

RE: 1024-077 -

Site Information:

Customer Info: ALEC NORTON Project Name: . Model: . Lot/Block: . Subdivision: . Address: ., City: LAKE CITY State: FL.

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

City:

State:

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

Design Code: FBC2023/TPI2014 Wind Code: ASCE 7-22 Roof Load: 40.0 psf

Design Program: MiTek 20/20 8.7 Wind Speed: 130 mph Floor Load: N/A psf

This package includes 35 individual, Truss Design Drawings and 0 Additional Drawings. With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	I russ Name	Date No.	Seal#	I russ Name	Date
12345678901123456789011234567890	$\begin{array}{c} T36176031\\T36176032\\T36176033\\T36176034\\T36176036\\T36176036\\T36176038\\T36176038\\T36176039\\T36176040\\T36176040\\T36176041\\T36176043\\T36176044\\T36176045\\T36176045\\T36176046\\T36176048\\T36176048\\T36176049\\T36176049\\T36176049\\T36176049\\T36176049\\T36176049\\T36176049\\T36176049\\T36176049\\T36176049\\T36176049\\T36176049\\T36176049\\T36176049\\T36176050\\T36176050\\T3617605\\T5605\\T5605\\T5605\\T5605\\T5605\\T5605\\T5605\\T5605\\T5605\\T5605\\$	A01 A02 A03 A3A A04 A4A A4B A05 B01 B02 B03 C01 C02 C03 C04 CJ01 D01 D01 D01 D02 D03 D04	1/27/25 23 1/27/25 24 1/27/25 25 1/27/25 26 1/27/25 27 1/27/25 28 1/27/25 29 1/27/25 30 1/27/25 31 1/27/25 32 1/27/25 33 1/27/25 34 1/27/25 1/27/25 1/27/25 1/27/25 1/27/25 1/27/25	T36176053 T36176054 T36176055 T36176057 T36176058 T36176059 T36176060 T36176060 T36176062 T36176063 T36176065	GDR J01 J02 J03 J04 M01 M02 M2A PB01 PB02 PB02 PB2A PB2B PB03	1/27/25 1/27/25 1/27/25 1/27/25 1/27/25 1/27/25 1/27/25 1/27/25 1/27/25 1/27/25

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

D05

D06

T36176051

T36176052

21 22

My license renewal date for the state of Florida is February 28, 2025.

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



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

January 27,2025

Lee, Julius

MiTek, Inc. 16023 Swinalev Ridae Rd. Chesterfield, MO 63017 314.434.1200

Job	Truss	Truss Type	Qty	Ply		
1024-077	A01	Piggyback Base Structural Gable	1	1	T3617 Job Reference (optional)	76031

Run; 8,73 S Dec 5 2024 Print: 8,730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:34 ID:yCaQp_q?a0WH_C1oiQ13I4yOalU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Plate Offsets (X, Y): [2:Edge, 0-3-2], [3:0-3-10, 0-2-0], [11:0-2-8, 0-3-0], [15:0-6-0, 0-2-8], [21:0-6-0, 0-2-8], [32:Edge, 0-1-8], [40:0-2-8, 0-3-0], [47:0-2-8, 0-3-0], [50:0-3-0, 0-3-4]

Scale = 1:89.7

Loading TCLL (roof) TCDL BCLL BCDL		(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES FBC2023/TPI2014	CSI TC BC WB Matrix-AS	0.78 0.93 0.53	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.18 -0.36 0.10	(loc) 51-52 51-52 32	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 529 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD WEBS JOINTS	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Structura except er (4-0-9 ma Rigid ceil 1 Row at 1 Brace a 60, 61, 62 66, 67, 61 74	0.2 1.2 *Excep 1.2 1.2 1.4 1.4 1.4 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	t* 2-50:2x4 SP SS athing directly applied, , and 2-0-0 oc purlins applied. 18-42, 21-39, 45-63	TOP CHORD	1-2=0/40, 2-3=-18 4-5=-1676/76, 5-6 7-8=-2361/92, 8-9 9-10=-2367/140, 1 12-13=-2014/171, 14-15=-1954/218, 16-17=-1810/212, 20-21=-1810/212, 20-21=-1810/212, 22-23=-1765/189, 24-25=-1818/141, 29-30=-1559/117, 30-32=-1782/112, 2-58=-112/1631, 5	44/33, 3- =-1943/9 =-2389/1 0-12=-2 13-14=-2 15-16=- 17-18=- 17-18=- 21-22=- 23-24=- 25-26=- 27-29=- 30-31=0 57-58=-1	4=-1808/56, 1, 6-7=-1985 13, 331/165, 2004/198, 1810/212, 1810/212, 1810/212, 1810/212, 1810/212, 1810/212, 1737/218, 1791/158, 1487/158, 1549/122, /37, 12/1631,	/103,						
REACTIONS	(size) Max Horiz Max Uplift Max Grav (lb) - Max Tension	2=5-5-8, 3 57=5-5-8, 2=260 (LC 2=-35 (LC 57=-825 (2=1039 (L 56=1814 58=113 (L ximum Com	32=0-5-8, 56=5-5-8, 58=5-5-8 C 11) 12), 32=-37 (LC 12) LC 1), 58=-7 (LC 9) C 1), 32=1863 (LC 1) (LC 1), 57=-18 (LC 1) .C 17) pression/Maximum	,), 2),	56-57=-112/1631, 54-55=-112/1631, 52-53=-112/1631, 49-51=-129/2109, 46-48=-129/2109, 44-45=-76/1783, 4 42-43=-76/1783, 4 39-41=-59/1562, 3 37-38=-77/1386, 3 35-36=-77/1386, 3 33-34=-42/70, 32-	55-56=- 53-54=- 51-52=- 48-49=- 45-46=- 13-44=-70 11-42=-59 38-39=-7 36-37=-7 34-35=-4 33=-42/7	112/1631, 112/1631, 112/1631, 129/2109, 76/1783, 5/1783, 5/1783, 9/1562, 7/1386, 7/1386, 2/70, 0				*	No 34		

Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. WARNING - Verify design parameters and KEAU NOTES ON This AND INCLOSED MITCH REFERENCE FACE MILETARS IN TAL2625 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)



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

January 27,2025

Page: 1



	Job	Truss	Truss Type	Qty	Ply		
	1024-077	A01	Piggyback Base Structural Gable	1	1	Job Reference (optional)	T36176031
Mayo Truss Company, Inc., Mayo, FL - 32066,			Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:34				

ID:yCaQp_q?a0WH_C1oiQ13I4yOalU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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

WEBS	7-54=-311/25, 7-69=-23/599, 68-69=-20/538,
	67-68=-17/511, 50-67=-21/547,
	11-50=-11/128, 11-66=-480/72,
	65-66=-439/67, 64-65=-498/76,
	46-64=-474/74, 15-46=-43/530,
	15-63=-39/190, 62-63=-67/263,
	61-62=-64/245, 42-61=-67/240,
	18-42=-267/35, 42-60=-24/600,
	59-60=-27/621, 21-59=-25/587,
	21-39=-47/142, 39-70=0/358, 70-71=0/344,
	71-72=0/375, 25-72=0/333, 25-35=-581/30,
	35-73=-39/1608.73-74=-41/1571.
	74-75=-42/1598, 30-75=-43/1663,
	20-59=-43/28, 40-59=-82/31, 19-60=-63/35,
	41-60=-41/31, 17-61=-53/28, 43-61=-48/26.
	16-62=-54/34, 44-62=-39/34, 45-63=-87/36,
	14-64=0/46, 47-64=-37/30, 13-65=-99/48,
	48-65=-11/43, 12-66=-10/44, 49-66=-70/38.
	10-67=-27/29, 51-67=-109/34, 9-68=-73/37,
	52-68=-9/46, 8-69=-132/30, 53-69=0/43,
	6-55=-140/20, 4-57=0/182, 3-58=-23/37,
	22-70=-45/36, 38-70=-61/36, 23-71=-76/47.
	37-71=0/54, 24-72=-3/30, 36-72=-100/21.
	26-73=-4/71, 27-74=-122/48, 34-74=-70/47.
	29-75=-113/35, 33-75=-10/35, 5-56=-671/49
NOTES	

NOTES

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 3-3-3, Zone1 3-3-3 to 21-7-0, Zone2 21-7-0 to 28-3-15, Zone1 28-3-15 to 34-0-14, Zone2 34-0-14 to 41-0-10, Zone1 41-0-10 to 49-2-0 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
- Truss designed for wind loads in the plane of the truss 3) 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.
- Provide adequate drainage to prevent water ponding. 5)
- All plates are 2x4 MT20 unless otherwise indicated. 6)
- Gable studs spaced at 2-0-0 oc. 7)
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Bearings are assumed to be: Joint 2 SP SS , Joint 32 SP No.2, Joint 56 SP SS.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2, 37 lb uplift at joint 32, 825 lb uplift at joint 57, 7 lb uplift at joint 58 and 35 lb uplift at joint 2.
- 12) 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.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

👠 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

WARNING - verify design parameters and READ NOTES ON THIS AND INCLOSED INTERNETING TO THE REFERENCE FOR UNITY TO THE INSTANCE OF THE ADDRESS OF THE ADDRESS

Job	Truss	Truss Type	Qty	Ply	
1024-077	A02	Piggyback Base	1	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:35 ID:yniicoMMSdGh_27BEsAJYIyOaXt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Plate Offsets (X, Y): [4:0-2-8,0-3-4], [6:0-2-8,0-2-4], [8:0-2-8,0-2-4], [9:0-2-8,0-3-0], [10:0-2-15,0-2-0], [18:0-2-8,0-3-0]

Scale = 1:88.2

Loading TCLL (roof) TCDL	(psf) 20.0 10.0	Spacing Plate Grip DOL Lumber DOL	2-0-0 1.25 1.25		CSI TC BC	0.61 0.59	DEFL Vert(LL) Vert(CT)	in -0.09 -0.16	(loc) 15-16 15-16	l/defl >999 >999	L/d 240 180	PLATES MT20	GRIP 244/190
BCLL	0.0*	Rep Stress Incr	YES		WB	0.74	Horz(CT)	0.03	12	n/a	n/a		
BCDL	10.0	Code	FBC202	3/TPI2014	Matrix-AS							Weight: 340 lb	FT = 20%
UMBER OP CHORD JOT CHORD VEBS JRACING OP CHORD SOT CHORD VEBS DEACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood she except end verticals (5-6-13 max.): 6-8. Rigid ceiling directly 1 Row at midpt	athing directly applied , and 2-0-0 oc purlins applied. 6-16, 7-16, 7-14, 9-14 5-17, 4-17	2) , ¹ , 3)	Wind: ASCE Vasd=101mp B=45ft; L=48 MWFRS (dir Zone1 3-3-3 Zone1 27-9- Zone1 41-5- exposed ; er members an Lumber DOL Building Des verifying app	7-22; Vult=130mp bh; TCDL=6.0psf; I tft; eave=6ft; Cat. I ectional) and C-C 2 to 20-11-3, Zone2 15 to 34-8-12, Zon 10 to 49-2-0 zone; d vertical left and id d forces & MWFRS _=1.60 plate grip D igner / Project eng lied roof live load s	h (3-sec BCDL=6 I; Exp B Zone3 - 20-11-3 e2 34-8 cantilev right exp s for rea OL=1.60 ineer re shown c	cond gust) .0psf; h=15ft; ; Enclosed; 1-6-0 to 3-3-3 8 to 27-9-15, .12 to 41-5-10 (er left and rig posed;C-C for ctions shown) sponsible for overs rain loa	, ht ; ding					
LEACTIONS	(size) 2=0-4-8, 18=13-2-4 Max Horiz 2=262 (LC Max Uplift 2=-40 (LC 17=-20 (L Max Grav 2=332 (LC 17=1763 19=501 (L	12=0-5-8, 17=13-2-8, 3, 19=13-2-8 C 11) 2 12), 12=-33 (LC 12), C 12) C 18), 12=1477 (LC 18 (LC 17), 18=584 (LC 1 LC 17)	4) 5) 3), 7),	requirements Provide adec This truss ha chord live loa * This truss f on the bottor 3-06-00 tall b	s specific to the use quate drainage to p is been designed fr ad nonconcurrent v has been designed n chord in all areas by 2-00-00 wide will	e of this prevent or a 10. with any for a liv s where Il fit betw	truss compor water ponding 0 psf bottom other live load re load of 20.0 a rectangle veen the botto	ding nent. J. ds. Dpsf					11111
ORCES	(lb) - Maximum Com Tension	pression/Maximum	7)	All bearings	are assumed to be	SP No.	2 .					JULIUS	LEE
OP CHORD	6-7=-356/153, 7-8=- 10-12=-1377/115, 1- 3-5=-188/123, 5-6=- 8-10=-1188/172, 10-	997/183, -2=0/40, 2-3=-262/106 436/160, -11=0/44	8) , 9)	2, 33 lb uplift This truss de	capable of withsta at joint 12 and 20 sign requires that	anding 4 Ib uplift a minim	ers) of truss to 0 lb uplift at ju at joint 17. um of 7/16"	oint					869
BOT CHORD	2-19=-188/203, 17-1 15-17=-139/894, 13- 12-13=-42/70	19=-117/203, -15=-41/961,	10	chord and 1/ the bottom c	2" gypsum sheetro hord.	pplied d ock be a	pplied directly	to			P	LAN.	
VEBS IOTES	6-16=-118/37, 7-16= 7-14=-21/169, 8-14= 9-13=-385/85, 10-13 4-18=-320/63, 5-17= 3-18=-90/58, 4-17=-	1034/49, 7-15=0/414 -0/226, 9-14=-84/100, 3=0/1095, 3-19=-322/7 1495/122, 5-16=0/11 128/79	3, LC	or the orienta bottom chore DAD CASE(S)	ation of the purlin a d. Standard	long the	top and/or	ιze			AOY	OR ONA	

NOTES

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1) Unbalanced roof live loads have been considered for this design.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 touble 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)

January 27,2025

Page: 1



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

Julius Lee PE No. 34869

Date:

Job	Truss	Truss Type	Qty	Ply		
1024-077	A03	Piggyback Base	1	1	Job Reference (optional)	6176033

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:35 ID:69XAaEJb0cn0V__mtgllAjyOanR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:90.2

Plate Offsets (X, Y)	: [4:0-2-8,0-3-0],	[6:0-6-0,0-2-8], [9:0)-6-0,0-2-8], [10:0-2-8,0-3	3-0], [11:0-2-15,0	-2-0], [14:0)-2-8,0-3-0],	[17:0-2-8	,0-3-0],	19:1-4-0),0-2-8], [21:0-2-8,0-3-0]	
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	ТС	0.51	Vert(LL)	-0.10	14-15	>999	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.20	14-15	>999	180	MT18HS	244/190	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.17	13	n/a	n/a			
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 311 lb	FT = 20%	

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
WEDGE	Left: 2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied,
	except end verticals, and 2-0-0 oc purlins
	(4-9-6 max.): 6-9.
BOICHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-19, 5-19, 6-18
REACTIONS	(size) 2=0-4-8, 13=0-5-8, 19=0-5-8
	Max Horiz 2=265 (LC 11)
	Max Uplift 2=-79 (LC 12), 13=-63 (LC 12)
	Max Grav 2=384 (LC 23), 13=1080 (LC 18)
	19=3067 (LC 17)
FORCES	(lb) - Maximum Compression/Maximum
	Tension
TOP CHORD	6-7=-346/167, 7-8=-1268/145,
	8-9=-1263/142, 11-13=-979/184, 1-2=0/40,
	2-3=-242/441, 3-5=-96/1320, 5-6=0/758,
	9-11=-1337/135, 11-12=0/44
BOT CHORD	2-20=-362/203, 19-20=-645/75,
	18-19=-1295/143, 16-18=-825/413,
	15-16=-14/1252, 13-15=-97/1186
WEBS	4-19=-869/75, 5-19=-1739/159,
	5-18=-14/1351, 6-18=-1339/79,
	6-17=-58/1199, 9-16=-7/285, 9-15=-49/177
	10-15=-58/167, 10-14=-512/107,
	11-14=-21/987, 7-17=-1031/139,
	11-14=-21/987, 7-17=-1031/139, 7-16=-48/1144, 8-16=-159/69, 3-21=0/260,

NOTES

1) Unbalanced roof live loads have been considered for this design.

 Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 3-3-3, Zone1 3-3-3 to 20-11-3, Zone2 20-11-3 to 27-9-15, Zone1 3-3-3 to 20-11-3, Zone2 20-11-3 to 27-9-15, Zone1 27-9-15 to 34-8-12, Zone2 34-8-12 to 41-5-10, Zone1 41-5-10 to 49-2-0 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

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom

chord live load nonconcurrent with any other live loads.
* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) All bearings are assumed to be SP No.2.

- Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 13 and 79 lb uplift at joint 2.
- 11) 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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:

January 27,2025

Page: 1



Job	Truss	Truss Type	Qty	Ply	
1024-077	A3A	Piggyback Base	3	1	Job Reference (optional)

Run: 8 73 S. Dec. 5 2024 Print: 8 730 S.Dec. 5 2024 MiTek Industries. Inc. Mon. Jan 27 07:17:33 ID:RP0wxSEyBxfrSjuoFCwRnEyOaVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:87.9

Plate Offsets (X, Y): [4:0-2-8,0-3-0], [6:0	0-6-0,0-2-8], [9:0-6-0,0-2-8], [13:0-2-8,0-3-0], [16:0-2-8,0-3-0], [18:1-4-0,0-2-8], [20:0-2-8,0-3-0]
---	--	---

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	тс	0.51	Vert(LL)	-0.11	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.20	13-14	>999	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.17	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 308 lb	FT = 20%

LOWBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
WEDGE	Left: 2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied,
	except end verticals, and 2-0-0 oc purlins
	(4-9-4 max.): 6-9.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-18, 5-18, 6-17
REACTIONS	(size) 2=0-4-8, 12=0-5-8, 18=0-5-8
	Max Horiz 2=261 (LC 11)
	Max Uplift 2=-68 (LC 24), 12=-17 (LC 12)
	Max Grav 2=383 (LC 23), 12=986 (LC 18),
	18=3066 (LC 17)
FORCES	(lb) - Maximum Compression/Maximum
	Tension
TOP CHORD	6-7=-347/163, 7-8=-1274/173,
	8-9=-1269/170, 9-10=-1345/157,
	10-11=-1252/130, 11-12=-887/132, 1-2=0/40,

BOT CHORD

WEBS

NOTES

this design.

