

RE: 0524-036 - Shaw MiTek, Inc.

Site Information:

Customer Info: William Scott Construction Project Name: . Model: .

Lot/Block: . Subdivision: .

Address: ., .

City: Live Oak 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 Design Program: MiTek 20/20 8.7

Wind Code: ASCE 7-22 Wind Speed: 130 mph Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 21 individual, Truss Design Drawings and 0 Additional Drawings. With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1234567891112345167891112345678921	T33926997 T33926998 T33927000 T33927000 T33927001 T33927003 T33927005 T33927006 T33927006 T33927007 T33927009 T33927010 T33927011 T33927011 T33927012 T33927014 T33927015 T33927016 T33927016 T33927016	A01 A02 A03 A04 A05 A06 B01 B02 B03 B04 B05 CJ01 J01 J02 M01 M02 M03 PB01 PB02 PB03 PB04	5/21/24 5/21/24

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

Truss Design Engineer's Name: Lee, Julius

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

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.



16023 Swingley Ridge Rd.

Chesterfield, MO 63017

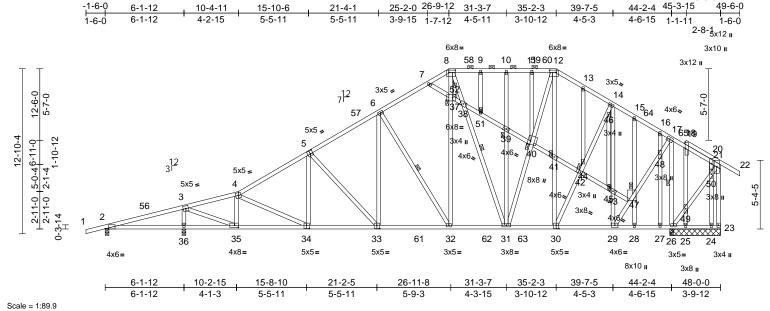
314.434.1200

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

Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	A01	Piggyback Base Structural Gable	2	1	Job Reference (optional)	T33926997

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon May 20 13:27:50 ID:vK2eYWXiIpGgaAZaTNvORMzEbo?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



[2:0-3-4,Edge], [5:0-2-8,0-3-0], [8:0-6-0,0-2-4], [12:0-6-0,0-2-4], [30:0-2-8,0-3-0], [33:0-2-8,0-3-0], [34:0-2-8,0-3-0], [35:0-3-8,0-2-0], [37:0-2-8,0-3-0], [40:0-3-0,0-2-8], [40:0-3-Plate Offsets (X, Y): [47:0-0-4,0-3-4]

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.53	Vert(LL)	-0.14	32-33	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-0.25	32-33	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.05	26	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 482 lb	FT = 20%

TOP CHORD

2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 2x4 SP No.2 **WEBS** 2x4 SP No.2 **OTHERS**

BRACING

LUMBER

TOP CHORD Structural wood sheathing directly applied,

except end verticals, and 2-0-0 oc purlins

(5-7-8 max.): 8-12.

BOT CHORD Rigid ceiling directly applied. **WEBS** 1 Row at midpt

6-32, 17-26, 8-31 **JOINTS** 1 Brace at Jt(s): 37,

39, 40, 41, 42, 43,

47.51

REACTIONS (size) 2=0-3-8, 23=3-11-8, 24=3-11-8, 25=3-11-8, 26=3-11-8, 36=0-3-8

Max Horiz 2=287 (LC 11)

Max Uplift 2=-67 (LC 8), 23=-442 (LC 25), 24=-49 (LC 23), 26=-97 (LC 12)

2=85 (LC 23), 23=20 (LC 12), Max Grav

24=61 (LC 11), 25=104 (LC 19)

26=2420 (LC 17), 36=2333 (LC 17)

(lb) - Maximum Compression/Maximum

FORCES

TOP CHORD 1-2=0/22, 2-3=-172/1180, 3-4=-1776/143,

4-6=-2214/226, 6-7=-1454/252, 7-8=-1239/246, 8-9=-1082/256,

9-10=-1082/256, 10-11=-1082/256, 11-12=-1082/256, 21-23=-2/397,

12-13=-996/258, 13-14=-1005/216, 14-15=-617/166, 15-16=-644/145,

16-17=-591/116, 17-19=-12/312, 19-20=-49/434, 20-21=-58/302, 21-22=0/43

BOT CHORD 2-36=-994/85 35-36=-994/85

> 32-35=-178/1999, 31-32=-88/1279, 29-31=-58/872, 28-29=-356/161. 27-28=-356/161, 26-27=-356/161,

25-26=-74/80, 24-25=-74/80, 23-24=-74/80

WEBS

4-35=-939/116, 6-32=-719/112, 32-37=-33/840. 8-37=-23/639.

