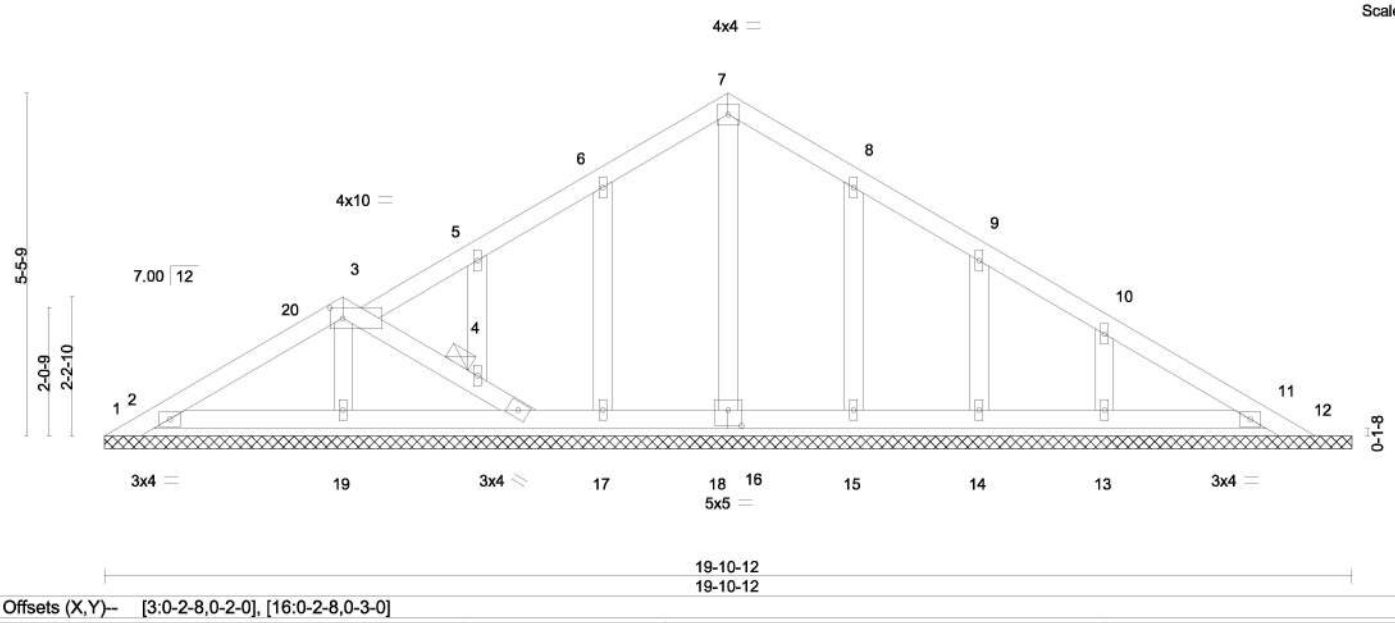
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	PB3A	GABLE	1	1	T29051536
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:24 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-xpUPv8?56ybjLd23CJDXKXvgDDBdOqgfhvWUhvyQBpD

9-11-6 / 9-11-6 — 19-10-12 / 9-11-6

Scale = 1:36.8



19-10-12 / 19-10-12

Plate Offsets (X,Y)-- [3:0-2-8,0-2-0], [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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 93 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
OTHERS 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 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 4

REACTIONS. All bearings 19-10-12.
(lb) - Max Horz 1=-92(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 17, 12, 15, 14, 13, 19, 11 except 1=-116(LC 17)
Max Grav All reactions 250 lb or less at joint(s) 1, 2, 16, 17, 18, 12, 15, 14, 13, 11 except 19=440(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-19=-333/168