1)

2-3=-241/445, 3-5=-133/1315, 5-6=0/754

6-16=-82/1201, 9-15=-24/285, 9-14=-42/179,

7-15=-91/1148, 8-15=-159/72, 3-20=0/260,

2-19=-365/200, 18-19=-648/72

4-18=-869/75, 5-18=-1737/187

5-17=-40/1352, 6-17=-1340/107

10-14=-58/160, 10-13=-519/139,

11-13=-67/1000, 7-16=-1036/163,

4-19=0/575, 3-19=-689/64

Unbalanced roof live loads have been considered for

17-18=-1297/141, 15-17=-826/414,

14-15=-71/1259, 12-14=-157/1194

2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 3-3-3, Zone1 3-3-3 to 20-11-3, Zone2 20-11-3 to 27-9-15, Zone1 27-9-15 to 34-8-12, Zone2 34-8-12 to 41-5-10, Zone1 41-5-10 to 47-6-4 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 Building Designer / Project engineer responsible for

- 3) verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component. Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom 6)
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. 8) All bearings are assumed to be SP No.2 .
- Bearing at joint(s) 12 considers parallel to grain value 9) using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 12 and 68 lb uplift at joint 2.
- 11) 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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:

January 27,2025

Page: 1



Job	Truss	Truss Type	Qty	Ply		
1024-077	A04	Piggyback Base	3	1	T361 Job Reference (optional)	76035

Run: 8 73 S. Dec. 5 2024 Print: 8 730 S.Dec. 5 2024 MiTek Industries. Inc. Mon. Jan 27 07:17:35 ID:AUq6aN?Xoo37z92sosYgi0yOaTB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:87.9

Plate Offsets (X, Y): [4:0-2-8,0-3-0], [6:0	0-6-0,0-2-8], [9:0-6-0,0-2-8], [13:0-2-8,0-3-0], [16:0-2-8,0-3-0], [18:1-4-0,0-2-8], [20:0-2-8,0-3-0]
---	--	---

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	тс	0.51	Vert(LL)	-0.11	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.20	13-14	>999	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.17	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 308 lb	FT = 20%

BCDL		10.0	Code	FE
LUMBER				
TOP CHORD	2x4 SP N	o.2		
BOT CHORD	2x4 SP N	0.2		
WEBS	2x4 SP N	0.2		
WEDGE	Left: 2x4	SP No.3		
BRACING				
TOP CHORD	Structura	l wood shea	athing directly applie	d.
	except er	nd verticals.	and 2-0-0 oc purling	, 5
	(4-9-4 ma	ax.): 6-9.		
BOT CHORD	Rigid ceil	ing directly	applied.	
WEBS	1 Row at	midpt	4-18, 5-18, 6-17	
REACTIONS	(size)	2=0-4-8, 1	2=0-5-8, 18=0-5-8	
	Max Horiz	2=261 (LC	C 11)	
	Max Uplift	2=-68 (LC	24), 12=-17 (LC 12))
	Max Grav	2=383 (LC	23), 12=986 (LC 18	3),
		18=3066 (LC 17)	
FORCES	(lb) - Max	imum Com	pression/Maximum	
	Tension			
TOP CHORD	6-7=-347	/163, 7-8=-′	1274/173,	
	8-9=-126	9/170, 9-10	=-1345/157,	
	10-11=-1	252/130, 11	-12=-887/132, 1-2=	0/40
	2-3=-241/	/445, 3-5=-´	133/1315, 5-6=0/754	r
BOT CHORD	2-19=-36	5/200, 18-1	9=-648/72,	
	17-18=-1	297/141, 15	5-17=-826/414,	
	14-15=-7	1/1259, 12-	14=-157/1194	
WEBS	4-18=-86	9/75, 5-18=	-1737/187,	
	5-17=-40/	1352, 6-17	=-1340/107,	
	6-16=-82	1201, 9-15	=-24/285, 9-14=-42/	179,
	10-14=-5	5/160,10-1 7/4000 7.4	3=-519/139,	
	7 15-01	//1000, /-1 /11/0 0 15	0=-1030/103,	0
	4-19-0/5	75 3_106	=-159/12, 5-20=0/20	υ,
			· · · · · · · · · · · · · · · · · · ·	

NOTES

Unbalanced roof live loads have been considered for 1) this design.

- verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component. Provide adequate drainage to prevent water ponding. 4)
- 5) All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom 6)
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. 8) All bearings are assumed to be SP No.2 .
- Bearing at joint(s) 12 considers parallel to grain value 9) using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 12 and 68 lb uplift at joint 2.
- 11) 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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:

January 27,2025

Page: 1



²⁾ Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 3-3-3, Zone1 3-3-3 to 20-11-3, Zone2 20-11-3 to 27-9-15, Zone1 27-9-15 to 34-8-12, Zone2 34-8-12 to 41-5-10, Zone1 41-5-10 to 47-6-4 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 Building Designer / Project engineer responsible for 3)

Job	Truss	Truss Type	Qty	Ply		
1024-077	A4A	Piggyback Base Girder	2	2	Job Reference (optional)	T36176036

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:34 ID:AUq6aN?Xoo37z92sosYgi0yOaTB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:87.9

Plate Offsets	(X, Y): [4:0-2-8,0-3-0]	, [6:0-3-0,0-2-7], [9:0-	-3-0,0-2-7	, [13:0-4-0,0-4·	-8], [15:0-2-12,0-	3-12], [16	:0-4-0,0-4-8],	, [18:0-6	-0,0-2-8]	, [20:0-2	-8,0-3-	0]		
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 NO FBC202	23/TPI2014	CSI TC BC WB Matrix-MS	0.39 0.23 0.75	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.08 -0.14 0.14	(loc) 15 15 12	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 695 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD	2x4 SP No.2 *Excep 2x6 SP No.2 *Excep No.2 2x4 SP No.2 *Excep Structural wood she 6-0-0 oc purlins, ex 2-0-0 oc purlins (6-0	ot* 6-9:2x6 SP No.2 ot* 2-20,20-18:2x4 SF ot* 8-15:2x6 SP No.2 eathing directly applie except end verticals, an 0-0 max.): 6-9.	1) ed or nd 2)	2-ply truss to (0.131*x3") n Top chords c oc, 2x6 - 2 rc Bottom chord 0-9-0 oc, 2x6 Web connec 2 rows stagg All loads are except if note	be connected to nails as follows: connected as follows was staggered at ds connected as 5 - 2 rows stagge ted as follows: 20 ered at 0-9-0 oc. considered equa d as front (E) or	gether wi ows: 2x4 - 0-9-0 oc. follows: 2 red at 0-9 (4 - 1 row illy applie- back (B)	th 10d • 1 row at 0-9 x4 - 1 row at -0 oc. at 0-9-0 oc, 2 d to all plies, face in the 10	0 2x6 - DAD	12) Gra or t bott 13) Har pro lb d des res LOAD (aphical p he orien tom chor nger(s) c vided su lown and ign/sele ponsibilit CASE(S	urlin re tation o rd. or other fficient d 114 ll ction o ty of ot) Star	presentation do of the purlin alor connection dev to support condo up at 32-8-8 d f such connection hers. ndard	es not depict the siz ig the top and/or vice(s) shall be centrated load(s) 102 in bottom chord. The on device(s) is the mathematical paragraphics 1.25 mathematical paragraphics 1.25	:e 23 ie
BOT CHORD	Rigid ceiling directly bracing. (size) 2=0-4-8, : Max Horiz 2=258 (L Max Uplift 2=-356 (L 18=-68 (L Max Grav 2=132 (L 18=4030	/ applied or 6-0-0 oc 12=0-5-8, 18=0-5-8 C 7) .C 20), 12=-50 (LC 8 .C 8) C 18), 12=1298 (LC - (LC 13)), ³⁾ 14), ⁴⁾	CASE(S) sec provided to c unless other Unbalanced this design. Wind: ASCE Vasd=101mp	tion. Ply to ply c listribute only loa wise indicated. roof live loads ha 7-22; Vult=130m h; TCDL=6.0psf	onnection ds noted ave been on ph (3-sec ; BCDL=6	s have been as (F) or (B), considered fo cond gust) .0psf; h=15ft	pr ;	1) De Pl Ur Co	ad + Ro ate Incre hiform Lo Vert: 1-1 15-18=- oncentra Vert: 15	ease=1 bads (II 6=-60, 20, 12 ted Los =-1023	e (balanced): Lu .25 6-9=-60, 9-11=- 15=-20 ads (Ib) 3 (F)	60, 18-21=-20,	',
FORCES	(lb) - Maximum Corr	npression/Maximum		B=45ft; L=48 MWFRS (dire	lft; eave=6ft; Cat. ectional); cantilev	II; Exp B /er left an	; Enclosed; d right expos	ed ;				mun	1111	
TOP CHORD	Lension 1-2=0/40, 2-3=-145/ 5-6=0/1227, 6-7=-62 8-9=-2719/98, 9-10= 10-11=-1792/92, 11	/1033, 3-5=-79/1935, 25/106, 7-8=-2726/99 =-2406/98, -12=-1194/63	9, 5)	end vertical I plate grip DC Building Des verifying app	eft and right expo DL=1.60 igner / Project er lied roof live load	osed; Lum Igineer re I shown c	sponsible for overs rain loa	60 ading			S. S	ULIUS	LEE	
BOT CHORD	2-19=-887/138, 18-1 17-18=-1969/137, 1 14-15=-15/2304, 12	19=-1205/77, 5-17=-1261/713, -14=-58/1734	6) 7)	Provide adec This truss ha	quate drainage to s been designed	for a 10.0	water ponding psf bottom	g.			*		869	
WEBS	3-20=0/274, 3-19=-7 4-18=-868/49, 5-18= 6-17=-2018/0, 6-16= 9-14=-297/96, 10-14 10-13=-853/76, 11-7 7-15=-53/2535, 9-15	729/41, 4-19=0/585, =-2336/12, 5-17=0/18 =0/2025, 7-16=-1871, 4=-57/618, 13=0/1499, 8-15=-13 5=-98/1240	8) 860, /82, 7/32, 9)	* This truss h on the bottor 3-06-00 tall b chord and ar Bearings are SP No.2, Jo	has been designed in chord in all are by 2-00-00 wide w by other members assumed to be: int 12 SP No.2.	ed for a liv as where vill fit betv s, with BC Joint 2 SI	e load of 20.0 a rectangle veen the botto DL = 10.0pst P No.2 , Joint	0psf om f. t 18		Inter	PRO		NO KOL	
NOTES			10)) Bearing at jo	int(s) 12 conside	rs parallel	to grain valu	le				THINK	in the second se	

designer should verify capacity of bearing surface.

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint

12, 356 lb uplift at joint 2 and 68 lb uplift at joint 18.

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

January 27,2025

Page: 1



Job	Truss	Truss Type	Qty	Ply		
1024-077	A4B	Piggyback Base	4	1	Job Reference (optional)	T36176037

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:34 ID:AUq6aN?Xoo37z92sosYgi0yOaTB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:69.8

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

Loading	(psf)	Spacing	2-0-0	csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	тс	0.41	Vert(LL)	-0.04	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.08	12-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 216 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
	(6-0-0 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-12, 5-12, 6-11
REACTIONS	(size) 2=0-4-8, 9= Mechanical, 12=0-5-8
	Max Horiz 2=239 (LC 9)
	Max Uplift 9=-52 (LC 9), 12=-31 (LC 12)
	Max Grav 2=737 (LC 17), 9=471 (LC 24),
	12=1880 (LC 17)
FORCES	(lb) - Maximum Compression/Maximum
	Tension
TOP CHORD	6-7=-249/86, 7-8=-75/58, 8-9=-150/41,
	1-2=0/40, 2-3=-915/0, 3-5=-374/430,
	5-6=-48/146
BOT CHORD	2-13=-300/841, 12-13=-134/285,
	11-12=-388/35, 9-11=-173/306
WEBS	4-12=-849/63, 5-12=-938/103, 5-11=0/611,
	6-11=-557/39, 6-10=0/422, 7-10=-300/72,
	7-9=-262/49, 3-14=0/244, 4-13=0/554,
	3-13=-62//61

NOTES

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; 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; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-8-15, Zone1 1-8-15 to 20-11-3, Zone2 20-11-3 to 25-6-5, Zone1 25-6-5 to 32-3-12 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

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 Provide adequate drainage to prevent water ponding.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. 7) Bearings are assumed to be: Joint 2 SP No.2. Joint 12
- 7) Bearings are assumed to be: Joint 2 SP No.2 , Joint 12 SP No.2 .
- 8) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 9 and 31 lb uplift at joint 12.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 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:

January 27,2025



Job	Truss	Truss Type	Qty	Ply		
1024-077	A05	Piggyback Base Structural Gable	1	1	Job Reference (optional)	736176038

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:35 ID:qEIUCo_1xVrjGWAZz0?MupyOaQc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:87.4

Plate Offsets ((X, Y): [2:0	-4-0,0-4-1],	, [9:0-3-0,Edge], [14:0)-7-4,0-3-8], [22:0-7-4,	0-3-8], [28:Edge	,0-4-13], [32	:0-3-0,0-3-12	2], [38:0-2	2-4,0-4-8	8], [47:0	-3-0,0-1	1-4]			
Loading		(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)		20.0	Plate Grip DOL	1.25	тс	0.34	Vert(LL)	-0.10	`41́	>999	240	MT20	244/190		
TCDL		10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.20	41	>999	180				
BCLL		0.0*	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.04	30	n/a	n/a				
BCDL		10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 576 lb	FT = 20%		
LUMBER				TOP CHORD	1-2=0/40, 2-4=	-644/0, 4-5=	-667/31,		WEBS		18-41	=-180/66, 19-40	=-215/43,		
TOP CHORD	2x4 SP N	0.2			5-6=-651/74, 6	-7=-644/119), 7-8=-641/1	63,			20-38	=-240/56, 21-37	=-105/178,		
BOT CHORD	2x6 SP N	0.2			8-10=-737/199, 10-11=-694/238,					23-36=-90/191, 24-35=-99/116, 25-34=0/478,					
WEBS	2x4 SP N	lo.2 *Excep	ot* 30-29:2x4 SP 2400	0F	11-12=-1112/341, 12-13=-1174/384,					26-33=0/134, 27-32=-409/120,					
	2.0E 2x4 SP No.2				15-14=-1219/4	20, 14-15=-	1206/423				16-43	=-374/103, 17-4 =-318/02 15-11	2=-390/114, 330/35		
OTHERS	HERS 2x4 SP No.2 ACING				17-18=-1273/4	40 18-19=-	1273/440				13-45	=-219/69 12-46	=-606/113		
BRACING	RACING P CHORD Structural wood sheathing directly applied,				19-20=-1263/4	42. 20-21=-	1263/442.				11-48	=-68/605, 10-49	=-44/63, 8-50=-426/	62.	
TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins				21-22=-1199/4	42, 22-23=-	1339/459,				7-51=	-130/75, 6-52=-1	22/78, 5-53=-98/71	,	
	(5-0-13 n	except end verticals, and 2-0-0 oc purlins (5-0-13 max): 14-22				23-24=-1351/492, 24-25=-1378/431,					4-54=	-200/91, 8-49=0	296, 11-49=-1121/2	212,	
BOT CHORD	Rigid ceil	ing directly	 applied		25-26=-1074/391, 26-27=-1166/351, 15-43=-154/873, 21-38=-15/556							8=-15/556,			
WEBS	1 Row at	midnt	18-41 19-40 20-38		27-28=-1041/2	93, 28-29=-	116/128,				17-41	=-88/420, 19-41	=-35/179,		
			21-37, 23-36, 24-35,		29-30=-125/98	; 					28-30	=-1334/273, 28-	32=-238/1362,		
			17-42, 16-43, 15-44,	BOT CHORD	2-54=-113/541	, 53-54=-11	3/541,				25-33	=-870/79, 23-35	=-288/115,		
			13-45, 12-46, 11-49,		52-53=-113/54 50-51=-113/54	1, 51-52=-1 1 49-50=-1	13/541, 13/541		NOTES		12-45	=-60/660			
			19-41, 23-35		48-49=-161/91	4, 46-48=-10	61/914.		A) Link		d reaf li	ive leade heve h	and annoidered for		
REACTIONS	(size)	2=14-2-8,	, 30=0-5-8, 49=14-2-8	3,	45-46=-161/91	4. 44-45=-1	75/1062.		1) Unit this	docian		ive loads have b	een considered for		
		50=14-2-8	8, 51=14-2-8, 52=14-	2-8,	43-44=-175/10	62, 42-43=-2	203/1206,		0113	uesign			1111.		
	Max Llaria	53=14-2-0	8, 54=14-2-8		41-42=-203/12	206, 40-41=-2	220/1263,					1 UIIS	1.111		
	Max Liplift	2=254 (LU	12) 40- 42 (LC 12)		38-40=-220/12	63, 37-38=-2	218/1199,					JULIOO	LEE "		
	Max Opint	2=-7 (LC	(12), 49 = 42 (LO 12), (12) 52 = 11 (LO 12)	2)	36-37=-218/11	99, 35-36=-2	218/1199,				S.	. CEI	VS.		
		53=-19 (L	C 12), 32=-11 (LO 12)	-),	34-35=-245/11	89, 33-34=-2	245/1189,				3		N		
	Max Grav	2=479 (L	C 1), 30=1473 (LC 1)		32-33=-225/97	1, 31-32=-1;	35/456,			1	Ξ.	No 34	869		
		49=760 (l	LC 23), 50=456 (LC 1	,),	30-31=-135/45	00					1				
		51=170 (l	LC 1), 52=169 (LC 23	s),							7:				
		53=106 (l	LC 23), 54=313 (LC 1)							1:	la ne .			
FORCES	(lb) - Max	imum Com	npression/Maximum								1		sta alter		
	Tension														

Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. WARNING - Verify design parameters and KEAU NOTES ON This AND INCLOSED MITCH REFERENCE FACE MILETARS IN TAL2625 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com) January 27,2025

Page: 1



ONAL minim

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

Julius Lee PE No. 34869

Date:

Job	Truss	Truss Type	Qty	Ply		
1024-077	A05	Piggyback Base Structural Gable	1	1	Job Reference (optional)	136176038

- Wind: ASCE 7-22; Vult=130mph (3-second gust) 2) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=48ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 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.
- Provide adequate drainage to prevent water ponding. 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 2-0-0 oc. 7)
- 8)
- This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf 9) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SP No.2 .
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 2, 42 lb uplift at joint 49, 10 lb uplift at joint 51, 11 lb uplift at joint 52, 19 lb uplift at joint 53 and 7 lb uplift at joint 2.
- 12) 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.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Run: 8 73 S. Dec. 5 2024 Print: 8 730 S.Dec. 5 2024 MiTek Industries. Inc. Mon. Jan 27 07:17:35 ID:qEIUCo_1xVrjGWAZz0?MupyOaQc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 2



Job	Truss	Truss Type	Qty	Ply		
1024-077	B01	Common Supported Gable	1	1	Job Reference (optional)	

Run; 8,73 S Dec 5 2024 Print: 8,730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:36 ID:GQ6ebsD00Yx9BxB8YcnKQ8yOawb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:78.1

Plate Offsets (X, Y): [2:Edge,0-3-2], [9:0-2-8,0-3-0], [17:0-2-8,0-3-0], [24:Edge,0-3-2], [31:0-2-8,0-3-0], [37:0-2-8,0-3-0]

						-		-					1	
Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc	c) l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.25		TC	0.14	Vert(LL)	n/a		- n/a	999	MT20	244/190
TCDL		10.0	Lumber DOL	1.25		BC	0.07	Vert(CT)	n/a		- n/a	999		
BCLL		0.0*	Rep Stress Incr	YES		WB	0.12	Horz(CT)	0.01	2	4 n/a	n/a		
BCDL		10.0	Code	FBC2	023/TPI2014	Matrix-AS							Weight: 307 lb	FT = 20%
	0 4 0D N				FORCES	(lb) - Maximum Cor	npressi	on/Maximum		3) T	russ desig	ned fo	r wind loads in the	e plane of the truss
TOP CHORD	2x4 SP N	0.2					120 4	E 120/121		0	niy. For s	rd Indi	cposed to wind (n	ormai to the face),
BOICHORD	2x4 SP N	0.2			IOF CHORD	1-2=0/40, 2-4=-13/	/129,4-	·3=-139/131, 1 7 9_ 109/1	00	5		ru muu	d building design	
WEBS	2x4 SP N	0.2				9 10 - 00/127 10 1	1_ 01/1	1, 7-0=-100/1	00,	رب ۱	uilding Do	cignor		r rosponsible for
OTHERS	2X4 SP N	0.2				11-12-100/229 12	1=-01/1 2_131	01, 16/267		4) L	erifving ar	nlied r	of live load show	n covers rain loading
BRACING						13-14 = -116/267 14	1-15=-10	10/229		r	enuiremen	ts snei	cific to the use of	this truss component
TOP CHORD	Structura	I wood she	athing directly applied	1.		15-16=-80/181 16-	18=-62	/137		5) A	Il plates a	re 1 5x	4 MT20 unless of	herwise indicated
BOT CHORD	Rigid ceil	ing directly	applied.			18-19=-44/48, 19-2	0=-51/3	6. 20-21=-57/	47.	6) (Gable requ	ires co	ntinuous bottom o	chord bearing
WEBS	1 Row at	midpt	13-34, 12-35, 11-36,			21-22=-95/53, 22-2	4=-54/2	15	,	7) (Bable stud	s space	ed at 2-0-0 oc.	shora boarnig.
PEACTIONS	(sizo)	2-42-8-0	24-42-8-0 25-42-8-	0	BOT CHORD	2-43=-74/82, 42-43	=-61/82	2, 41-42=-60/1	51,	8) T	his truss h	ias bee	en designed for a	10.0 psf bottom
REACTIONS	(5120)	2=42-0-0,	24=42-0-0, 23=42-0-	0, 2-0		40-41=-60/151, 39-	40=-60/	/151,		C	hord live lo	oad no	nconcurrent with a	any other live loads.
		20=42-0-0	30=42-8-0 $31=42-8$	3-0, 3-0		38-39=-60/151, 36-	38=-60/	/151,		9) *	This truss	has be	een designed for a	a live load of 20.0psf
		32=42-8-0	33=42-8-0, 34=42-8	3-0.		35-36=-60/151, 34-	35=-60/	(151,		C	n the botto	om cho	rd in all areas wh	ere a rectangle
		35=42-8-0), 36=42-8-0, 37=42-8	3-0.		33-34=-60/151, 32-	33=-60/	/151, // 54		3	-06-00 tall	by 2-0	0-00 wide will fit b	between the bottom
		38=42-8-0), 39=42-8-0, 40=42-8	3-0,		30-32=-60/151, 29=	30=-61/	151, 454			nord and a	any oth	er members.	N- 0
		41=42-8-0	, 42=42-8-0, 43=42-8	3-0		20-29=-01/101, 27-	20=-01/	101, (60 24 25- 11	2/60	10) F	ui bearings	s are a	ssumed to be SP	NO.2 .
	Max Horiz	2=200 (LC	C 11)	,	WEBS	13-34-164/37 12-	20=-12/	8/62	2/00					
	Max Uplift	2=-31 (LC	12), 26=-50 (LC 12),		WEBO	11-36-120/82 10-	37110	9/74 9-3812	20/76				11110	
		27=-12 (L	C 12), 28=-12 (LC 12),		8-39=-121/76 7-40	=-119/7	6 6-41=-123/	77				IN ULIUS	LEE
		29=-12 (L	C 12), 30=-12 (LC 12),		5-42=-108/73, 4-43	=-148/0	. 14-33=-126/	62.				CEN	
		31=-11 (L	C 12), 32=-15 (LC 12),		15-32=-120/82, 16-	31=-11	9/74,	,			3		SE
		33=-3 (LC	12), 35=-3 (LC 12),			17-30=-120/76, 18-	29=-12	1/76,				2	1 in 1	
		36=-15 (L	C 12), 37=-11 (LC 12),		19-28=-119/75, 20-	27=-124	4/78,					No 34	869
		38=-12 (L	C 12), 39=-12 (LC 12),		21-26=-101/68, 22-	25=-15	0/0, 4-42=-62/	109,			*:	()	∧ :★ E
		40=-12 (L	C 12), 41=-11 (LC 12 C 12)),		22-26=-66/116						:	1/ 0*	
	Max Croy	42=-52 (L	(12)		NOTES							D:	X //.	
	Max Grav	2=237 (LC	C 1), 24=115 (LC 1),	\ \	1) Unbalanced	d roof live loads have	e been o	considered for				TH		ANALANS
		27=169 (L	C 24) 28=158 (I C 1),	this design.							-0		
		29=161 (I	C 24), 20=100 (LC 1 C 24) 30=160 (LC 2	4) ···	2) Wind: ASCI	E 7-22; Vult=130mpl	h (3-sec	cond gust)				21	A LODY	01:55
		31=159 (L	C 1), 32=160 (LC 1).	.,,	Vasd=101m	nph; TCDL=6.0psf; E	BCDL=6	.0psf; h=15ft;				11	C OH	GN
		33=166 (L	C 24), 34=150 (LC 1	7),	B=45ft; L=4	3ft; eave=2ft; Cat. II	; Exp B	; Enclosed;					CONA	ENIN
		35=166 (L	C 23), 36=160 (LC 1),	MWFRS (di	rectional) and C-C 2	2one3 z	one; cantileve	r				111	inne.
		37=159 (L	C 1), 38=160 (LC 23),	left and righ	it exposed ; end ver	ical left	and right					DE N. 24960	
		39=161 (L	C 23), 40=159 (LC 1),	exposed;C-	C for members and	torces &	& IMWERS for			J	unus Le fiTel: Ir	C DRA MiTek USA	FL Cert 6634
		41=165 (L	C 23), 42=155 (LC 1	7),	reactions sh	nown; Lumber DOL=	=1.60 pla	ate grip			1	6023 Sv	vinglev Ridge Rd. C	hesterfield. MO 63017
		43=210 (L	.C 1)		DOL=1.60						D	ate:	- · · · · · · · · · · · · · · · · · · ·	

January 27,2025

Page: 1

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

Job	Truss	Truss Type	Qty	Ply		
1024-077	B01	Common Supported Gable	1	1	Job Reference (optional)	136176039

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 2, 3 lb uplift at joint 35, 15 lb uplift at joint 36, 11 lb uplift at joint 37, 12 lb uplift at joint 38, 12 lb uplift at joint 39, 12 lb uplift at joint 40, 11 lb uplift at joint 41, 52 lb uplift at joint 42, 3 lb uplift at joint 33, 15 lb uplift at joint 32, 11 lb uplift at joint 31, 12 lb uplift at joint 30, 12 lb uplift at joint 29, 12 lb uplift at joint 28, 12 lb uplift at joint 27, 50 lb uplift at joint 26 and 31 lb uplift at joint 2.

12) 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.

LOAD CASE(S) Standard

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:36 ID:GQ6ebsD00Yx9BxB8YcnKQ8yOawb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



Job	Truss	Truss Type	Qty	Ply	
1024-077	B02	Common	6	1	T36176040 Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:36 ID:OTSPSxnVy?sUK9GBp_7Mq2yOavs-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:76.7

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [7:0-2-8,0-3-0], [10:0-4-0,0-4-8], [12:0-4-0,0-4-8]

Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25		TC	0.45	Vert(LL)	-0.22	10-11	>999	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.25		BC	0.54	Vert(CT)	-0.40	10-11	>999	180			
BCLL	0.0*	Rep Stress Incr	YES		WB	0.74	Horz(CT)	0.12	8	n/a	n/a			
BCDL	10.0	Code	FBC202	3/TPI2014	Matrix-AS							Weight: 272 lb	FT = 20%	
LUMBER TOP CHORD 30T CHORD WEBS WEDGE BRACING TOP CHORD 30T CHORD WEBS REACTIONS	2x4 SP No.2 2x6 SP No.2 2x4 SP No.2 Left: 2x4 SP No.3 Structural wood shea Rigid ceiling directly 1 Row at midpt (size) 2=0-5-8, 8 Max Horiz 2=207 (LC Max Uplift 2=-35 (LC Max Grav 2=2017 (L (lb) - Maximum Com	athing directly applie applied. 6-11, 4-11 5-0-5-8 2 11) 12) .C 17), 8=1933 (LC 1 pression/Maximum	4) 5) d. 6) 7) 8) 8)	This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar All bearings a Provide mec bearing plate 2. This truss de structural wo chord and 1/ the bottom cl	is been designe as been designe has been design n chord in all ar by 2-00-00 wide are assumed to hanical connect capable of with sign requires th od sheathing be 2" gypsum shee hord. Standard	d for a 10.0 nt with any led for a liv eas where will fit betw be SP No. ion (by oth nstanding 3 hat a minim e applied di strock be ap) p ssf bottom other live loa e load of 20.0 a rectangle veen the bott DL = 10.0psi 2. ers) of truss i 5 lb uplift at j um of 7/16" rectly to the oplied directly	nds. Opsf om f. to joint top y to						



NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=43ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-9-3, Zone1 2-9-3 to 21-4-0, Zone2 21-4-0 to 27-4-7, Zone1 27-4-7 to 42-8-0 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.



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

January 27,2025

Page: 1



Job	Truss	Truss Type	Qty	Ply		
1024-077	B03	Common	6	1	T361 Job Reference (optional)	176041

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:36 ID:xon7H?VNLojxvhc3m8hbzGyOaKo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:76.7

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

MWFRS (directional) and C-C Zone3 -1-6-0 to 2-9-3, Zone1 2-9-3 to 21-4-0, Zone2 21-4-0 to 27-4-6, Zone1 27-4-6 to 42-8-0 zone; cantilever left and right exposed;

DOL=1.60 plate grip DOL=1.60

end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber

	()) E = = -3;E		,-,- <u>1</u> ,	L	3, 2									
Loading	(psf)	Spacing	2-0-0		CSI	0.45	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	_
TCLL (root)	20.0	Plate Grip DOL	1.25			0.45	Vert(LL)	-0.14	11-12	>999	240	M120	244/190	
	10.0	Lumber DOL	1.25		BC	0.73	Vert(CT)	-0.26	11-12	>999	180			
BOLL	0.0	Rep Stress Incr	TES		VVB	0.83	Horz(CT)	0.06	9	n/a	n/a		FT 000/	
BCDL	10.0	Code	FBC202	3/1912014	Matrix-AS							weight: 248 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Right: 2x4 SP No.3 Structural wood sheat Rigid ceiling directly a 1 Row at midpt 7 (size) 2=0-4-8, 9= Max Horiz 2=207 (LC Max Uplift 2=-56 (LC 2 Max Grav 2=235 (LC 14=2422 (L (lb) - Maximum Comp	thing directly applied. applied. -12 =0-5-8, 14=0-5-8 11) 24) 23), 9=1454 (LC 18), _C 17) ression/Maximum	3) 4) 5) 6) 7) 8)	Building Des verifying app requirements This truss he chord live loa * This truss h on the bottor 3-06-00 tall h chord and ar All bearings Provide mec bearing plate 2. This truss de structural wc chord and 11	igner / Project eng lied roof live load s specific to the us is been designed ad nonconcurrent has been designed in chord in all area by 2-00-00 wide w hy other members are assumed to be hanical connection e capable of withst esign requires that yod sheathing be a 2" growsum sheat	gineer rea shown c se of this for a 10.0 with any d for a liv s where ill fit betv , with BC e SP No. n (by oth canding 5 a minim applied di ock be a	sponsible for overs rain loc truss compoid of truss compoid of truss compoid of truss to a rectangle veen the botti DL = 10.0psid c lo uplift at j um of 7/16" irrectly to the identification onlied directly	ading nent. ds. Dpsf om f. to oint						
TOP CHORD	Tension 1-2=0/40, 2-3=-146/38 5-6=-1163/184, 6-7=- 7-9=-2529/161	84, 3-5=-721/848, 1144/192,	LO	the bottom c AD CASE(S)	hord. Standard							annin 110	11111	
BOT CHORD	2-15=-374/113, 14-15 12-14=-710/667, 10-1 9-10=-139/2173	5=-374/58, 2=-46/2169,									STATE.	ULIUS	SE.	
WEBS	6-12=-23/613, 7-11=0 4-14=-2014/96, 3-14= 8-11=-679/100, 7-12= 4-13=-22/1659, 5-12=	0/626, 8-10=0/271, =-520/47, 3-15=0/200, =-992/111, 5-13=-871, =0/543	, /92,								*	No 348	869	
NOTES										=	-	Kalla in	MIN I	ŧ
1) Unbalance	ed roof live loads have b	peen considered for								-	T	TULL		
this design	n.										10	SE STATE	:415	
2) Wind: ASC Vasd=101 B=45ft; L= MWFRS (Wind: ASCE 7-22; 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; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-9-3,										D	SS/ONA	D.A. CININ	

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

January 27,2025

Page: 1



Job	Truss	Truss Type	Qty	Ply	
1024-077	C01	Roof Special Supported Gable	1	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:36 ID:BuSf08dLCgZbA7o7GtNen4yOaJK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:75.6