31-40=-69/838, 12-40=-86/888,

30-41=-510/59, 12-41=-495/56 17-26=-1435/117, 26-49=-519/134

49-50=-529/137. 21-50=-547/145.

31-39=-213/91, 10-39=-182/78, 8-52=-145/0,

38-52=-404/0, 31-38=-489/23, 5-34=0/196,

4-34=-19/147, 5-33=-453/72, 6-33=0/572,

3-36=-2084/161, 3-35=-161/2961, 30-42=-2/741, 42-44=-5/768, 44-46=-16/832,

14-46=0/591, 29-43=-1070/131,

14-43=-813/88, 29-47=-142/1505

47-48=-76/1524, 17-48=-60/1393,

7-37=-222/87, 37-38=-79/90, 38-51=0/105, 39-51=-34/72, 39-40=-19/85, 40-41=-64/60,

41-42=-36/68, 42-45=-48/56, 43-45=-162/68,

43-47=-46/46, 11-40=-88/20, 13-44=-107/54,

45-46=-276/24, 15-47=-64/19, 28-47=-20/49,

16-48=-150/36, 27-48=-297/52,

19-49=-301/63, 25-49=-317/66,

20-50=-57/177, 24-50=-44/165, 9-51=-78/32,

37-52=0/291

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 3-3-10, Zone1 3-3-10 to 26-9-12, Zone2 26-9-12 to 33-7-4, Zone1 33-7-4 to 35-2-3, Zone2 35-2-3 to 41-11-10, Zone1 41-11-10 to 49-6-0 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 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 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- 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.
- 10) All bearings are assumed to be SP No.2.



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

May 21,2024

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



Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	A01	Piggyback Base Structural Gable	2	1	T3392 Job Reference (optional)	26997

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Page: 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.

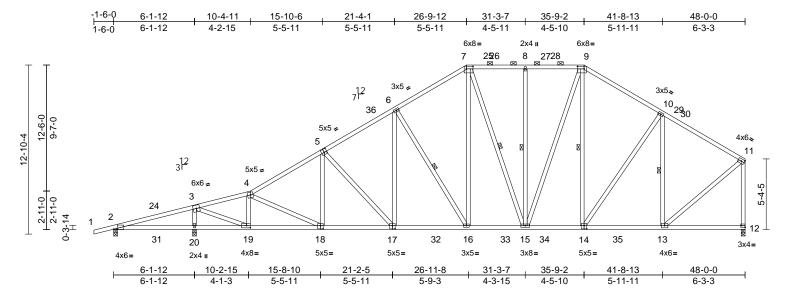
LOAD CASE(S) Standard



Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	A02	Piggyback Base	3	1	Job Reference (optional)	T33926998

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon May 20 13:27:51 ID:LXvfxxrr2rhiFVYQXIa_BOzEccX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:87.6

Plate Offsets (X, Y): [2:0-3-4,Edge], [5:0-2-8,0-3-0], [7:0-6-0,0-2-4], [9:0-6-0,0-2-4], [12:Edge,0-1-8], [14:0-2-8,0-3-0], [17:0-2-8,0-3-0], [18:0-2-8,0-3-0], [19:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.84	Vert(LL)	-0.17	16-17	>999	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.30	16-17	>999	180			
BCLL	0.0*	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.07	12	n/a	n/a			
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 358 lb	FT = 20%	

LUMBER

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

BRACING

Structural wood sheathing directly applied, TOP CHORD

except end verticals, and 2-0-0 oc purlins (4-8-12 max.): 7-9.

BOT CHORD Rigid ceiling directly applied.

WEBS 1 Row at midpt 6-16, 9-14, 10-13, 8-15, 7-15

REACTIONS (size) 2=0-3-8, 12=0-3-8, 20=0-3-8

Max Horiz 2=285 (LC 11)

Max Uplift 2=-118 (LC 8), 20=-53 (LC 12)

Max Grav 2=49 (LC 23), 12=1868 (LC 18),

20=2577 (LC 17)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/22 2-3=-204/1371 3-4=-2052/115

7-8=-1522/294, 8-9=-1522/294,

9-10=-1635/283, 10-11=-1443/202, 11-12=-1776/250, 4-6=-2620/249,

6-7=-1903/294

BOT CHORD 2-20=-1181/65, 19-20=-1181/65,

16-19=-235/2342, 15-16=-152/1667, 13-15=-155/1371, 12-13=-66/82

WEBS 4-19=-1111/147, 6-16=-759/126,

7-16=-45/873, 9-15=-73/634, 9-14=-167/92,

10-14=0/353, 10-13=-693/164,

11-13=-116/1484, 8-15=-279/105,

7-15=-227/78, 5-18=0/173, 4-18=-65/221, 5-17=-410/60, 6-17=0/540, 3-20=-2367/204,