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=24ft; eave=2ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Corner(3E) 0-3-8 to 3-3-8, Exterior(2N) 3-3-8 to 9-11-6, Corner(3R) 9-11-6 to 12-11-6, Exterior(2N) 12-11-6 to 19-0-5 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) 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 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 17, 12, 15, 14, 13, 19, 11 except (jt=lb) 1=116.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
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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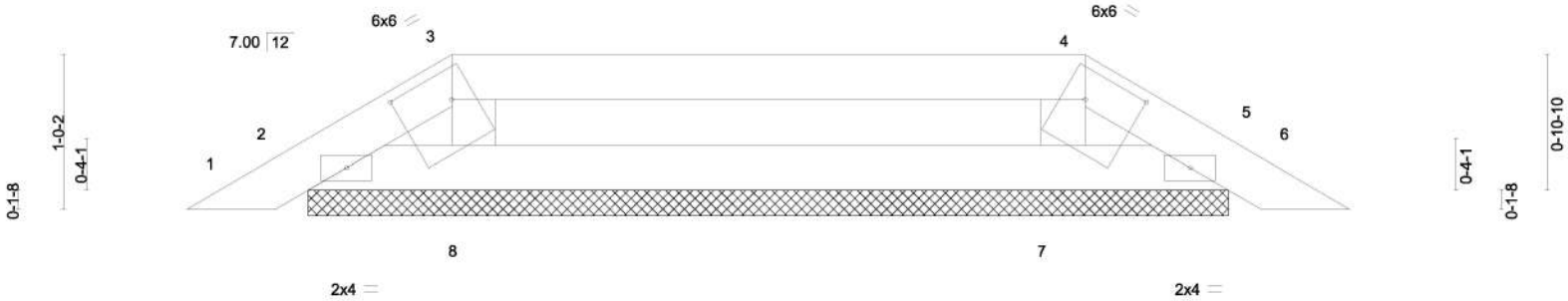
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Brooks
BROOKS	PB04	Piggyback	1	1	T29051537
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.530 s Aug 11 2022 MiTek Industries, Inc. Mon Oct 24 13:02:21 2022 Page 1
ID:vAyZ7OAm5bhRAlwadF_UtyyTqye-WEpHH6zCp1D9T9JUWBgqiuH7L0C6BTPD?xHq5byQBpG

7-7-5
7-7-5

Scale = 1:15.1



7-7-5
7-7-5

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

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	0.30	Vert(LL)	-0.00	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	-0.00	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-P							Weight: 22 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.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 6-0-4.
(lb) - Max Horz 2=15(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 5
Max Grav All reactions 250 lb or less at joint(s) 2, 5, 8, 7

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; 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
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) Gable requires continuous bottom chord bearing.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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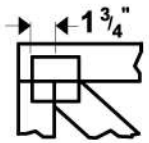
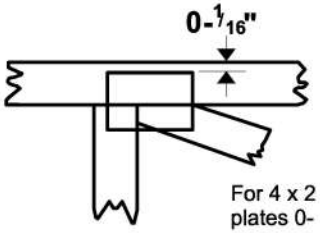
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

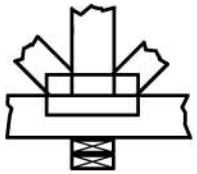
4 x 4

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

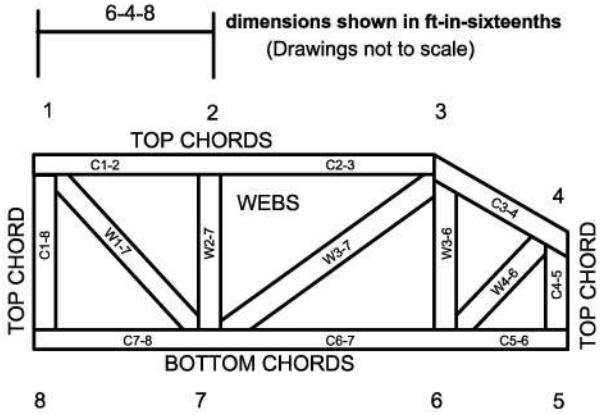


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

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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.