Plate Offsets (X, Y):	[2:0-0-10,0-3-9], [9:0-2-8,0-3-0]	, [15:0-2-8,0-3-0], [22:0-2-0,0-2-3],	[29:0-2-8,0-3-0], [33:0-3-0,0-0-12]
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Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES FBC2023	5/TPI2014	CSI TC BC WB Matrix-AS	0.24 0.18 0.12	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.01	(lo	c) / - 2	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 257 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood she Rigid ceiling directly 1 Row at midpt (size) 2=38-3-8, 24=38-3-8 33=38-3-6 36=38-3-6 39=38-3-6	athing directly applied applied. 12-31, 11-32, 13-30 22=38-3-8, 23=38-3 8, 25=38-3-8, 26=38-3 8, 31=38-3-8, 29=38- 3, 31=38-3-8, 32=38- 3, 34=38-3-8, 35=38- 3, 37=38-3-8, 38=38-3	. ВО -8, 3-8, 3-8, 3-8, 3-8, 3-8, 3-8, 3-8,	P CHORD	I-2=0/40, 2-4=-127 5-6=-89/61, 6-7=-9 3-10=-107/169, 10- 11-12=-120/255, 12 3-14=-104/216, 14 16-17=-55/81, 17-1 19-20=-74/27, 20-2 2-39=-72/128, 38-3 37-38=-64/121, 36- 35-36=-41/125, 34- 33-34=-41/126, 32- 31-32=-37/121, 30- 28-30=-37/121, 27- 26-27=-36/119, 23- 22-23=-36/119, 23- 22-23=-36/119	/96, 4-5 2/65, 7-8 11=-10- 2-13=-12 1-16=-85 8=-58/3 2=-111/ 9=-77/1 37=-40/ 335=-41/ 335=-41/ 335=-36/ 24=-36/ 24=-36/ 32=-125	=-118/60, 3=-114/81, 1/216, 20/255, 5/168, 6, 18-19=-64, 51 09, 123, 125, 121, 121, 119, 119, 119, 5/63.	/19,	4) F 5) / 6) (7) (8) - (7) (8) - (7) (7) (8) - (7) (10) / 11) F 2 2 2 2 2 2 2 2 2 2 2 2 2	Buildir verifyin require All pla Gable Gable This tr chord * This on the 3-06-0 chord All bea Provid bearin 2, 5 lb	ng Des ng app ement tes are studs russ ha live lo truss ha live lo truss ha alive lo truss ha truss ha	signer oblied ro s spece e 1.5x res con space ad nor has be m cho by 2-0 ny oth are as chanic e capa at join b unlif	/ Project enginee oof live load show diffic to the use of 4 MT20 unless of thinuous bottom - ed at 2-0-0 oc. In designed for a noconcurrent with een designed for rd in all areas wh 0-00 wide will engine ssumed to be SP al connection (by ble of withstandi t 32, 35 lb uplift a t at joint 35, 21 lb	er responsible for vn covers rain loadi this truss component therwise indicated. chord bearing. 10.0 psf bottom any other live loads a live load of 20.0ps ere a rectangle between the bottom No.2. others) of truss to ng 37 lb uplift at joint t joint 33, 9 lb uplift o uplift at joint 36, 12	ng nt. s. sf n tat 28
	Max Horiz 2=177 (LC Max Uplift 2=-37 (LC 24=-9 (LC 26=-12 (L 30=-5 (LC 33=-35 (L 35=-12 (L 35=-12 (L 35=-12 (L 35=-12 (L 23=229 (L 25=164 (L 27=157 (L 29=162 (L 31=140 (L 33=155 (L 23=164 (L) 25=164 (L) 33=155 (L) 29=162 (L) 31=140 (L) 33=155 (L) 33=155 (L) 23=299 (L) 23=299 (L) 23=299 (L) 23=100	C 11) 12), 23=-21 (LC 12) 12), 25=-12 (LC 12) C 12), 27=-11 (LC 12) C 12), 27=-11 (LC 12) C 12), 32=-5 (LC 12), C 12), 36=-9 (LC 12), C 12), 36=-9 (LC 12), C 12), 36=-21 (LC 12), LC 17), 39=-20 (LC 11), C 24), 24=-142 (LC 1, C 1), 28=-160 (LC 24), C 1), 30=-164 (LC 24), C 1), 32=-164 (LC 24), C 23), 34=-162 (LC 1), C 23), 36=-162 (LC 1), C 17), 38=-39 (LC 9), C 1),	, , , , , , , , , , , , , ,	TES Unbalanced this design. Wind: ASCE Vasd=101mp B=45ft; L=38 MWFRS (dim Beft and right exposed;C-C reactions sho DOL=1.60	 12-11-130/42, 9-3 10-33=-122/82, 9-3 7-36=-127/99, 5-38 13-30=-125/63, 14-15-28=-120/75, 16-17-26=-120/76, 18-19-24=-110/71, 20-7-37=-51/73, 5-37= roof live loads have 7-22; Vult=130mploh; TCDL=6.0psf; Eft; eave=2ft; Cat. II ectional) and C-C z exposed ; end vert for members and own; Lumber DOL= ad for wind loads in 	4=-119/ =-76/83 29=-122 27=-117 25=-122 23=-167 -64/85 e been of h (3-sec 3CDL=6 ; Exp B; Zone3 z; ical left forces & =1.60 pla	74, 8-35=-12(, 4-39=-293/1 2/83, 7/74, 2/77, 7/96, 6-37=-8 considered for ond gust) .0psf; h=15ft; Enclosed; bone; cantileve and right & MWFRS for ate grip	0/77, 156, 1/36, r]	ib uplif joint 3 joint 2 joint 2 37 lb u	4, 12 1 ft at jo 0, 15 1 ft at jo 5, 9 lb uplift a	b uplif int 38, b uplif int 27, uplift t joint	20 Ib uplift at join t at join 20 I uplift at join 19 b uplift at join 21 join 22 , 21 ib. 2.	139, 5 lb uplift at uplift at joint 28, 17 ht/26, 12 b uplift at uplift at joint 23 and 869	1
FORCES	(lb) - Maximum Com Tension	pression/Maximum	3)	only. For stu see Standard or consult qu	ed for wind loads in ids exposed to wind Industry Gable Er alified building des	n the pla d (norma nd Detai igner as	ane of the frus al to the face) Is as applicat per ANSI/TF	ss), ole, Pl 1.			Ju M 16 Da	iTek In 023 Sw ite:	c. DBA MiTek USA ingley Ridge Rd. C	A FL Cert 6634 hesterfield, MO 63017	7

January 27,2025

Page: 1



Continued on page 2
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org)
and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)

Job	Truss	Truss Type	Qty	Ply			
1024-077	C01	Roof Special Supported Gable	1	1	Job Reference (optional)	T36176042	
Mayo Truss Company, Inc., Mayo	o, FL - 32066,	Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:36					

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:36 ID:BuSf08dLCgZbA7o7GtNen4yOaJK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 37, 34, 35, 36, 38, 39.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top observed and 1/0" groups a beatrack he applied directly to the top. chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Job	Truss	Truss Type	Qty	Ply	
1024-077	C02	Roof Special	2	1	T36176043 Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:36 ID:ZTQ6TkwS?Y1PWZTh1snkceyOaHf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:72.9

Plate Offsets (X, Y):	[2:0-3-5,0-0-15]	[4:0-4-0,0-4-8], [9:0-4-0,0-4-8],	[14:0-4-0,0-4-8], [18:0-2-4,0-5-8]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	тс	0.38	Vert(LL)	-0.27	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.96	Vert(CT)	-0.51	17-18	>903	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.25	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 310 lb	FT = 20%

LUMBER TOP CHORD BOT CHORD WEBS BRACING	2x6 SP No.2 2x6 SP No.2 2x4 SP No.2
TOP CHORD BOT CHORD	Structural wood sheathing directly applied. Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-15, 8-15, 5-16
REACTIONS	(size) 2=0-5-8, 11= Mechanical
	Max Horiz 2=183 (LC 11) Max Uplift 2=-36 (LC 12)
	Max Grav 2=1781 (LC 17), 11=1700 (LC 18)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/40, 2-3=-5560/149, 3-5=-5473/209, 5-6=-2265/180, 6-7=-1868/196, 7-8=-1952/200, 8-10=-2889/172, 10-11=-2960/163
BOT CHORD	2-1998/5158, 18-19=-98/5196, 17-1816/2933, 16-1715/2955, 15-16=0/2042, 13-1538/2555, 12-1393/2561, 11-1293/2561
WEBS	6-16=-9/687, 7-15=-79/1372, 6-15=-740/100, 8-14=0/533, 9-14=-475/60, 9-13=0/192, 8-15=-821/98, 4-18=-173/64, 3-18=-74/62, 3-19=-90/42, 10-13=-34/67, 10-12=-80/42, 5-16=-1546/57, 5-17=0/216, 5-18=-71/3098

- NOTES
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-3-15, Zone1 2-3-15 to 19-4-0, Zone2 19-4-0 to 24-8-15, Zone1 24-8-15 to 38-2-12 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.
 * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom
- chord and any other members, with BCDL = 10.0psf.
 Bearings are assumed to be: Joint 2 SP No.2.
 Refer to girder(s) for truss to truss connections.

 Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.
- 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.

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:

January 27,2025

Page: 1



Job	Truss	Truss Type	Qty	Ply	
1024-077	C03	Roof Special	8	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:36 ID:u8na17ITIGBqUSJJtyl9QUyOaDI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:72.9

1)

this design.

Plate Offsets (X, Y): [2:1-1-9,Edge], [4:0-4-0,0-4-8], [9:0-4-0,0-4-8], [15:0-4-0	0,0-4-8], [19:0-5-4,0-3-0]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.37	Vert(LL)	-0.26	18-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.94	Vert(CT)	-0.50	18-19	>928	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.26	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 311 lb	FT = 20%

LUMBER	
TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.2
SLIDER	Right 2x6 SP No.2 1-6-0
BRACING	
TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-17, 6-16, 8-16
REACTIONS	(size) 2=0-5-8, 12= Mechanical
	Max Horiz 2=183 (LC 11)
	Max Uplift 2=-36 (LC 12)
	Max Grav 2=1781 (LC 17), 12=1701 (LC 18)
FORCES	(lb) - Maximum Compression/Maximum
	Tension
TOP CHORD	1-2=0/40, 2-3=-5509/146, 3-5=-5523/161,
	5-6=-2263/179, 6-7=-1882/197,
	7-8=-1943/200, 8-10=-2980/167,
	10-12=-2870/165
BOT CHORD	2-20=-98/5102, 19-20=-101/5148,
	18-19=-69/4970, 17-18=-16/2974,
	16-17=0/2047, 14-16=-55/2656,
	13-14=-98/2481, 12-13=-98/2481
WEBS	6-17=-6/670, 4-19=0/2597, 4-18=-2604/68,
	5-17=-1521/53, 5-18=0/1413, 3-19=-8/125,
	3-20=-109/40, 7-10=-02/1303,
	0-10=-752/103, 0-15=0/513, 9-14=0/158, 0-15=-521/72, 8-16=-8/6/08, 10-1/-0/237
	10-13021/12, 0-10040/90, 10-14=0/237, 10-13102/18
NOTES	10-13-102/10
NULES	

Unbalanced roof live loads have been considered for

- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-3-15, Zone1 2-3-15 to 19-4-0, Zone2 19-4-0 to 24-8-15, Zone1 24-8-15 to 38-2-12 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.
 * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle
- 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 6) Bearings are assumed to be: Joint 2 SP No.2 .
 7) Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.
- 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.

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:

January 27,2025

Page: 1



Job	Truss	Truss Type	Qty	Ply		
1024-077	C04	Roof Special	1	1	Ich Reference (optional)	T36176045



LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 *Except* 35-33:2x4 SP No.2, 33-30:2x4 SP No.1 WEBS 2x4 SP No.2 OTHERS 2x4 SP No.2 SLIDER Right 2x4 SP No.2 -- 1-6-0 BRACING TOP CHORD Structural wood sheathing directly applied. BOT CHORD Rigid ceiling directly applied. WEBS 1 Row at midpt 21-34, 26-34, 18-35 JOINTS 1 Brace at Jt(s): 13, 21, 18, 8 **REACTIONS** (size) 1=4-5-8, 30= Mechanical, 40=4-5-8 Max Horiz 1=-195 (LC 10) Max Uplift 1=-668 (LC 17), 40=-61 (LC 12) Max Grav 1=59 (LC 12), 30=1689 (LC 18), 40=2750 (LC 17) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 22-24=-891/117, 25-26=-1838/143, 26-28=-2829/107, 28-30=-2727/110, 1-2=-169/1809, 2-3=-105/302, 3-4=-804/0, 4-9=-964/0, 9-11=-888/0, 11-14=-911/24, 14-16=-896/46, 16-19=-956/80, 19-22=-929/121, 5-39=-2875/145, 5-7=-2267/132, 7-8=-2267/105, 8-12=-3237/101, 12-13=-3146/68, 13-15=-1658/88, 15-17=-1635/77, 17-18=-1556/54, 18-20=-1044/71, 20-21=-1036/52, 21-23=-832/47,

23-24=-1040/60, 24-25=-1567/121 BOT CHORD 1-40=-1470/175, 39-40=-1516/183, 38-39=0/2778, 37-38=0/2854, 36-37=0/4019, 35-36=0/2464, 34-35=0/1695, 32-34=0/2513, 31-32=-53/2336. 30-31=-54/2336

26-33=0/541, 27-33=-587/82, 27-32=0/192, 13-37=0/1703, 25-34=-25/994, 21-35=-13/547, 21-34=-259/10, 26-34=-842/82, 13-36=-1959/7, 18-35=-1258/40, 18-36=0/1061, 8-37=0/1031, 8-38=-248/44, 28-31=-114/23, 28-32=0/234, 22-23=-29/490, 19-20=-94/43, 16-17=-225/53, 14-15=-72/25, 11-12=-166/48, 9-10=-54/29, 6-7=-84/48, 4-5=-463/23, 2-40=-2264/104, 3-39=-1849/24, 2-39=-24/1849, 3-5=-12/2110

NOTES

WEBS

- Unbalanced roof live loads have been considered for 1) this design
- Wind: ASCE 7-22; Vult=130mph (3-second gust) 2) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -0-0-0 to 4-3-12, Zone1 4-3-12 to 23-4-0, Zone3 21-4-0 to 23-0-1, Zone1 23-4-0 to 42-3-8 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.
- Building Designer / Project engineer responsible for 4) verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component. All plates are 1.5x4 MT20 unless otherwise indicated. 5)
- Gable studs spaced at 2-0-0 oc. 6)
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. 9) Bearings are assumed to be: Joint 40 SP No.2 .

10) Refer to girder(s) for truss to truss connections. 11) Provide mechanical connection (by others) of truss to

- bearing plate capable of withstanding 668 lb uplift at joint 1 and 61 lb uplift at joint 40. 12) 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.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord

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:

January 27,2025



Job	Truss	Truss Type	Qty	Ply	
1024-077	CJ01	Diagonal Hip Girder	2	1	Job Reference (optional)

Run; 8,73 S Dec 5 2024 Print: 8,730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:37 ID:m_E8ZmkRIZ6F5Q0l22cGdvyOazo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:47.8

Plate Offsets (X, Y): [9:0-3-0,0-1-12]

Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25		тс	0.48	Vert(LL)	-0.04	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25		BC	0.47	Vert(CT)	-0.09	7-8	>999	180		
BCLL	0.0*	Rep Stress Incr	NO		WB	0.25	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC202	3/TPI2014	Matrix-MS							Weight: 60 lb	FT = 20%
LUMBER			5)	Bearings are	assumed to be: , .	Joint 9 S	SP No.2 .						
TOP CHORD	2x4 SP No.2		6)	Refer to girde	er(s) for truss to tru	uss con	nections.						
BOT CHORD	2x4 SP No.2		7)	Provide mecl	nanical connection	(by oth	ers) of truss	to					
WEBS	2x4 SP No.2			bearing plate	capable of withsta	anding 1	33 lb uplift a	t joint					
BRACING			•	9 and 142 lb	uplift at joint 6.	0" 0")	0.40.1						
TOP CHORD	Structural wood sheat	thing directly applie	dor ⁸⁾	"NAILED" Inc	licates 3-10d (0.14	8"X3") (or 2-12d						
	6-0-0 oc purlins, exce	ept end verticals.	0)	(0.148 X3.25	CASE(S) section	5 guiaili Ioade ai	nes.	face					
BOT CHORD	Rigid ceiling directly a bracing.	applied or 6-0-0 oc	5)	of the truss a	re noted as front (I	F) or ba	ck (B).	lace					
REACTIONS	(size) 5= Mechan	nical, 6= Mechanica	l, LC	DAD CASE(S)	Standard			<u></u>					
	9=0-7-12		1)	Dead + Roo	of Live (balanced):	Lumber	Increase=1.	25,					
	Max Horiz 9=158 (LC	8)			bde (lb/ft)								
	Max Uplift 6=-142 (LC	C 8), 9=-133 (LC 8)		Vert: 1-2-	60 2-560 6-9-	20							
	Max Grav 5=189 (LC	3), 6=364 (LC 13),		Concentrate	= 00, 2 0= 00, 0 0- ed Loads (lb)	- 20							
	9=456 (LC	13)		Vert: 10=	85 (F=43 B=43) 1	12=-78	F=-39 B=-3	9)					
FORCES	(Ib) - Maximum Comp Tension	pression/Maximum		13=55 (F	=28, B=28), 14=5	(F=2, B	=2), 15=-45	0),					
TOP CHORD	2-9=-460/129, 1-2=0/5	58, 2-3=-551/39,		(F=-22, E	s=-22)								11.
	3-4=-105/48, 4-5=0/80	0										2111 1119	111,
BOT CHORD	8-9=-349/28, 7-8=-85/	/457, 6-7=0/0										ULIUS	LEE
WEBS	3-8=0/222, 2-8=0/677	′, 4-7=-65/145,									N.	CEA	10 11
	3-7=-537/100										5		
NOTES												· No 34	860
1) Wind: AS	CE 7-22; Vult=130mph (3-second gust)									1.00		003
Vasd=10	1mph; TCDL=6.0psf; BC	DL=6.0psf; h=15ft;								-	×:		
B=45ft; L:	=24ft; eave=4ft; Cat. II; E	Exp B; Enclosed;								=			
MWFRS	(directional); cantilever le	eff and right expose	id;								7	Lett / ///	
plate grip	DOL −1.60		0								2	TRAVITA	
2) Building F	Designer / Project engine	er responsible for									:4	· ^,	P:23
verifying a	applied roof live load sho	own covers rain load	ding								1	OR	IV GIN
requireme	ents specific to the use o	of this truss compon	ent.								1	SIO	ENIN
3) This truss	has been designed for a	a 10.0 psf bottom									8	UNA	Linn
chord live	load nonconcurrent with	n any other live load	ds.										III.

chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf

4) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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

January 27,2025

Page: 1



Job	Truss	Truss Type	Qty	Ply	
1024-077	D01	Hip Girder	1	2	T36176047 Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:37 Page: 1 ID:VauDuE55uozJVRfxFu5N1YyOZBj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:47.6

BRACING

TOP CHORD

BOT CHORD

FORCES

TOP CHORD

BOT CHORD

WEBS

NOTES

2)

3)

REACTIONS (size)

Right: 2x4 SP No.2

6-0-0 oc purlins.