3-19=-173/3455

- **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 3-3-10, Zone1 3-3-10 to 26-9-12, Zone2 26-9-12 to 33-7-4, Zone1 33-7-4 to 35-9-2, Zone2 35-9-2 to 42-6-9, Zone1 42-6-9 to 47-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch left 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.
- * 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.
- All bearings are assumed to be SP No.2
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 2 and 53 lb uplift at joint 20.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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

May 21,2024



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



Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	A03	Piggyback Base	1	1	Job Reference (optional)	T33926999

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon May 20 13:27:51 ID:?CGKI60hCevxNPT3iAqkcrzEcb0-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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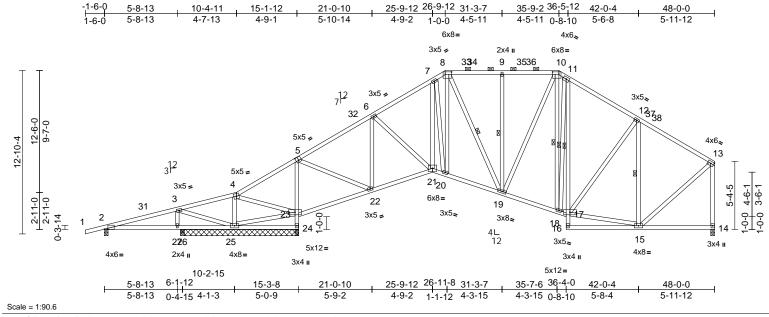


Plate Offsets	(X, Y):	[2:0-3-4,Edge],	[5:0-2-8,0-3-4]	, [8:0-6-0,0-2-4],	[10:0-6-0,0-2-4]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.47	Vert(LL)	-0.06	21	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.38	Vert(CT)	-0.11	21-22	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.07	14	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 392 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, and 2-0-0 oc purlins

(5-9-14 max.): 8-10.

BOT CHORD Rigid ceiling directly applied. Except:

1 Row at midpt 11-17

WEBS 1 Row at midpt 12-15, 10-18, 8-19, 9-19,

11-18

REACTIONS (size) 2=0-3-8, 14=0-3-8, 24=9-3-8, 25=9-3-8, 26=0-3-8

2=285 (LC 11)

Max Horiz Max Uplift

2=-39 (LC 12), 14=-4 (LC 12), 25=-33 (LC 8), 26=-6 (LC 12)

Max Grav 2=324 (LC 23), 14=1210 (LC 1) 24=2040 (LC 1), 25=193 (LC 18),

26=194 (LC 23)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=0/22, 2-3=-228/86, 3-4=-142/472,

4-6=-856/926, 6-7=-1271/237, 7-8=-1143/292, 8-9=-967/252, 9-10=-967/252, 10-11=-981/326

11-12=-1030/259, 12-13=-877/192, 13-14=-1156/199

BOT CHORD 2-27=-64/145, 26-27=-64/145,

25-26=-64/145, 24-25=-27/2, 23-24=-1989/320, 5-23=-1704/296 22-23=-720/110, 21-22=-124/725

20-21=-130/1067, 19-20=-119/1047 18-19=-96/864, 17-18=-89/836, 16-17=0/102,

11-17=-191/0, 15-16=-1/95, 14-15=-65/81

WEBS

3-27=-63/82, 3-25=-505/57, 4-25=-51/250, 23-25=-400/72, 4-23=-314/99, 5-22=-191/1448, 8-20=-126/471, 15-17=-124/631, 12-17=0/234, 12-15=-599/161, 13-15=-74/899,

10-18=-189/170, 8-19=-126/116, 10-19=-49/434, 9-19=-290/115,

6-21=-21/490, 6-22=-879/203, 7-21=-28/264,

7-20=-386/158, 11-18=-98/168

NOTES

- Unbalanced roof live loads have been considered for 1) 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 3-3-10, Zone1 3-3-10 to 26-9-12, Zone2 26-9-12 to 33-7-4, Zone1 33-7-4 to 35-9-2, Zone2 35-9-2 to 42-6-9, Zone1 42-6-9 to 47-10-4 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 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.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 2, 4 lb uplift at joint 14, 33 lb uplift at joint 25 and 6 lb uplift at joint 26.

- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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





Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	A04	Piggyback Base	4	1	Job Reference (optional)	T33927000

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon May 20 13:27:51 ID:Bg3dSwBvb8?KuAoWKKYEV5zEcZW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

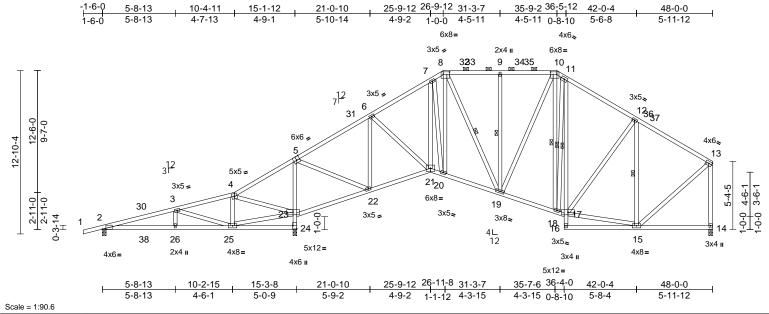


Plate Offsets (X, Y): [2:0-3-4,Edge], [5:0-3-0,Edge], [8:0-6-0,0-2-4], [10:0-6-0,0-2-4], [24:Edge,0-3-8]

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	0.48	Vert(LL)	0.08	26-29	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.41	Vert(CT)	-0.10	21-22	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.06	14	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 392 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, and 2-0-0 oc purlins

(5-11-15 max.): 8-10.

BOT CHORD Rigid ceiling directly applied. Except:

1 Row at midpt 11-17

WEBS 1 Row at midpt 12-15, 10-18, 8-19, 9-19,

11-18

REACTIONS (size) 2=0-3-8, 14=0-3-8, 24=0-3-8

Max Horiz 2=285 (LC 11)

Max Uplift 2=-140 (LC 12), 24=-165 (LC 12) 2=431 (LC 23), 14=1179 (LC 1), Max Grav

24=2318 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/22. 2-3=-561/668. 3-4=-88/443. 4-6=-693/1165, 6-7=-1161/144,

7-8=-1055/215, 8-9=-913/200, 9-10=-913/200, 10-11=-939/269

11-12=-991/207, 12-13=-852/159, 13-14=-1125/173

BOT CHORD 2-26=-541/526, 25-26=-541/526,

24-25=-51/0, 23-24=-2270/526, 5-23=-1798/377, 22-23=-964/443,

21-22=0/662, 20-21=-49/1002, 19-20=-45/982, 18-19=-66/829,

17-18=-61/803, 16-17=0/102, 11-17=-181/0,

15-16=-1/95, 14-15=-65/81

WEBS

3-26=-159/200, 3-25=-799/498, 4-25=-287/441, 23-25=-309/26, 4-23=-640/462, 5-22=-276/1549,

8-20=-43/430, 15-17=-106/609, 12-17=0/212, 12-15=-576/142, 13-15=-51/871, 6-21=-74/553, 6-22=-946/259, 7-21=0/230,

7-20=-348/81, 10-18=-212/172, 8-19=-217/123, 10-19=-10/382

9-19=-291/116, 11-18=-103/179

NOTES

- Unbalanced roof live loads have been considered for 1) 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 3-3-10, Zone1 3-3-10 to 26-9-12, Zone2 26-9-12 to 33-7-4, Zone1 33-7-4 to 35-9-2, Zone2 35-9-2 to 42-6-9, Zone1 42-6-9 to 47-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch left 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.
- * 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 140 lb uplift at joint 2 and 165 lb uplift at joint 24.

- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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

May 21,2024

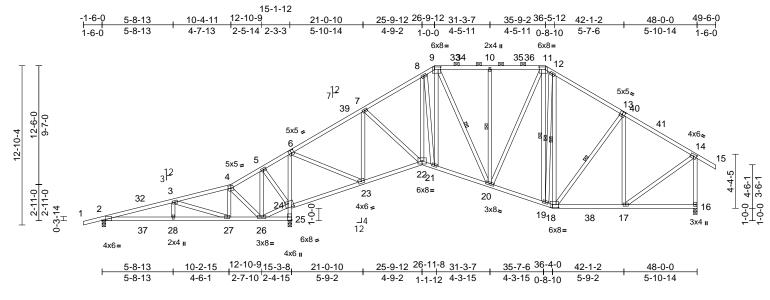


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	A05	Piggyback Base	3	1	Job Reference (optional)	T33927001

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon May 20 13:27:52 ID:BGJBxJxQ2uWZYZL2sM5PxzzEcTN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:92.9

Plate Offsets (X, Y): [2:0-3-4,Edge], [6:0-2-8,0-3-0], [9:0-6-0,0-2-4], [11:0-6-0,0-2-4], [13:0-2-8,0-3-0], [14:0-2-14,0-2-0], [18:0-5-12,0-2-12], [24:0-5-0,0-4-0], [25:Edge,0-3-0], [14:0-2-14,0-2-0], [18:0-5-12,0-2-12], [24:0-5-0,0-4-0], [25:Edge,0-3-0], [26:0-2-8,0-3-0], [26:0-2-	·2-8,0-3-0], [9:0-6-0,0-2-4], [11:0-6-0,0-2-4], [13:0-2-8,0-3-0], [14:0-2-14,0-2-0], [18:0-5-12,0-2-12], [24:0-5-0,0-4-0],	25:Edge,0-3-8]
--	--	----------------

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	0.41	Vert(LL)	0.08	28-31	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	-0.11	17-18	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.06	16	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 386 lb	FT = 20%

TOP CHORD 2x4 SP No.2 **BOT CHORD**

2x4 SP No.2 2x4 SP No.2

BRACING

LUMBER

WEBS

TOP CHORD Structural wood sheathing directly applied,

except end verticals, and 2-0-0 oc purlins

(5-8-13 max.): 9-11.

BOT CHORD Rigid ceiling directly applied. WEBS 1 Row at midpt 11-19, 12-19, 12-18,

9-20, 10-20, 13-18

REACTIONS (size) 2=0-3-8, 16=0-3-8, 25=0-3-8

Max Horiz 2=269 (LC 11)

Max Uplift 2=-144 (LC 12), 16=-25 (LC 12), 25=-163 (LC 12)

Max Grav 2=433 (LC 23), 16=1445 (LC 18),

25=2476 (LC 17)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=0/22, 2-3=-587/662, 3-4=-64/538,

9-10=-1032/189. 10-11=-1032/189.

14-16=-1359/230, 4-5=-234/856,

5-7=-809/1249, 7-8=-1306/119,

8-9=-1197/194, 11-12=-1097/283,

12-14=-1121/210, 14-15=0/50

BOT CHORD 2-28=-548/557, 27-28=-548/557

26-27=-405/0, 25-26=-75/0,

24-25=-2455/538, 6-24=-1915/323, 23-24=-1054/441, 22-23=0/785,

21-22=0/1198, 20-21=0/1185, 19-20=0/963

18-19=-3/920, 17-18=-40/869, 16-17=-44/66

WEBS 3-28=-171/219, 3-27=-905/537

4-27=-251/406, 6-23=-242/1731 9-21=-18/515, 14-17=0/1016, 7-22=-48/589,

7-23=-978/234, 8-22=0/270, 8-21=-384/57,

11-19=-231/211, 12-19=-147/201, 12-18=-195/3, 9-20=-213/117, 11-20=0/432,

10-20=-292/116, 13-18=-57/114,

13-17=-401/78, 5-26=-386/650, 4-26=-411/309, 24-26=-626/227,

5-24=-638/369

NOTES

- Unbalanced roof live loads have been considered for 1) 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 3-3-10. Zone1 3-3-10 to 26-9-12, Zone2 26-9-12 to 33-7-4, Zone1 33-7-4 to 35-9-2, Zone2 35-9-2 to 42-6-9, Zone1 42-6-9 to 49-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left 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.
- All plates are 3x5 MT20 unless otherwise indicated.
- 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 144 lb uplift at joint 2, 163 lb uplift at joint 25 and 25 lb uplift at joint 16.

- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	A06	Piggyback Base	6	1	Job Reference (optional)	T33927002

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon May 20 13:27:52 ID:8034B3?_YdUDUxVmS89ozJzEcS0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

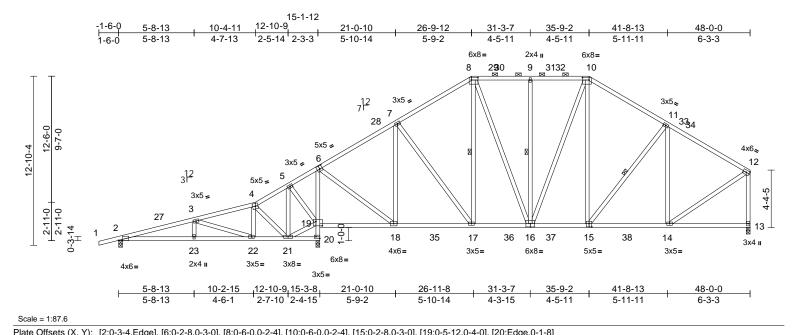


Plate Offsets (A, 1). [2.0-3-4,Euge	, [6.0-2-6,0-3-0], [6.0-6-0,0-2-4], [10.0-6-0,0-2	-4], [15.0-2-6,0-3-0], [19.0-	5-12,0-4-0], [20.Edge,0-1-6]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.36	Vert(LL)	-0.06	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.52	Vert(CT)	-0.06	23-26	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.02	13	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 352 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins

(5-9-12 max.): 8-10.