Max Horiz 2=-104 (LC 6)

bracing

Tension

6-8=-184/2158

1) 2-ply truss to be connected together with 10d

oc, 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows

(0.131"x3") nails as follows:

unless otherwise indicated.

this design.

staggered at 0-9-0 oc.

Structural wood sheathing directly applied or

Rigid ceiling directly applied or 10-0-0 oc

2=0-5-8, 6=0-5-8

Max Uplift 2=-240 (LC 8), 6=-239 (LC 8)

Max Grav 2=1907 (LC 13), 6=1909 (LC 14)

1-2=0/50, 2-3=-2687/364, 3-4=-2606/382.

4-5=-2585/375, 5-6=-2688/363, 6-7=0/50

3-10=-35/415, 3-9=-114/766, 4-9=-723/233,

2-10=-200/2199, 8-10=-201/2211,

5-9=-108/760. 5-8=-38/404

Top chords connected as follows: 2x4 - 1 row at 0-9-0

Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

All loads are considered equally applied to all plies,

CASE(S) section. Ply to ply connections have been

provided to distribute only loads noted as (F) or (B),

Unbalanced roof live loads have been considered for

except if noted as front (F) or back (B) face in the LOAD

(lb) - Maximum Compression/Maximum

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

		1		1								
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.37	Vert(LL)	-0.04	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.44	Vert(CT)	-0.07	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 283 lb	FT = 20%
LUMBER			4) Wind: ASCE	7-22; Vult=130	mph (3-sec	ond gust)						
TOP CHORD	2x4 SP No.2 *Excep	t* 3-5:2x6 SP No.2	Vasd=101m	ph; TCDL=6.0ps	sf; BCDL=6	.0psf; h=15ft	;					
BOT CHORD	2x6 SP No.2		B=45ft; L=24	lft; eave=4ft; Ca	at. II; Exp B	; Enclosed;						
WEBS	2x4 SP No.2		MWFRS (dir	ectional); cantile	ever left an	d right expos	ed ;					
WEDGE	Left: 2x4 SP No 2		end vertical	left and right exp	posed: Lum	ber DOL=1.	60					

end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- Building Designer / Project engineer responsible for 5) verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding. 6) This truss has been designed for a 10.0 psf bottom 7)
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2. 9)
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 240 lb uplift at joint 2 and 239 lb uplift at joint 6.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 269 Ib down and 31 lb up at 7-0-0, and 269 lb down and 31 Ib up at 15-3-8 on top chord, and 394 lb down and 132 Ib up at 7-0-0, and 394 lb down and 132 lb up at 15-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- LOAD CASE(S) Standard
- Dead + Roof Live (balanced): Lumber Increase=1.25, 1) Plate Increase=1.25
 - Uniform Loads (lb/ft) Vert: 1-3=-60, 3-5=-60, 5-7=-60, 11-14=-20
 - Concentrated Loads (lb)
 - Vert: 3=-186 (B), 5=-186 (B), 9=-112 (B), 10=-374 (B), 4=-248 (B), 8=-374 (B), 17=-124 (B), 18=-124 (B), 19=-56 (B), 20=-56 (B)

A MARTINE 34869 ONAL 11111

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

January 27,2025



Job	Truss	Truss Type	Qty	Ply		
1024-077	D02	Нір	1	1	T36 Job Reference (optional)	176048

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:37 ID:dulQJ6tEqT1EBGYF?KENd1yOZAj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:49.9

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

Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES FBC202	3/TPI2014	CSI TC BC WB Matrix-AS	0.33 0.41 0.13	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.04 -0.08 0.04	(loc) 11-12 11-12 9	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 140 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Left 2x6 SP No.2 1 1-6-0 Structural wood shea Rigid ceiling directly (size) 2=0-5-8, S Max Horiz 2=-129 (LI Max Uplift 2=-36 (LC Max Grav 2=982 (LC	-6-0, Right 2x6 SP N athing directly applie applied. =0-5-8 C 10) 12), 9=-36 (LC 12) C 1), 9=982 (LC 1)	3) No.2 5) d. 7) 8)	Building Des verifying app requirements Provide adee This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar All bearings Provide mec bearing plate 2 and 36 b u	igner / Project engi lied roof live load s s specific to the use uate drainage to p s been designed for ad nonconcurrent w has been designed n chord in all areas by 2-00-00 wide wil y other members. are assumed to be hanical connection e capable of withsta iolift at ioint 9.	ineer re- shown co of this revent v for a 10.0 vith any for a liv s where I fit betw SP No. (by oth anding 3	sponsible for overs rain loa truss compor- vater ponding 0 psf bottom other live loa e load of 20.0 a rectangle veen the botto 2. ers) of truss t 6 lb uplift at j	ading nent. g. ds. Opsf om to joint						
FORCES TOP CHORD	(lb) - Maximum Com Tension 1-2=0/50, 2-4=-1171 5-6=-746/103, 6-7=-5	pression/Maximum /54, 4-5=-962/98, 961/99, 7-9=-1171/60	9) 0,	This truss de structural wo chord and 1/ the bottom c	sign requires that a od sheathing be ap 2" gypsum sheetro hord.	a minim oplied di ck be aj	um of 7/16" rectly to the t oplied directly	top y to						
BOT CHORD	9-10=0/50 2-14=0/910, 12-14=0 9-11=-7/910)/910, 11-12=0/910,	LC	OAD CASE(S)	Standard							ULIUS		
NEBS	4-13=-236/61, 5-13= 6-12=0/282, 7-12=-2 7-11=0/143	0/282, 6-13=-92/93, 38/59, 4-14=0/142,									STAR.	CEN	SE.	
NOTES 1) Unbalance	ed roof live loads have	been considered for									*	A 34	*	1

 Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-22; 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; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 9-0-0, Zone3 9-0-0 to 13-3-8, Zone2 13-3-8 to 17-7-12, Zone1 17-7-12 to 23-9-8 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



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

January 27,2025



Job	Truss	Truss Type	Qty	Ply	
1024-077	D03	Нір	1	1	Job Reference (optional)

Run; 8,73 S Dec 5 2024 Print: 8,730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:37 ID:wWCUMJ9IAr2q3yNsPNg0b5yOZAL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



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

Scale = 1:56.6

Loa	ading	(psf)	Spacing	2-0-0		CSI	0.00	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
	LL (root)	20.0	Plate Grip DOL	1.25			0.33	Vert(LL)	-0.04	10-11	>999	240	MT20	244/190	
ICI	DL	10.0	Lumber DOL	1.25		BC	0.38	Vert(CT)	-0.09	10-11	>999	180			
BCI	LL	0.0*	Rep Stress Incr	YES		WB	0.28	Horz(CT)	0.04	8	n/a	n/a			
BC	DL	10.0	Code	FBC202	3/TPI2014	Matrix-AS							Weight: 129 lb	FT = 20%	
LUI TOI BO WE SLI BR TOI BO RE	MBER P CHORD T CHORD BS DER ACING P CHORD T CHORD ACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Left 2x6 SP No.2 - 1 1-6-0 Structural wood shea Rigid ceiling directly (size) 2=0-5-8, 8 Max Horiz 2=-154 (LI Max Uplift 2=-36 (LC Max Grav 2=982 (LC	- -6-0, Right 2x6 SP athing directly applied applied. 5-0-5-8 C 10) 12), 8=-36 (LC 12) C 1), 8=-982 (LC 1)	5) No.2 6) 7) ed. 8) LC	* This truss h on the bottor 3-06-00 tall b chord and ar All bearings a Provide mec bearing plate 2 and 36 lb u This truss de structural wo chord and 1/, the bottom cl DAD CASE(S)	has been designen n chord in all are y 2-00-00 wide ' hy other member are assumed to l hanical connecti e capable of with yolift at joint 8. sign requires that od sheathing be 2" gypsum shee hord. Standard	ed for a live eas where will fit betw 's. be SP No.: on (by othe standing 3 at a minime applied di trock be ap	e load of 20. a rectangle reen the bott 2. ers) of truss i 6 lb uplift at j um of 7/16" rectly to the pplied directly	Opsf om to joint top y to						
FO	RCES	(lb) - Maximum Com Tension	pression/Maximum												
TO	P CHORD	1-2=0/50, 2-4=-1165 5-6=-865/95, 6-8=-1	/44, 4-5=-865/95, 165/44, 8-9=0/50												
BO	T CHORD	2-12=-5/902, 10-12=	0/902, 8-10=-13/89	9										111.	
WE	BS	4-12=0/194, 5-11=-1 4-11=-347/72, 6-11=	1/530, 6-10=0/194, -347/72										ULIUS	LEE	
NO	TES											1	CEN	0	
1) 2)	Unbalance this design Wind: ASC Vasd=101 B=45ft; L= MWERS (ed roof live loads have n. CE 7-22; Vult=130mph mph; TCDL=6.0psf; B0 -24ft; eave=4ft; Cat. II; directional) and C-C 70	been considered for (3-second gust) CDL=6.0psf; h=15ft; Exp B; Enclosed; pre3 -1-6-0 to 1-6-0	r								+	No 34	369	

- Zone1 1-6-0 to 11-1-12, Zone2 11-1-12 to 15-4-11, Zone1 15-4-11 to 23-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

ONAL 1111111 Julius Lee PE No. 34869 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017

Date:

January 27,2025



Job	Truss	Truss Type	Qty	Ply	
1024-077	D04	Common	5	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:37 ID:6AQVoiiWagjSztKVXKzZwbyOZ9e-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



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

Scale = 1:56.7

Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES FBC202	23/TPI2014	CSI TC BC WB Matrix-AS	0.33 0.38 0.29	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.04 -0.09 0.04	(loc) 11-12 11-12 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 129 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Left 2x6 SP No.2 1 1-6-0 Structural wood shea Rigid ceiling directly (size) 2=0-5-8, 8 Max Horiz 2=-155 (L Max Uplift 2=-36 (LC Max Grav 2=982 (LC (Ib) - Maximum Com Tension	I-6-0, Right 2x6 SP athing directly applied applied. 3=0-5-8 C 10) : 12), 8=-36 (LC 12) C 1), 8=-36 (LC 1) pression/Maximum	5) No.2 6) 7) ed. 8)	* This truss on the botto 3-06-00 tall chord and a All bearings Provide mec bearing plate 2 and 36 lb This truss de structural we chord and 1, the bottom c DAD CASE(S)	has been design m chord in all are by 2-00-00 wide ny other member are assumed to chanical connecti e capable of with uplift at joint 8. esign requires th ood sheathing be (2" gypsum shee chord. Standard	ed for a live eas where a will fit betw rs. be SP No.: bo (by othe istanding 3 at a minimu applied di trock be ap	e load of 20.1 a rectangle reen the both 2. ers) of truss t 6 lb uplift at j and of 7/16" rectly to the oplied directly	Opsf om to joint top y to						
TOP CHORD BOT CHORD	1-2=0/50, 2-4=-1165 5-6=-864/118, 6-8=- 2-12=-5/902, 10-12=	6/68, 4-5=-864/118, 1165/68, 8-9=0/50 0/902, 8-10=-19/89	9									mun	un.	
WEBS	4-12=0/194, 5-11=-2 6-11=-350/85, 4-11=	23/534, 6-10=0/194, -350/85										JULIUS	LEE	
NOTES 1) Unbalance this desig 2) Wind: AS Vasd=10 B=45ft; L MWFRS Zone1 1-1 Zone1 15	ed roof live loads have n. CE 7-22; Vult=130mph 1mph; TCDL=6.0psf; B(=24ft; eave=4ft; Cat. II; (directional) and C-C Zo 6-0 to 11-1-12, Zone2 1	been considered fo (3-second gust) CDL=6.0psf; h=15ft; Exp B; Enclosed; one3 -1-6-0 to 1-6-0 1-1-12 to 15-4-11, autilever left and rice)r ;),								III + PH	No 34	SE.	

members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading

exposed ; end vertical left and right exposed;C-C for

requirements specific to the use of this truss component.4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date: January 27,2025

ON

Julius Lee PE No. 34869

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Job	Truss	Truss Type	Qty	Ply	
1024-077	D05	Common	1	1	T36176051 Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:38 ID:W0d3?Yy3spEcMyrLiXKFjpyOZ9K-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

16-6-14 5-8-10 11-1-12 22-3-8 5-8-10 5-5-2 5-5-2 5-8-10 4x4= 4 12 81 3x5 🟑 3x5 💊 20 21 3 5 8-2-9 19 22 4x4 🧔 4x4 2 6 7 9-6-0 10 9 8 1.5x4 **I** 6x8= 1.5x4 u 4x6 II 4x6 II



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

Scale = 1:56.5

Loa	ding	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCL	L (roof)	20.0	Plate Grip DOL	1.25		TC	0.25	Vert(LL)	-0.03	8-9	>999	240	MT20	244/190	
ГС	DL .	10.0	Lumber DOL	1.25		BC	0.35	Vert(CT)	-0.08	8-9	>999	180			
BCI	L	0.0*	Rep Stress Incr	YES		WB	0.30	Horz(CT)	0.03	7	n/a	n/a			
BCI	DL	10.0	Code	FBC202	23/TPI2014	Matrix-AS							Weight: 123 lb	FT = 20%	
LUI FOF 30 WE SLII BR/ BR/ BR/ BR/ BR/ BR/ BR/ BR/ BR/ BR/	MBER P CHORD T CHORD BS DER ACING P CHORD T CHORD ACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Left 2x6 SP No.2 1 1-6-0 Structural wood shea Rigid ceiling directly (size) 1=0-5-8, 7 Max Horiz 1=-137 (Li Max Grav 1=892 (LC	I-6-0, Right 2x6 SP athing directly applie applied. 7=0-5-8 C 10) C 1), 7=892 (LC 1)	5) No.2 6) 7) ed. LC	* This truss h on the botton 3-06-00 tall b chord and an All bearings a This truss de structural wo chord and 1/2 the bottom ch DAD CASE(S)	has been designed in chord in all areas y 2-00-00 wide wi y other members. are assumed to be sign requires that od sheathing be a 2" gypsum sheetro hord. Standard	I for a liv s where II fit betv e SP No. a minim pplied di pock be a	e load of 20. a rectangle veen the bott 2 . um of 7/16" rectly to the oplied directly	0psf om top y to						
-01	RCES	(lb) - Maximum Com	pression/Maximum												
TOF	P CHORD	1-3=-1185/86, 3-4=-{ 5-7=-1185/86	874/126, 4-5=-874/1	26,											
30 ⁻ NE	T CHORD BS	1-10=-64/919, 8-10= 3-10=0/197, 4-9=-33 3-9=-366/87, 5-9=-36	2/919, 7-8=-67/919 /545, 5-8=0/197, 66/87)									annun la	11111	
NO.	TES												ULIUU	LEEM	
1) 2)	Unbalance this design Wind: ASC Vasd=101 B=45ft; L= MWFRS (Zone1 3-0 Zone1 15- exposed ;	ed roof live loads have h. CE 7-22; Vult=130mph mph; TCDL=6.0psf; BC +24ft; eave=4ft; Cat. II; directional) and C-C ZC +0 to 11-1-12, Zone2 1 +0 to 22-3-8 zone; ci end vertical left and rig	been considered for (3-second gust) CDL=6.0psf; h=15ft; Exp B; Enclosed; one3 0-0-0 to 3-0-0, 1-1-12 to 15-4-11, antilever left and rigi ght exposed;C-C for	r ht							. and the state	* PHO	No 34		
	members	and forces & MWFRS	for reactions shown	;								11	···· /	nP. ZS	

Lumber DOL=1.60 plate grip DOL=1.60
Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

 This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. Julius Lee PE No. 34869 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

January 27,2025

Page: 1



Job	Truss	Truss Type	Qty	Ply	
1024-077	D06	Common Girder	1	2	Job Reference (optional)

Run; 8,73 E Nov 16 2023 Print; 8,730 E Nov 16 2023 MiTek Industries, Inc. Mon Jan 27 15:30:06 ID:mlgTud3ilaNKxK14kw?MbiyOZ9B-EbW7BXByHJhChuNwpSBfWD8Ui1xOZVpLo0eP?vzr7Wn