BOT CHORD Rigid ceiling directly applied. WFRS 1 Row at midpt 8-17, 11-15, 9-16

REACTIONS (size) 2=0-3-8, 13=0-3-8, 20=0-3-8

Max Horiz 2=263 (LC 11) Max Uplift 2=-34 (LC 12)

2=525 (LC 25), 13=1437 (LC 18), Max Grav

20=2532 (LC 17)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/22, 2-3=-1027/94, 3-4=-211/105,

4-5=-95/493 5-7=-860/921 7-8=-1096/247

8-9=-1007/261, 9-10=-1007/261, 10-11=-1223/256, 11-12=-1210/181

12-13=-1343/222

BOT CHORD 2-23=-50/977, 22-23=-50/977, 21-22=-73/82,

> 20-21=-59/0, 19-20=-2493/175, 6-19=-2077/200, 18-19=-733/136 17-18=-123/742, 14-17=-128/978,

13-14=-60/70

WEBS 3-23=0/216, 3-22=-917/70, 4-22=0/412,

6-18=-105/1664, 7-18=-734/141, 7-17=0/364, 8-17=-134/60, 10-16=-41/186,

10-15=-16/274, 11-15=-86/105 11-14=-402/133, 12-14=-83/1103,

9-16=-280/104, 8-16=-65/375, 5-21=-61/629, 4-21=-516/47, 19-21=-378/113, 5-19=-615/84

- NOTES
- Unbalanced roof live loads have been considered for 1) 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 3-3-10, Zone1 3-3-10 to 26-9-12, Zone2 26-9-12 to 33-7-4, Zone1 33-7-4 to 35-9-2, Zone2 35-9-2 to 42-6-9, Zone1 42-6-9 to 47-10-4 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 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.
- All plates are 3x5 MT20 unless otherwise indicated.
- 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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May 21,2024



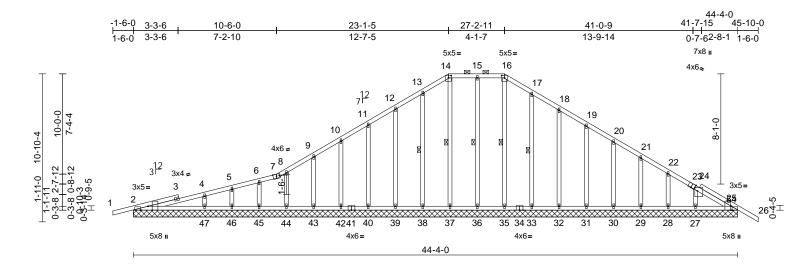
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	B01	Piggyback Base Supported Gable	2	1	Job Reference (optional)	T33927003

Run: 8,73 S Apr 25 2024 Print: 8,730 S Apr 25 2024 MiTek Industries, Inc. Mon May 20 13:27:52

Page: 1



Scale = 1:84.5

Plate Offsets (X, Y): [Plate Offsets (X, Y): [2:0-3-8,Edge], [2:0-6-12,Edge], [14:0-2-8,0-2-1], [16:0-2-8,0-2-1], [23:0-3-0,Edge], [24:0-3-0,0-2-4], [25:0-3-8,Edge], [25:0-0-9,Edge]												
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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.25	BC	0.18	Vert(CT)	n/a	-	n/a	999			
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	51	n/a	n/a			
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 298 lb	FT = 20%	

BCDL	10.0	Code F	BC2023/TPI2014	Matrix-	AS			
LUMBER TOP CHORD BOT CHORD OTHERS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2			Max Grav	29=162 (LC 18),	25=219 (LC 24), , 28=156 (LC 24), , 30=160 (LC 18), , 32=160 (LC 18),	WE	EBS 16-35= 13-38= 11-40= 9-43=-
BRACING TOP CHORD		,			33=164 (LC 18), 36=175 (LC 23), 38=161 (LC 17), 40=161 (LC 17),	. ,,		5-46=-6 17-33= 19-31= 21-29= 24-27=
WEBS	1 Row at midpt	16-35, 15-36, 14-37, 13-38, 17-33			45=188 (LC 23), 47=392 (LC 23), 51=219 (LC 24)	, 46=52 (LC 1), , 48=281 (LC 23),	NO 1)	TES Unbalanced roof liv this design.
REACTIONS	28=44-4-(31=44-4-(, 25=44-4-0, 27=44-4-0, 0, 29=44-4-0, 30=44-4-(0, 32=44-4-0, 33=44-4-(0, 36=44-4-0, 37=44-4-(), FORCES	Tension	kimum Compressi , 2-4=-121/128, 4-		2)	Wind: ASCE 7-22; Vasd=101mph; TCI B=45ft; L=44ft; eave

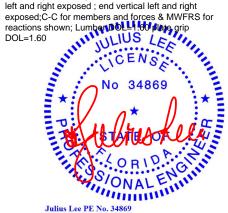
BOT CHORD

	28=44-4-0, 29=44-4-0, 30=44-4-0,
	31=44-4-0, 32=44-4-0, 33=44-4-0,
	35=44-4-0, 36=44-4-0, 37=44-4-0,
	38=44-4-0, 39=44-4-0, 40=44-4-0,
	42=44-4-0, 43=44-4-0, 44=44-4-0,
	45=44-4-0, 46=44-4-0, 47=44-4-0,
	48=44-4-0, 51=44-4-0
Max Horiz	2=183 (LC 11), 48=183 (LC 11)
Max Uplift	2=-34 (LC 12), 25=-39 (LC 12),
	28=-22 (LC 12), 29=-14 (LC 12),
	30=-16 (LC 12), 31=-16 (LC 12),
	32=-18 (LC 12), 33=-13 (LC 12),
	38=-11 (LC 12), 39=-19 (LC 12),
	40=-16 (LC 12), 42=-16 (LC 12),
	43=-17 (LC 12), 44=-12 (LC 12),
	46=-11 (LC 12), 48=-34 (LC 12),
	51=-39 (LC 12)

002 (20 20); .0 20. (20 20);	
51=219 (LC 24)	
(lb) - Maximum Compression/Maximum	
Tension	
1-2=0/22, 2-4=-121/128, 4-5=-120/112,	
5-6=-109/116, 6-7=-112/113, 14-15=-111/347,	
15-16=-111/347, 16-17=-123/372,	
17-18=-101/307, 18-19=-79/237,	
19-20=-57/170, 20-21=-37/102,	
21-22=-46/48, 22-24=-61/58, 24-25=-102/65,	
25-26=0/52, 7-8=-104/120, 8-9=-119/123,	
9-10=-105/107, 10-11=-94/173,	
11-12=-83/240, 12-13=-103/310,	
13-14=-123/371	
2-47=-65/194, 46-47=-65/194,	
45-46=-65/194, 44-45=-65/194,	
43-44=-65/194, 42-43=-65/194,	
40-42=-65/194, 39-40=-65/194,	
38-39=-65/194, 37-38=-65/194,	
36-37=-65/193, 35-36=-65/193,	
33-35=-65/193, 32-33=-65/193,	
31-32=-65/193, 30-31=-65/193,	
29-30=-65/193, 28-29=-65/193,	
27-28=-65/193, 25-27=-56/182	

5=-112/0, 15-36=-135/56, 14-37=-115/0, 3=-121/99, 12-39=-121/115, 0=-121/109, 10-42=-120/110, -125/112, 8-44=-117/98, 6-45=-134/84, =-63/67, 4-47=-252/127, 3=-124/104, 18-32=-120/114, I=-121/109, 20-30=-121/111, 9=-121/110, 22-28=-121/113, 7=-143/108

- live loads have been considered for
- ; Vult=130mph (3-second gust) CDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=44ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 zone; cantilever left and right exposed; end vertical left and right



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Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	B01	Piggyback Base Supported Gable	2	1	Job Reference (optional)	T33927003

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- 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 verifying applied roof live load shown covers rain loading

requirements specific to the use of this truss component.

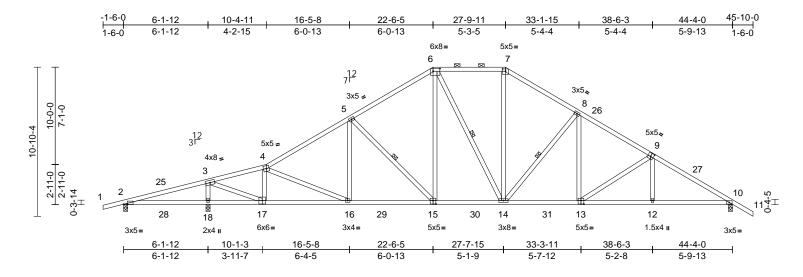
- Provide adequate drainage to prevent water ponding.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- 11) All bearings are assumed to be SP No.2.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 2, 39 lb uplift at joint 25, 11 lb uplift at joint 38, 19 lb uplift at joint 39, 16 lb uplift at joint 40, 16 lb uplift at joint 42, 17 lb uplift at joint 43, 12 lb uplift at joint 44, 11 lb uplift at joint 46, 13 lb uplift at joint 33, 18 lb uplift at joint 32, 16 lb uplift at joint 31, 16 lb uplift at joint 30, 14 lb uplift at joint 29, 22 lb uplift at joint 28, 34 lb uplift at joint 2 and 39 lb uplift at joint 25.
- 13) 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.
- 14) 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

Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	B02	Piggyback Base	4	1	Job Reference (optional)	T33927004

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon May 20 13:27:53 ID:jm65TbVyiDTlkFWSozLGazzEcMB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:83.9

Plate Offsets (X, Y): [2:0-3-4,Edge], [6:0-6-0,0-2-4], [7:0-2-8,0-2-1], [9:0-2-8,0-3-0], [13:0-2-8,0-3-0], [15:0-2-8,0-3-0],

-											_	
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.57	Vert(LL)	-0.16	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.29	13-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 266 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied,

except

2-0-0 oc purlins (4-5-13 max.): 6-7. Rigid ceiling directly applied.