Page: 1



Scale = 1:58.9

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

Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.25		CSI TC	0.59	DEFL Vert(LL)	in -0.14	(loc) 12-13	l/defl >999	L/d 240	PLATES MT20	GRIP 244/190		
TCDL	10.0	Lumber DOL	1.25		BC	0.51	Vert(CT)	-0.26	12-13	>999	180	MT20HS	187/143		
BCLL	0.0*	Rep Stress Incr	NO		WB	0.68	Horz(CT)	0.08	9	n/a	n/a				
BCDL	10.0	Code	FBC20	23/TPI2014	Matrix-MS							Weight: 370 lb	FT = 20%		
LUMBER			2)	All loads are	considered equa	ally applie	d to all plies,			Vert: 23	=-1488	3 (F), 24=-1509 (F	F), 25=-1510 (F),		
TOP CHORD	2x6 SP No.2			except if note	xcept if noted as front (F) or back (B) face in the LOAD 26=-1510 (F), 27=-1510 (F), 28=-151										
BOT CHORD	2x6 SP 2400F 2.0E			CASE(S) sec	CASE(S) section. Ply to ply connections have been (F), 30=-1510 (F), 31=-1510 (F), 32=										
WEBS	2x4 SP No.2 *Exce	pt* 12-5:2x4 SP No.1	N- 0	provided to distribute only loads noted as (F) or (B), 33=-1509 (F)											
SLIDER	Left 2x6 SP No.2	1-6-0, Right 2x6 SP I	NO.2 3)	Unhalanced	Unbalanced roof live loads have been considered for										
	1-0-0		0)	this design.	this design.										
	Structural wood ch	oothing directly applie	4)	Wind: ASCE	7-22; Vult=130m	nph (3-sec	cond gust)								
TOP CHORD	3-10-6 oc purlins	eating unectly applie	u 01 - 7	Vasd=101mp	h; TCDL=6.0psf	f; BCDL=6	0.0psf; h=15ft	;							
BOT CHORD	Rigid ceiling direct	v applied or 10-0-0 oc		B=45ft; L=24	ft; eave=4ft; Cat	. II; Exp B	; Enclosed;								
	bracing.	,		MWFRS (dire	ectional); cantile	ver left an	d right expos	ed ;							
REACTIONS	(lb/size) 1=9831/	0-5-8, 9=8503/0-5-8		end vertical l	eft and right exp	osed; Lurr	nber DOL=1.6	50							
	Max Horiz 1=134 (L	_C 7)	5)	Plate grip DC	L=1.60	aginoor ro	sponsible for								
	Max Grav 1=10784	(LC 13), 9=9287 (LC	; 14) ³⁾	verifying app	lied roof live load	d shown o	overs rain los	dina							
FORCES	(lb) - Max. Comp./M	Aax. Ten All forces	250	verilying applied tool live load shown covers rain loading											
	(lb) or less except v	when shown.	6)) All plates are MT20 plates unless otherwise indicated.											
TOP CHORD	1-2=-11502/0, 2-3=	-12778/0, 3-4=-11206	5/0, 7)	This truss ha	This truss has been designed for a 10.0 psf bottom										
	4-5=-8698/0, 5-6=-	8699/0, 6-7=-11171/0	,	chord live loa	d nonconcurren	t with any	other live loa	ds.					1111.		
	7-8=-12648/0, 8-9=	-10280/0	8)	* This truss h	as been designe	ed for a liv	e load of 20.0	Opsf				W UIUS	15.11.		
BUICHURD	1-23=0/10439, 1-2	3=0/10439, 1-24=0/10 _25=0/10/39	1439,	on the botton	n chord in all are	as where	a rectangle				1	10	E III		
	25-26=0/10439 13	-26=0/10439		3-06-00 tall b	y 2-00-00 wide \		veen the bott	m			5	CEN	Sp. 4		
	13-27=0/9426. 27-2	28=0/9426. 12-28=0/9	426. a)	Lise MiTek T	HDH26 (With 20	ə. I-16d nails	into Girder 8	1			-	. ×	N 16 1 1 1		
	12-29=0/9344, 29-3	30=0/9344, 11-30=0/9)344, [°]	8-16d nails in	nto Truss) or equ	ivalent at	0-6-12 from t	he				• No 34	369 🧯 💈		
	11-31=0/10206, 31	-32=0/10206,		left end to co	nnect truss(es) t	o front fac	e of bottom				*		/ :★ Ξ		
	10-32=0/10206, 10	-33=0/10206,		chord.	. ,						:	13 / 1 ★			
	9-33=0/10206		. 10)) Use MiTek H	US26 (With 14-1	16d nails i	nto Girder &				ט:	Ten I II I			
WEBS	5-12=0/9273, 6-12	=-3686/0, 6-11=0/412	1,	6-16d nails ir	nto Truss) or equ	ivalent sp	aced at 2-0-0) oc			J	PULLAHIN	10- 1 =		
	7-11=-1129/0, 7-10	-0/1800, 3-13=-1200 -0/181 1-123727/	/0, 0	max. starting at 2-2-12 from the left end to 20-2-12 to									:413		
NOTES	0 14=0/1000, 4 10	-0/+10+, + 12- 0/2//	1.	Connect truss	(es) to front lace		n chord.	hor			-0	L. LOPI	01.51		
1) 2 ply truce	to be connected tog	othor with 10d		11) Fill all hall holes where hanger is in contact with lumber.											
(0 131"v3") nails as follows:		1)	1) Dead + Roof Live (balanced): Lumber Increase=1 25											
Top chord	s connected as follows.	vs: 2x6 - 2 rows	1)	Plate Increa		i). Lumber	Increase=1.	25,				in mining	mm		
staggered	at 0-7-0 oc.			Uniform I or	ads (lb/ft)					J	ulius Le	e PE No. 34869			
Bottom ch	ords connected as fo	llows: 2x6 - 2 rows		Vert: 1-5	=-60, 5-9=-60. 1	5-19=-20				N	liTek In	c. DBA MiTek USA	FL Cert 6634		
staggered	at 0-7-0 oc.			Concentrate	ed Loads (lb)					10	6023 Sw	ingley Ridge Rd. C	nesterfield, MO 63017		
Web conn	acted as follows: 2v4	- 1 row at 0-9-0 oc			. /					D	are:				

Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)

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

January 27,2025

Job	Truss	Truss Type	Qty	Ply	
1024-077	GDR	Roof Special Girder	1	2	T36176053 Job Reference (optional)

Run: 8,73 S Dec 5 2024 Print: 8,730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:38 ID:MkiibAV32zx7RWYhWIzqFIyNyR_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LSSH15-TZ

		LSSH15-TZ									
L	2-5-11	4-2-15	6-0-3	8-5-15	1						
Γ	2-5-11	1-9-4	1-9-4	2-5-12							

Scale = 1:51.5

Loadin TCLL TCDL BCLL BCDL	ng (roof)	(psf) 20.0 10.0 0.0* 15.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 NO FBC202	23/TPI2014	CSI TC BC WB Matrix-MP	0.06 0.14 0.13	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.01 0.00	(loc) 7 7 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 198 lb	GRIP 244/190 FT = 20%
LUMB TOP C BOT C WEBS BRAC TOP C BOT C REAC	ER HORD HORD HORD HORD	2x6 SP No.2 2x6 SP No.2 2x4 SP No.2 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1= Mecha Machanic Max Horiz 1=-404 (L Max Uplift 1=-17 (LC 10=-138 (Max Grav 1=74 (LC)	athing directly applied applied or 10-0-0 oc anical, 6= Mechanical al C 13), 10=400 (LC 1- 24), 6=-102 (LC 8), LC 8) 1), 6=1043 (LC 1),	4) d or 5) l, 10= 6) 7) 4) 8)	Wind: ASCE Vasd=101mp B=45ft; L=24 MWFRS (dir end vertical 1 plate grip DC Building Des verifying app requirements Provide adec This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar	7-22; Vult=130m h; TCDL=6.0psf; ft; eave=4ft; Cat. ectional); cantileve eft and right expo lied roof live load s specific to the us quate drainage to is been designed ad nonconcurrent has been designed an noconcurrent has been designed by 2-00-00 wide w y other members	bh (3-sec BCDL=6 II; Exp B; er left and sed; Lurr gineer res shown ca se of this prevent v for a 10.0 with any d for a liv is where ill fit betw.	ond gust) .0psf; h=15ft; ; Enclosed; d right expose iber DOL=1.6 sponsible for overs rain loa truss compor water ponding other live loa e load of 20.0 a rectangle veen the botto	ed ; ;0 ding nent. j. ds.)psf		Vert: 13 16=-441	=-441 ⊢ (B)	(B), 14=-441 (B)	15=-441 (B),
FORC TOP C BOT C WEBS	ES HORD	10=1384 (lb) - Maximum Com Tension 1-2=-51/404, 2-3=-5 4-5=0/0 9-10=-29/317, 8-9=- 6-7=-48/474 1-10=0/0, 5-6=-74/1 4-7=-35/452, 3-8=-7 4-8=-105/21, 2-10=-	(LC 1) pression/Maximum 68/76, 3-4=-568/76, 28/302, 7-8=-47/459, 7, 2-9=-35/453, 2/587, 2-8=-36/369, 1430/155, 4-6=-949/3	9) 1(- 12 - 12 - 13	 chord and any other members. 9) Refer to girder(s) for truss to truss connections. 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1, 138 lb uplift at joint 10 and 102 lb uplift at joint 6. 11) N/A 12) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in. 13) Use MiTek LSSH15-TZ (With 6-10d HDG nails into Girder & 7-10d x 1-1/2 HDG nails into Truss) or equivalent spaced at 2-0-0 oc max, starting at 1-9-12 									
NOTE: 1) 2-1 (0. To sta Bo sta Wi 2) All ex CA pro un 3) Uti	S bly truss 131"x3" p chord aggered to conn loads a cept if n ASE(S) sovided t less oth abalance	s to be connected toge ') nails as follows: Is connected as follows: at 0-9-0 oc. wected as follows: 2x4 - are considered equally noted as follows: 2x4 - are considered equally noted as fornt (F) or ba section. Ply to ply conr o distribute only loads herwise indicated. ed noof live loads have n	ther with 10d s: 2x6 - 2 rows ows: 2x6 - 2 rows ows: 2x6 - 2 rows - 1 row at 0-9-0 oc. applied to all plies, ck (B) face in the LO/ tections have been noted as (F) or (B), been considered for	14 14 AD 1)	equivalent sy from the left face of bottoi 4) Use MiTek L Girder & 7-11 equivalent sy the left end to bottom chorc 5) Fill all nail ho CAD CASE(S) Dead + Roc Plate Increa Uniform Loc Vert: 1-2: Concentrate	aced at 2-0-0 cc end to 3-9-1 cc m m chord. SSH15-TZ (With I Od x 1-1/2 HDG m baced at 2-0-0 cc o 6-8-3 to connecc standard of Live (balanced) ase=1.25 ads (lb/ft) ==60, 2-3=-60, 3-4 ed Loads (lb)	max. sta onnect tr 6-10d HE ails into T max. sta t truss(es is in con : Lumber !=-60, 4-5	rung at 1-9-1: uss(es) to ba OG nails into russ) or rting at 4-8-3 c) to back facu tact with lum Increase=1.: 5=-60, 6-10=-	2 ck from a of ber. 25, 30		Ju M Iu D	tlius Le liTek In 5023 Sw ate:	e PE No. 34869 I.o. DBA MiTek US, ringley Ridge Rd. C	A FL Cert 6634 hesterfield, MO 63017

January 27,2025

Page: 1



Job	Truss	Truss Type	Qty	Ply	
1024-077	J01	Jack-Open	6	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:38 ID:62L2enMw8YIQQvIrM6ZX?tyOb?a-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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Scale = 1:32.8

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

Loading	(r	psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	2	20.0	Plate Grip DOL	1.25		тс	0.58	Vert(LL)	-0.09	4-5	>889	240	MT20	244/190	
TCDL	1	0.0	Lumber DOL	1.25		BC	0.51	Vert(CT)	-0.21	4-5	>394	180			
BCLL		0.0*	Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.05	3	n/a	n/a			
BCDL	1	0.0	Code	FBC2023	3/TPI2014	Matrix-AS							Weight: 26 lb	FT = 20%	
				7)	Provide mech	nanical connection	(by oth	ers) of truss	to						
	2x4 SP No 2			• • • •	bearing plate	capable of withsta	ndina 6	6 lb uplift at	ioint						
	2x4 SP No 2				3.				,						
WEBS	2x4 SP No 2			8)	This truss de	sign requires that a	a minim	um of 7/16"							
	2/11 01 11012			,	structural wo	od sheathing be ap	oplied di	rectly to the	top						
	Structural woo	nd shea	thing directly applied	4	chord and 1/2	2" gypsum sheetro	ck be ap	oplied directl	y to						
	except end ve	erticals	and a cours applied	•,	the bottom ch	ord.									
BOT CHORD	Rigid ceiling d	directly a	applied.	LO											
REACTIONS	(size) 3= 1	Mechar	nical, 4= Mechanical												
	5=0)-5-8 150/10	12)												
	Max Uplift 3=-	66 (LC	12)												
	Max Grav 3=1	189 (LC	17), 4=125 (LC 3),												
	5=3	382 (LC	1)												
FORCES	(lb) - Maximun	m Comp	pression/Maximum												
	Tension	1 2 0													
BOT CHORD	2-5=-322/107, 4-5=0/0	, 1-2=0/	55, 2-3=-140/66												
NOTES	10-0/0												11110	1111	
	E 7 22. Vult_12	20mph	(2 second quet)										IL ULIUS	LEEN	
Vasd-101	mph TCDI -6.0	Insf: BC	DI -6 Onsf: h-15ft									SV.	CEN	1. A.	
B=45ft =	24ft: eave=4ft: (Cat II F	Exp B: Enclosed:									5		SE	
MWFRS (directional) and (C-C Zo	ne3 -1-6-0 to 1-6-0									5	· · · · · · ·		-
Zone1 1-6	-0 to 6-11-4 zon	ne: canti	ilever left and right										NO 34	869	3
exposed ;	end vertical left	and rig	ht exposed:C-C for									*:		/):*	-
members	and forces & MV	NFRS f	or reactions shown;								=	1:	1 . *		-
Lumber D	OL=1.60 plate gi	rip DOL	_=1.60								=	0:		- I Vac	
2) Building D	esigner / Project	t engine	eer responsible for									V	O CALTA	Sha	2
verifying a	pplied roof live lo	oad sho	own covers rain load	ing								-0		:41	-
requireme	nts specific to th	ne use c	of this truss compone	ent.								131	A Long	01:50	
3) This truss	has been desigr	ned for	a 10.0 psf bottom									1	SOUH	Gin	
chord live	load nonconcurr	rent wit	h any other live load	S.								J	1, ONA	ENI	
+) ^ I his trus	s nas been desig	gned to	or a live load of 20.0p	ST									1111	in the second	
3-06-00 to	I by 2-00-00 wid	areas v do will fi	it between the better	n							т.	line I o	• PF No 34869		
s-uo-uu la	any other moment	ue wiil li hore									M	iTek In	c. DBA MiTek USA	FL Cert 6634	
5) Bearings a	are assumed to h	he .lo	int 5 SP No 2								16	023 Sw	ingley Ridge Rd. C	hesterfield, MO 63	017
6) Refer to di	rder(s) for truss	s to trus	s connections								D	ate:			

January 27,2025



Job	Truss	Truss Type	Qty	Ply	
1024-077	J02	Jack-Open	4	1	T36176055 Job Reference (optional)

-1-6-0

1-6-0

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

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:38 ID:xCiJuqRhjOWZ8qL_jNgxF8yOb?U-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

rag





1-0-0

1-0-0

Scale = 1:24.5

Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.25		TC	0.22	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	FBC202	3/TPI2014	Matrix-MR							Weight: 7 lb	FT = 20%
LUMBER				6)	Refer to gire	der(s) for truss t	o truss con	nections.						
TOP CHORD	2x4 SP N	0.2		7)	Provide me	chanical connect	tion (by oth	ers) of truss	to					
BOT CHORD	2x4 SP N	0.2			bearing plat	e capable of with	hstanding 6	2 lb uplift at	joint					
WEBS	2x4 SP N	0.2			5, 19 lb upli	ft at joint 4 and 4	14 lb uplift a	it joint 3.						
BRACING				LC	DAD CASE(S) Standard								
TOP CHORD	Structura	wood she	athing directly applie	ed or										
	1-0-0 oc p	ourlins, ex	cept end verticals.											
BOT CHORD	Rigid ceil bracing.	ng directly	applied or 10-0-0 o	С										
REACTIONS	(size)	3= Mecha 5=0-5-8	anical, 4= Mechanica	al,										
	Max Horiz	5=64 (LC	12)											
	Max Uplift	3=-44 (LC	C 1), 4=-19 (LC 1), 5	=-62										
	Max Grav	3=20 (LC (LC 1)	12), 4=7 (LC 3), 5=2	229										
FORCES	(lb) - Max Tension	imum Com	pression/Maximum											
TOP CHORD	2-5=-193/	203 1-2=0)/55 2-3=-52/28											

BOT CHORD 2-5=-193/203, 1-2=0/55, 2-3=-52/2 BOT CHORD 4-5=0/0

NOTES

- Wind: ASCE 7-22; 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; Enclosed; MWFRS (directional) and C-C Zone3 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) Bearings are assumed to be: , Joint 5 SP No.2 .



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

January 27,2025



Job	Truss	Truss Type	Qty	Ply	
1024-077	J03	Jack-Open	4	1	Job Reference (optional)

Run; 8,73 S Dec 5 2024 Print: 8,730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07;17;38 ID:p_xqkCUCnc0?dR3myDktP_yOb?Q-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



S

							1					
(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
20.0	Plate Grip DOL	1.25	TC	0.22	Vert(LL)	0.00	4-5	>999	240	MT20	244/190	
10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.01	4-5	>999	180			
0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
10.0	Code	FBC2023/TPI2014	Matrix-MR							Weight: 13 lb	FT = 20%	
2x4 SP No.2 2x4 SP No.2 2x4 SP No.2		7) Provide me bearing plat 5 and 24 lb LOAD CASE(S)	chanical connect e capable of with uplift at joint 3.) Standard	ion (by oth Istanding 2	ers) of truss ?7 lb uplift at	to joint						
Structural wood she 3-0-0 oc purlins, ex Rigid ceiling directly bracing.	eathing directly appli cept end verticals. applied or 10-0-0 o	ed or										
	(psf) 20.0 10.0 0.0* 10.0 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood she 3-0-0 oc purlins, ex Rigid ceiling directly bracing.	(psf) 20.0Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code2x4 SP No.2 2x4 SP No.2Structural wood sheathing directly applied 3-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.	(psf) Spacing 2-0-0 20.0 Plate Grip DOL 1.25 10.0 Lumber DOL 1.25 0.0* Rep Stress Incr YES 10.0 Code FBC2023/TPI2014 2x4 SP No.2 5 and 24 lb 2x4 SP No.2 LOAD CASE(S) Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.	(psf) Spacing 2-0-0 CSI 20.0 Plate Grip DOL 1.25 TC 10.0 Lumber DOL 1.25 BC 0.0* Rep Stress Incr YES WB 10.0 Code FBC2023/TPI2014 Matrix-MR 2x4 SP No.2 2x4 SP No.2 5 and 24 lb uplift at joint 3. LOAD CASE(S) Standard Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing. Structural wood sheathing directly applied or 0.0-0 oc bracing. Structural wood sheathing directly applied or 0.0-0 oc bracing.	(psf) Spacing 2-0-0 CSI 20.0 Plate Grip DOL 1.25 TC 0.22 10.0 Lumber DOL 1.25 BC 0.07 0.0* Rep Stress Incr YES WB 0.00 10.0 Code FBC2023/TPI2014 Matrix-MR 2x4 SP No.2 2x4 SP No.2 5 and 24 lb uplift at joint 3. 2x4 SP No.2 2x4 SP No.2 LOAD CASE(S) Standard Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.	(psf) Spacing 2-0-0 CSI DEFL 20.0 Plate Grip DOL 1.25 TC 0.22 Vert(LL) 10.0 Lumber DOL 1.25 BC 0.07 Vert(CT) 0.0* Rep Stress Incr YES WB 0.00 Horz(CT) 10.0 Code FBC2023/TPI2014 Matrix-MR Horz(CT) 2x4 SP No.2 7) Provide mechanical connection (by others) of truss bearing plate capable of withstanding 27 lb uplift at 5 and 24 lb uplift at joint 3. ZX4 SP No.2 LOAD CASE(S) Standard Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing. Structural wood sheathing directly applied or 10-0-0 oc bracing. Structural wood sheathing directly applied or 10-0-0 oc bracing.	(psf) Spacing 2-0-0 CSI DEFL in 20.0 Plate Grip DOL 1.25 TC 0.22 Vert(LL) 0.00 10.0 Lumber DOL 1.25 BC 0.07 Vert(CT) -0.01 0.0* Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 10.0 Code FBC2023/TPI2014 Matrix-MR Horz(CT) 0.00 2x4 SP No.2 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 5 and 24 lb uplift at joint 3. LOAD CASE(S) Standard Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing. Standard	(psf) Spacing 2-0-0 CSI DEFL in (loc) 20.0 Plate Grip DOL 1.25 TC 0.22 Vert(LL) 0.00 4-5 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.01 4-5 10.0 Code FBC2023/TPI2014 Matrix-MR Horz(CT) 0.00 3 2x4 SP No.2 Zx4 SP No.2 T) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 5 and 24 lb uplift at joint 3. LOAD CASE(S) Standard Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing. Structural wood sheathing directly applied or 10-0-0 oc bracing. Standard	(psf) 20.0Spacing Plate Grip DOL 1.252-0-0 1.25CSI TC C 0.22DEFL Vert(LL)in 0.00 4-5//defl >99910.0Lumber DOL Lumber DOL 1.251.25BC BC 0.070.07 Vert(CT)-0.01 4-54-5>99910.0CodeFBC2023/TPI2014Matrix-MRHorz(CT)0.003n/a2x4 SP No.27)Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 5 and 24 lb uplift at joint 3. LOAD CASE(S)7)Provide mechanical StandardStructural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.To and 24 lb uplift at joint 3.To and 24 lb uplift at joint 3.	(psf) 20.0Spacing Plate Grip DOL 1.252-0-0 1.25CSI TC 0.22DEFL Vert(LL)in vert(LL)(loc) vert(LL)1/defl L/d vert(LL)10.0Lumber DOL 1.251.25BC BC 0.070.07 Vert(CT)-0.01 Vert(CT)4-5 - >999 - 999180 Horz(CT)0.0* 10.0Rep Stress Incr CodeYES FBC2023/TPI2014WB Matrix-MR0.00 Matrix-MRHorz(CT) -0.000.003n/a2x4 SP No.27) Sand 24 lb uplift at joint 3. LOAD CASE(S)7) StandardProvide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 5 and 24 lb uplift at joint 3. LOAD CASE(S)555Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.5555	(psf) Spacing 2-0-0 CSI DEFL in (loc) I/defl L/d PLATES 20.0 Plate Grip DOL 1.25 TC 0.22 Vert(LL) 0.00 4-5 >999 240 MT20 10.0 Lumber DOL 1.25 BC 0.07 Vert(CT) -0.01 4-5 >999 180 0.0* Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 3 n/a Weight: 13 lb 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 3. 2x4 SP No.2 LOAD CASE(S) Standard Standard Standard Standard	(psf) Spacing 2-0-0 CSI DEFL in (loc) //deft L/d PLATES GRIP 20.0 Plate Grip DOL 1.25 TC 0.22 Vert(LL) 0.00 4-5 >999 240 MT20 244/190 10.0 Lumber DOL 1.25 BC 0.07 Vert(CT) -0.01 4-5 >999 180 0.0* Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 3 n/a n/a 2x4 SP No.2 Code FBC2023/TPI2014 Matrix-MR Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 3. Vert(CT) 0.00 3 n/a n/a Weight: 13 lb FT = 20% 2x4 SP No.2 Za4 SP No.2 LOAD CASE(S) Standard Standard Verticals. Verticals.

3-0-0

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-5-8 Max Horiz 5=96 (LC 12) Max Uplift 3=-24 (LC 12), 5=-27 (LC 12) 3=65 (LC 17), 4=50 (LC 3), 5=240 Max Grav (LC 1)

FORCES (Ib) - Maximum Compression/Maximum Tension TOP CHORD 2-5=-206/165, 1-2=0/55, 2-3=-62/35

BOT CHORD 4-5=0/0

NOTES

- Wind: ASCE 7-22; Vult=130mph (3-second gust) 1) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 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. This truss has been designed for a 10.0 psf bottom 3)
- chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf 4) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) Bearings are assumed to be: , Joint 5 SP No.2 .
- Refer to girder(s) for truss to truss connections. 6)



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

January 27,2025

Page: 1



🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only using the mathematical network of the intervention of the in

Job	Truss	Truss Type	Qty	Ply	
1024-077	J04	Jack-Open	4	1	T36176057 Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:38 ID:AxljnvYKc9eljDxjImK261yOb?L-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



5-0-0

Scale = 1:27.2

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

Loading TCLL (roof) TCDL BCLL	(psf) 20.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.25 1.25 YES	2/TEI2014	CSI TC BC WB	0.27 0.24 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.03 -0.05 -0.02	(loc) 4-5 4-5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190	
BUDL	10.0	Code	FBC202	3/1912014	Matrix-A5							weight: 20 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood she except end verticals Rigid ceiling directly (size) 3= Mecha 5=0-5-8 Max Horiz 5=127 (LC Max Uplift 3=-46 (LC Max Grav 3=128 (LC (LC 1) (lb) - Maximum Com Tension 2-5=-262/176, 1-2=(4-5=0/0 CE 7-22; Vult=130mph mph; TCDL=6.0psf; B -24ft; eave=4ft; Cat. II; directional) and C-C Z i-0 to 4-11-4 zone; can end vertical left and rig and forces & MWFRS OL=1.60 plate grip DC besigner / Project engir pplied roof live load sf ints specific to the use has been designed fo load nonconcurrent wi is has been designed fo load nonconcurrent wi is ha	athing directly applie applied. anical, 4= Mechanica C 12) C 12), 5=-12 (LC 12) C 17), 4=88 (LC 3), 5 appression/Maximum 0/55, 2-3=-110/61 (3-second gust) CDL=6.0psf; h=15ft; Exp B; Enclosed; one3 -1-6-0 to 1-6-0, tilever left and right ght exposed;C-C for for reactions shown; DL=1.60 heer responsible for nown covers rain load of this truss compon r a 10.0 psf bottom th any other live load or a live load of 20.0 where a rectangle fit between the botto bint 5 SP No.2. ss connections.	d, d, 1, =307 ding ent. ls. psf m	Provide mech bearing plate 5 and 46 lb u This truss de structural wor chord and 1/2 the bottom ch PAD CASE(S)	hanical connection capable of withsta plift at joint 3. sign requires that i od sheathing be a " gypsum sheetro hord. Standard	(by oth anding 1 a minim oplied di ck be a	ers) of truss t 2 lb uplift at j um of 7/16" rectly to the t oplied directly	o oint op / to		Ji M IC D	* PROVING	Vergini. 20 ID	LEC SE SE DAGINI ENGINE ENGINE	
													January 21,20	20
												i.		

www.tpinst.org) With the second secon

Job	Truss	Truss Type	Qty	Ply	
1024-077	M01	Monopitch Supported Gable	2	1	T36176058 Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:38 ID:Eq9Ox2jk4mX90Wbc7P5ZDCyOb?6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:28.6

Plate Offsets (X, Y): [2:0-4-12,0-2-7]

Loading	(ps	sf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.	.0	Plate Grip DOL	1.25		TC	0.67	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.	.0	Lumber DOL	1.25		BC	0.61	Vert(CT)	n/a	-	n/a	999		
BCLL	0.	.0*	Rep Stress Incr	YES		WB	0.09	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.	.0	Code	FBC2023	3/TPI2014	Matrix-AS							Weight: 38 lb	FT = 20%
LUMBER				6)	This truss ha	s been designed f	or a 10.0) psf bottom						
TOP CHORD	2x4 SP No.2				chord live loa	a nonconcurrent v	with any	other live loa	ias.					
BOICHORD	2x4 SP No.2			()	on the botton	as been designed	s whore	e luau ul 20.0	opsi					
WEBS	2X4 SP No.2				3-06-00 tall b	v 2-00-00 wide wi	ll fit hetw	a rectangle	om					
UTHERS	2X4 SP N0.2				chord and an	v other members	ii iii betw	veen the bott	UIII					
BRACING	o			8)	All bearings a	are assumed to be	SP No	2						
TOP CHORD	Structural wood	snea	thing directly applied.	. 9)	Provide mech	hanical connection	by oth	ers) of truss t	to					
BOICHORD	Rigia celling aire	ectly a	applied.	-,	bearing plate	capable of withsta	anding 1	15 lb uplift at	t joint					
REACTIONS	(size) 2=10-	-0-0, 5	5=10-0-0, 6=10-0-0		2, 265 lb upli	ft at joint 5, 39 lb u	uplift at jo	pint 6 and 11	5 lb					
	Max Horiz 2=55	(LC 8			uplift at joint 2	2.	. ,							
	Max Uplift 2=-11	15 (LC	38), 5=-265 (LC 1),	10)	This truss de	sign requires that	a minim	um of 7/16"						
	Max Gray 2-47		0) 1) 5-22 (IC 9) 6-9	00	structural wo	od sheathing be a	pplied di	irectly to the	top					
)	1), J=22 (LC 0), 0=0	00	chord and 1/2	2" gypsum sheetro	ock be ap	pplied directly	y to					
FORCES	(lb) - Maximum	, Comr	vression/Maximum		the bottom cr	nord.								
TORCES	Tension	Comp		LO	AD CASE(S)	Standard								
TOP CHORD	1-2=0/15. 2-3=-	184/2	95. 3-4=-42/21											
BOT CHORD	2-6=-311/189, 5	6-6=0/	0											10.
WEBS	3-6=-526/491, 4	-5=-1	30/153										2111.111	1111
NOTES													JULIOO	LEE
1) Wind ASC	CE 7-22. Vult=130	mph ((3-second dust)									1	CEN	0.1
Vasd=101	mph; TCDL=6.0ps	sf; BC	DL=6.0psf; h=15ft;									5		· · · · · · · · · · · · · · · · · · ·
B=45ft; L=	24ft; eave=2ft; Ca	at. II; E	Exp B; Enclosed;										No 34	860
MWFRS (directional) and C-	-C Zo	ne3 zone; cantilever								-			
left and rig	pht exposed ; end	vertica	al left and right									×:		
exposed;C	C-C for members a	and fo	rces & MWFRS for								=	_		
reactions s	shown; Lumber D	OL=1.	.60 plate grip								-	5	bK) / // I	
DOL=1.60)											2	TUCIAND	0
2) Truss desi	igned for wind load	ds in t	the plane of the truss								2	- 4	T. A.	A:23
only. For s	sidds exposed to	wina (o End	(normal to the face),									1	ORI	Dichis
or consult	qualified building	desia	ner as ner ANSI/TPI	, 1								×	0'8'	ENUN
3) Building D	esigner / Project e	engine	er responsible for									1	UNA	
verifving a	oplied roof live loa	ad sho	own covers rain loadi	na										III.
requireme	nts specific to the	use o	of this truss componer	nť.							Ju	lius Le	e PE No. 34869	
4) Gable requ	uires continuous b	ottom	h chord bearing.								M	iTek In	c. DBA MiTek USA	FL Cert 6634
5) Gable stud	ds spaced at 2-0-0) oc.	-								16 D	023 Sw	ingley Ridge Rd. Cl	nesterneld, MO 63017
											D	arc.		

January 27,2025

Page: 1



Job	Truss	Truss Type	Qty	Ply	
1024-077	M02	Monopitch	10	1	T36176059 Job Reference (optional)

2-3-7

Scale = 1:26.9 Loading

TCLL (roof)

TCDI

BCLL

BCDL

Run: 8 73 S. Dec. 5 2024 Print: 8 730 S.Dec. 5 2024 MiTek Industries. Inc. Mon. Jan 27 07:17:38 Page: 1 ID:3_WfB5oVfcIJkR2ITgCzSSyOb?0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -1-6-0 5-4-11 10-5-8 1-6-0 5-4-11 5-0-13 12 2 2x4 I 4 3x4 = 13 12 3 2-2-12 11 10 2 -5-13 L0 Μ 5 6 1.5x4 🛚 4x4 = 3x4 = 5-4-11 10-5-8 5-4-11 5-0-13 2-0-0 CSI DEFL l/defl L/d PLATES GRIP (psf) Spacing in (loc) 20.0 Plate Grip DOL 1.25 тс 0.21 Vert(LL) -0.04 6-9 >999 240 MT20 244/190 BC 10.0 1 25 0.30 Vert(CT) Lumber DOL -0.08 6-9 >999 180 0.0* Rep Stress Incr YES WB 0.43 Horz(CT) 0.02 5 n/a n/a 10.0 Code FBC2023/TPI2014 Matrix-AS Weight: 44 lb FT = 20%

LUMBER TOP CHORD 2x4 SP No.2 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS BRACING TOP CHORD Structural wood sheathing directly applied, except end verticals. BOT CHORD Rigid ceiling directly applied. REACTIONS (size) 2=0-4-8, 5=0-5-8 Max Horiz 2=72 (LC 9) Max Uplift 2=-49 (LC 8), 5=-15 (LC 9) Max Grav 2=509 (LC 1), 5=406 (LC 1) FORCES (Ib) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/15, 2-3=-1065/232, 3-4=-96/32, 4-5=-135/131 BOT CHORD 2-6=-324/1028, 5-6=-324/1028 3-6=0/196, 3-5=-984/280 WEBS

NOTES

- Wind: ASCE 7-22; Vult=130mph (3-second gust) 1) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 10-3-12 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
- Building Designer / Project engineer responsible for 2) verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component. This truss has been designed for a 10.0 psf bottom 3)
- chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf 4) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) All bearings are assumed to be SP No.2 .

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 5 and 49 lb uplift at joint 2.

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.

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:

January 27,2025



Job	Truss	Truss Type	Qty	Ply		
1024-077	M2A	Monopitch	4	1	Job Reference (optional)	136176060

Run; 8,73 S Dec 5 2024 Print: 8,730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07;17;38 ID:3_WfB5oVfcIJkR2ITgCzSSyOb?0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-2-12

Page: 1



Scale = 1:27.5

Loading TCLL (roof) TCDL BCLL	(psf) 20.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.25 1.25 YES		CSI TC BC WB	0.41 0.34 0.23	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.03 -0.07 0.01	(loc) 6-9 6-9 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL	10.0	Code	FBC2023	3/TPI2014	Matrix-AS							Weight: 43 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood shear except end verticals. Rigid ceiling directly a (size) 2=0-4-8, 6= Max Horiz 2=72 (LC 9 Max Uplift 2=-50 (LC 1 Max Grav 2=243 (LC	thing directly applied applied. =0-5-8 3) 8), 6=-119 (LC 9) 1), 6=672 (LC 1)	6) 7) I, LO	Provide mec bearing plate 2 and 119 lb This truss de structural wo chord and 1/ the bottom c AD CASE(S)	hanical connec e capable of witi uplift at joint 6. ssign requires th ood sheathing b 2" gypsum shea hord. Standard	tion (by oth hstanding 5 nat a minim e applied d etrock be a	ers) of truss 0 lb uplift at um of 7/16" rectly to the oplied directl	to joint top ly to					
FORCES	(lb) - Maximum Comp Tension	pression/Maximum											
TOP CHORD	1-2=0/15, 2-3=-796/3 4-5=-71/84	09, 3-4=-32/44,											
BOT CHORD WEBS	2-6=-271/680, 5-6=-2 3-6=-508/578, 3-5=-7	271/680 768/280											
IOTEO													

- NOTES
- 1) Wind: ASCE 7-22; 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; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 10-3-12 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
- Building Designer / Project engineer responsible for 2) verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component. This truss has been designed for a 10.0 psf bottom 3)
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 . 5)



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

January 27,2025



Job	Truss	Truss Type	Qty	Ply		
1024-077	PB01	Piggyback	2	1	Job Reference (optional)	6061

3-1-8

Run: 8,73 S Dec 5 2024 Print: 8,730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:39





10

1.5x4 🛚

9

10-8-4

1.5x4 u

8

1.5x4 u



Loading		(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES
TCLL (roof)		20.0	Plate Grip DOL	1.25		ТС	0.14	Vert(LL)	n/a	-	n/a	999	MT20
TCDL		10.0	Lumber DOL	1.25		BC	0.06	Vert(TL)	n/a	-	n/a	999	
BCLL		0.0*	Rep Stress Incr	YES		WB	0.02	Horiz(TL)	0.00	6	n/a	n/a	
BCDL		10.0	Code	FBC2	023/TPI2014	Matrix-AS							Weight: 45 lb
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N Structura Rigid ceil (size) Max Horiz Max Uplift Max Grav	o.2 o.2 o.2 l wood she ing directly 1=11-10- ⁻ 6=11-10- ⁻ 8=11-10- ⁻ 10=11-10 1=49 (LC 1=-17 (LC 1=5 (LC 1), 7= 24), 9=90	athing directly applied applied. 4, 2=11-10-14, 14, 7=11-10-14, 14, 9=11-10-14, 11) C 17), 6=-7 (LC 12), 1), 8=-18 (LC 12), C 12) 2), 2=291 (LC 1), 6=2 7 (LC 12), 8=243 (LC 2) (LC 1), 10=244 (LC 2)	1. 275 23)	 Truss design only. For str see Standar or consult qu Building Des verifying app requirement Gable requii Gable studs This truss ha chord live lo * This truss on the bottoo 3-06-00 tall chord and a All bearings Provide mec bearing platu Tho uplift a 	ted for wind loa uds exposed to d Industry Gabl alified building igner / Project of lied roof live los s specific to the es continuous I spaced at 2-0-1 as been design ad nonconcurren has been design m chord in all al oy 2-00-00 wide hare assumed to chanical connect e capable of wit i cint 10. 18 lb	ds in the pl wind (norm le End Deta designer a engineer re ad shown c a use of this bottom cho 0 oc. ed for a 10. ent with any ned for a 10. ent with any ned for a 10. et will fit betw ers. b be SP No ction (by oth thstanding 7 chstanding 7	ane of the tru al to the face ills as applica s per ANSI/TI sponsible for overs rain loc truss compoind bearing. 0 psf bottom other live loa re load of 20.1 a rectangle ween the botti 2. ers) of truss i 7 lb uplift at jo	ss), ble, Pl 1. ading nent. dds. Dpsf om to int 6, ,ift at				
FORCES	(lb) - Max Tension	imum Com	pression/Maximum		joint 1, 87 lb	uplift at joint 7	and 7 lb up	lift at joint 6.					minin
TOP CHORD	1-2=-37/9 4-5=-49/8	99, 2-3=-59 88, 5-6=-47	/43, 3-4=-51/86, /32, 6-7=-22/60		11) This truss de	esign requires the	hat a minim	ium of 7/16" lirectly to the t	top				JULIUS
BOT CHORD	2-10=-25 6-8=-27/4	/49, 9-10=- I9	12/49, 8-9=-12/49,		chord and 1 the bottom c	2" gypsum she hord.	etrock be a	pplied directly	y to			and the second s	LICE
WEBS	4-9=-73/0), 3-10=-17	2/130, 5-8=-172/130		12) See Standar	d Industry Pigg	yback Trus	s Connection					No 34
NOTES	ed roof live	loads have	been considered for		Detail for Co	nnection to bas	se truss as	applicable, or				*	

3x4 =

this design.

Wind: ASCE 7-22; Vult=130mph (3-second gust) 2) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-11-12 to 3-11-12, Zone1 3-11-12 to 6-10-12, Zone2 6-10-12 to 11-1-11, Zone1 11-1-11 to 12-9-13 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

LOAD CASE(S) Standard



3x4 =

GRIP 244/190

FT = 20%

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

January 27,2025



Job	Truss	Truss Type	Qty	Ply		
1024-077	PB02	Piggyback	7	1	T361 Job Reference (optional)	176062

3-3-14

3-5-6

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:39 ID:qoX6Re5BnHRmEHSZRQ9qzkyOb_d-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:31.5

Loading		(psf) 20.0	Spacing Plate Grip DOI	2-0-0 1 25		CSI TC	0 15	DEFL Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES	GRIP 244/190
TCDL		10.0	Lumber DOL	1.25		BC	0.12	Vert(TL)	n/a	-	n/a	999		2.0,000
BCLL		0.0*	Rep Stress Incr	YES		WB	0.04	Horiz(TL)	0.00	7	n/a	n/a		
BCDL		10.0	Code	FBC202	3/TPI2014	Matrix-AS				-			Weight: 47 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.: 2x4 SP No.: 2x4 SP No.: Structural w Rigid ceiling (size) 1 7 1 Max Uplift 1 (I Max Grav 1 (2 2	2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	athing directly applied. applied. 2=13-9-8, 6=13-9-8, 8=13-9-8, 9=13-9-8, 11) 10), 7=-2 (LC 12), 8=-2 0=-23 (LC 12) 18), 2=78 (LC 1), 6=61 34 (LC 24), 8=-294 (LC 10-295 (LC 24), 8=-294 (LC	4) 5) 6) 7) 8) 24 9) 10 5 23)	Building Des verifying app requirements Gable requir Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar All bearings) Provide mec bearing plate 2 lb uplift at j at joint 8.	igner / Project e lied roof live los s specific to the es continuous b spaced at 4-0-0 is been designe ad nonconcurre nas been design n chord in all ar oy 2-00-00 wide yo other membe are assumed to hanical connec e capable of witt oint 7, 23 lb upl	engineer re ad shown c use of this bottom chor 0 oc. ed for a 10.0 nt with any hed for a liv reas where e will fit betw ers. 0 be SP No. tion (by oth hstanding 7 lift at joint 1	sponsible for overs rain loa truss compor d bearing. 0 psf bottom other live loa e load of 20.0 a rectangle veen the botto 2. ers) of truss t 7 lb uplift at jo 0 and 24 lb u	ding hent. ds.)psf om o int 1, plift					
FORCES	(lb) - Maxim	num Com	pression/Maximum	-, 11	structural wo	od sheathing b	e applied d	irectly to the f	op					
TOP CHORD BOT CHORD WEBS	1-2=-62/62, 4-5=-82/82, 2-10=-9/41, 4-9=-212/52	, 2-3=-48/ , 5-6=-31/ , 9-10=-9/ 2, 3-10=-2	'44, 3-4=-83/80, '28, 6-7=-13/14 '41, 8-9=-9/41, 6-8=-9, 233/158, 5-8=-232/158	12 (41 3	 chord and 1/2" gypsum sheetrock be applied directly to the bottom chord. 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer. 									

 Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-22; 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; Enclosed; MWFRS (directional) and C-C Zone3 0-3-15 to 3-3-15, Zone1 3-3-15 to 6-10-12, Zone2 6-10-12 to 10-10-12, Zone1 10-10-12 to 13-5-10 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
- 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.

LOAD CASE(S) Standar



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

January 27,2025

Page: 1



Job	Truss	Truss Type	Qty	Ply		
1024-077	PB2A	Piggyback	2	2	T361 Job Reference (optional)	176063

Run; 8,73 S Dec 5 2024 Print: 8,730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07;17;38 ID:qoX6Re5BnHRmEHSZRQ9qzkyOb_d-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:31.5

Loading TCLL (roof) TCDL BCLL	(psf) 20.0 10.0 0.0*	Spacing2-0Plate Grip DOL1.2Lumber DOL1.2Rep Stress IncrYE	0-0 25 25 ES	CSI TC BC WB	0.08 0.06 0.01	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 7	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190
BCDL	10.0	Code FE	3C2023/TPI2014	Matrix-AS							Weight: 94 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood she Rigid ceiling directly (size) 1=13-9-8 7=13-9-8, 10=13-9-1 Max Horiz 1=54 (LC Max Uplift 1=-7 (LC (LC 12), ' Max Grav 1=39 (LC (LC 1), 7- 24), 9=29	athing directly applied. ⁷ applied. 2=13-9-8, 6=13-9-8, 8=13-9-8, 9=13-9-8, 8 11) 10), 7=-2 (LC 12), 8=-24 10=-23 (LC 12) 18), 2=79 (LC 1), 6=66 =33 (LC 24), 8=294 (LC 18 (LC 1), 10=296 (LC 23)	 4) Wind: ASCE Vasd=101mp B=45ft; L=24 MWFRS (dir Zone1 3-3-1! Zone1 10-10 exposed; en members an Lumber DOL 5) Truss design only. For stu see Standard or consult qu 6) Building Des verifying app requirements 7) Gable require 	7-22; Vult=130mp bh; TCDL=6.0psf; fft; eave=4ft; Cat. L ectional) and C-C 5 to 6-10-12, Zone -12 to 13-5-10 zon d vertical left and d forces & MWFR =1.60 plate grip D ted for wind loads wids exposed to wind a Industry Gable E alified building de igner / Project eng lied roof live load s specific to the us es continuous bott	bh (3-sec BCDL=6 II; Exp B Zone3 0 a2 6-10-1 he; cantil right exp S for rea OOL=1.60 in the pla of OOL=1.60 in the	cond gust) .0psf; h=15ft; Enclosed; -3-15 to 3-3-1 2 to 10-10-12 ever left and loosed;C-C for ctions shown ane of the true al to the face, is as applicat s per ANSI/TF sponsible for overs rain loa truss compor	5, 2, right ; ss), ole, PI 1. ding nent.					
FORCES	(lb) - Maximum Com Tension	npression/Maximum	8) Gable studs	spaced at 4-0-0 o	C. for a 10 /) not bottom						
TOP CHORD	1-2=-62/62, 2-3=-49 4-5=-82/82, 5-6=-32	0/44, 3-4=-82/80, 2/28, 6-7=-12/13	chord live loa	ad nonconcurrent	with any	other live load	ds. Insf				mmm	IIII.
BOT CHORD WEBS	2-10=-9/41, 9-10=-9 4-9=-212/52, 3-10=-	//41, 8-9=-9/41, 6-8=-9/41 233/158, 5-8=-232/158	on the bottor 3-06-00 tall b chord and ar	n chord in all area by 2-00-00 wide winy other members.	s where ill fit betv	a rectangle	om			A.M.	ULIUS	LEE
 2-ply truss Top chord follows: 2x Bottom ch follows: 2y All loads a except if r 	s to be connected toge ds connected with 10d x4 - 1 row at 0-9-0 oc. oords connected with 1 x4 - 1 row at 0-9-0 oc. are considered equally ooted as front (F) or ba	ther as follows: (0.131"x3") nails as 0d (0.131"x3") nails as applied to all plies, ck (B) face in the LOAD	 11) All bearings : 12) Provide mec bearing plate 2 lb uplift at j at joint 8. 13) This truss de structural wo 	are assumed to be hanical connection capable of withst oint 7, 23 lb uplift usign requires that od sheathing be a	e SP No. n (by oth anding 7 at joint 1 a minim pplied d	2. ers) of truss to buplift at joi 0 and 24 lb u um of 7/16" rectly to the t	o nt 1, plift op			* PRC		869 * H

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.
- chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



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

January 27,2025



Job	Truss	Truss Type	Qty	Ply	
1024-077	PB2B	Piggyback	4	1	T36176064 Job Reference (optional)

3-5-6

Run: 8,73 S Dec 5 2024 Print: 8,730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:39 ID:qoX6Re5BnHRmEHSZRQ9qzkyOb_d-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0.00

6

n/a n/a



Scale = 1:34.1

Loading

TCLL (roof)

		L		10	-3-7				
(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/c
20.0	Plate Grip DOL	1.25	TC	0.18	Vert(LL)	n/a	-	n/a	999
10.0		1 25	PC .	0.12	Vort(TL)	n/a		n/o	000

TCDL		10.0	Lumber DOL	1.25		BC	0.12	Vert(TL)	
BCLL		0.0*	Rep Stress Incr	YES		WB	0.06	Horiz(TL)	
BCDL		10.0	Code	FBC202	3/TPI2014	Matrix-AS			
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Structura Rigid ceil (size) Max Horiz Max Uplift Max Grav	0.2 0.2 0.2 0.2 I wood she: ing directly 1=11-6-4, 7=11-6-4, 1=1-6-4 1=46 (LC 1=-2 (LC 7=-85 (LC 10=-23 (L1 1=37 (LC (LC 12), 7 24), 9=31i	athing directly applied applied. 2=11-6-4, 6=11-6-4, 8=11-6-4, 9=11-6-4, 1, 11=11-6-4 11) 10), 6=-162 (LC 24), 3), 8=-33 (LC 12), C 12) 18), 2=64 (LC 1), 6=4 '=-26 (LC 8), 8=413 (L 8 (LC 1), 10=296 (LC	3) 4) - 5) 6) 7) 8) 2 9) 2 10j 2 23)	 Truss designe only. For stur see Standard or consult qui Building Desiverifying appl requirements Gable studs s This truss has chord live loa * This truss has on the bottom 3-06-00 tall by chord and an All bearings a Bearing at joi 	ed for wind loa dis exposed to d Industry Gab alified building igner / Project lied roof live lo s specific to the es continuous spaced at 4-0- s been design chord in all a by 2-00-00 wid y other memb are assumed to int(s) 7, 6, 11 co NSI/TPI 1 ang	a tor wind todas in the plante s exposed to wind (normal t ndustry Gable End Details a ified building designer as pe ner / Project engineer respo ad roof live load shown cove specific to the use of this tru: s continuous bottom chord b baced at 4-0-0 oc. been designed for a 10.0 ps nonconcurrent with any oth s been designed for a live lo chord in all areas where a re 2-00-00 wide will fit betwee other members. e assumed to be SP No.2. (t(s) 7, 6, 11 considers paral		
FORCES	(lb) - Max Tension	timum Com	pression/Maximum	, 11)	Provide mechanical connection (by others) of bearing plate capable of withstanding 85 lb up			ers) of truss to by the second second second second	
TOP CHORD	1-2=-53/5 4-5=-59/9	52, 2-3=-45/ 95, 5-6=-70/	/73, 3-4=-66/116, /85		7, 2 lb uplift a	at joint 1, 23 lb	uplift at join	t 10, 33 lb uplift	
BOT CHORD WEBS	2-10=-6/1 4-9=-234 7-11=0/0	5, 9-10=0/0 /68, 3-10=-2 , 6-7=0/0	0, 8-9=0/0, 7-8=0/0 233/171, 5-8=-322/31	12) 7,) This truss de structural wo chord and 1/2	od sheathing t 2" gypsum she	hat a minim be applied d etrock be a	um of 7/16" irectly to the top pplied directly to	
NOTES					the bottom cl	hord.			

- Unbalanced roof live loads have been considered for 1) this design.
- 2) Wind: ASCE 7-22; 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; Enclosed; MWFRS (directional) and C-C Zone3 0-3-15 to 3-3-15, Zone1 3-3-15 to 6-10-12, Zone3 6-10-12 to 11-4-8 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

- applicable, ANSI/TPI 1. sible for rain loading component. aring. bottom r live loads.
- d of 20.0psf tangle the bottom
- to grain Ia. Building urface.
- of truss to uplift at joint 33 lb uplift at
- f 7/16" y to the top d directly to
- 13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



PLATES

Weight: 42 lb

MT20

GRIP

244/190

FT = 20%

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

January 27,2025

Page: 1



🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only using the mathematical network of the intervention of the in

Job	Truss	Truss Type	Qty	Ply	
1024-077	PB03	Piggyback	1	1	Job Reference (optional)

3-5-6

Scale = 1:31.5 Loading

TCLL (roof)

TCDI

BCLL

BCDL

LUMBER

OTHERS

TOP CHORD

BOT CHORD



Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:39 ID:yZLSkvS?iVDWrulKCjhtB3yOb_9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f .12-10-3 11-10-14 -0-11-5 5-11-7 0-11-5 0-11-5 5-11-7 5-11-7 4x4 = 4 12 6 Г 1.5x4 ı 1.5x4 I 3-3-14 18 19 3 5 P 6 2 6 10 9 8 1.5x4 🛚 1.5x4 🛚 3x4 : 1.5x4 II 3x4 = 11-10-14 Spacing 2-0-0 CSI DEFL l/defl L/d PLATES GRIP (psf) in (loc) 20.0 Plate Grip DOL 1.25 TC 0.15 Vert(LL) n/a 999 MT20 244/190 n/a BC 10.0 Lumber DOL 1 25 Vert(CT) 0.12 n/a n/a 999 0.0* Rep Stress Incr YES WB 0.04 Horz(CT) 0.00 15 n/a n/a 10.0 Code FBC2023/TPI2014 Matrix-AS Weight: 47 lb FT = 20% 4) Building Designer / Project engineer responsible for 2x4 SP No.2 verifying applied roof live load shown covers rain loading 2x4 SP No.2 requirements specific to the use of this truss component. Gable requires continuous bottom chord bearing. 2x4 SP No.2 5) Gable studs spaced at 2-0-0 oc. 6) 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf 8) 2=11-10-14, 6=11-10-14, on the bottom chord in all areas where a rectangle 8=11-10-14, 9=11-10-14,

BRACING TOP CHORD Structural wood sheathing directly applied. Rigid ceiling directly applied. BOT CHORD **REACTIONS** (size) 10=11-10-14 Max Horiz 2=-54 (LC 10) Max Uplift 2=-13 (LC 12), 6=-13 (LC 12), 8=-19 (LC 12), 10=-19 (LC 12) Max Grav 2=91 (LC 1), 6=91 (LC 1), 8=283 (LC 24), 9=299 (LC 1), 10=283 (LC 23) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/17, 2-3=-49/44, 3-4=-82/79, 4-5=-82/84, 5-6=-32/26, 6-7=0/17 BOT CHORD 2-10=-8/45, 9-10=-8/45, 8-9=-8/45, 6-8=-8/45 WEBS 4-9=-212/53, 3-10=-227/155, 5-8=-227/155

NOTES

Unbalanced roof live loads have been considered for 1) this design.

- Wind: ASCE 7-22; Vult=130mph (3-second gust) 2) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-3-15 to 3-3-15, Zone1 3-3-15 to 6-10-12, Zone2 6-10-12 to 10-10-12, Zone1 10-10-12 to 13-5-10 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
- Truss designed for wind loads in the plane of the truss 3) 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.

- 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 . 9)
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 2, 13 lb uplift at joint 6, 19 lb uplift at joint 10, 19 lb uplift at joint 8, 13 lb uplift at joint 2 and 13 lb uplift at joint 6.
- 11) 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.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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:

January 27,2025





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.
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor1 bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- 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
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- 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.
- 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.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- 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.