BOT CHORD WFRS 1 Row at midpt 5-15, 6-14, 8-14 REACTIONS (size) 2=0-3-8, 10=0-3-8, 18=0-3-8

Max Horiz 2=183 (LC 11)

Max Uplift 2=-114 (LC 8), 10=-36 (LC 12),

18=-42 (LC 12)

Max Grav 2=77 (LC 23), 10=1775 (LC 18),

18=2374 (LC 17)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/22, 2-3=-18/1326, 3-4=-1738/140,

4-5=-2274/257, 5-6=-1893/319, 6-7=-1615/326, 7-8=-1919/326, 8-10=-2899/293, 10-11=0/45

BOT CHORD 2-18=-1176/88, 16-18=-1176/1864, 14-16=-39/2023. 12-14=-139/2430.

10-12=-138/2434

WEBS 4-17=-1003/139, 4-16=-12/210, 5-16=0/250 5-15=-555/113, 6-15=-14/623, 6-14=-114/216,

7-14=-31/672, 8-14=-729/123, 8-13=0/505, 9-13=-511/73, 9-12=0/220, 3-18=-2174/189,

3-17=-108/3088

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=44ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-11-3, Zone1 2-11-3 to 22-6-5, Zone3 22-6-5 to 27-9-11, Zone2 27-9-11 to 34-0-14, Zone1 34-0-14 to 45-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left 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.
- * 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 2, 42 lb uplift at joint 18 and 36 lb uplift at joint 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.
- 10) 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



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May 21,2024



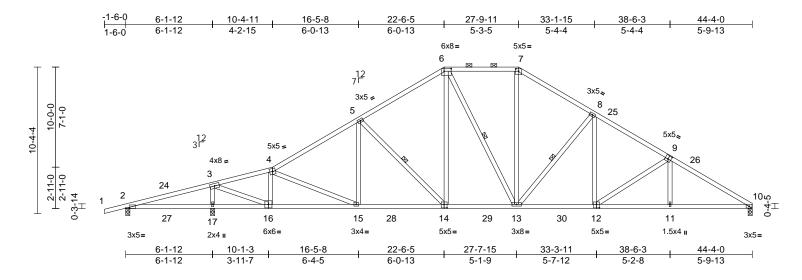
🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job		Truss	Truss Type	Qty	Ply	Shaw	
0524	4-036	B03	Piggyback Base	4	1	Job Reference (optional)	T33927005

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon May 20 13:27:53 ID:BmFION8aTC1wzFUSruHThxzEcLN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:81.5

Plate Offsets (X, Y): [2:0-3-4,Edge], [6:0-6-0,0-2-4], [7:0-2-8,0-2-1], [9:0-2-8,0-3-0], [12:0-2-8,0-3-0], [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	TC	0.57	Vert(LL)	-0.16	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.29	12-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 263 lb	FT = 20%

LUMBER

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

BRACING

BOT CHORD

TOP CHORD Structural wood sheathing directly applied,

except

2-0-0 oc purlins (4-5-12 max.): 6-7. Rigid ceiling directly applied. 5-14, 6-13, 8-13

WFRS 1 Row at midpt REACTIONS (size) 2=0-3-8, 10=0-3-8, 17=0-3-8

Max Horiz 2=178 (LC 11) Max Uplift 2=-112 (LC 8), 17=-50 (LC 12)

2=76 (LC 23), 10=1692 (LC 18), Max Grav 17=2373 (LC 17)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/22, 2-3=-46/1321, 3-4=-1738/134,

4-5=-2277/255, 5-6=-1896/319,

6-7=-1619/326, 7-8=-1922/326,

8-10=-2904/294

BOT CHORD 2-17=-1177/83, 15-17=-1177/1860,

13-15=-55/2017. 11-13=-161/2453.

10-11=-160/2457

WEBS 4-16=-1003/141, 4-15=-18/210, 5-15=0/250, 5-14=-555/109, 6-14=-11/623, 6-13=-113/218,

7-13=-37/673, 8-13=-733/124, 8-12=-4/512, 9-12=-528/136, 9-11=0/223, 3-17=-2174/193,

3-16=-114/3087

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=44ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-11-3, Zone1 2-11-3 to 22-6-5, Zone3 22-6-5 to 27-9-11, Zone2 27-9-11 to 34-0-14, Zone1 34-0-14 to 44-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left 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.
- * 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 112 lb uplift at joint 2 and 50 lb uplift at joint 17.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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May 21,2024



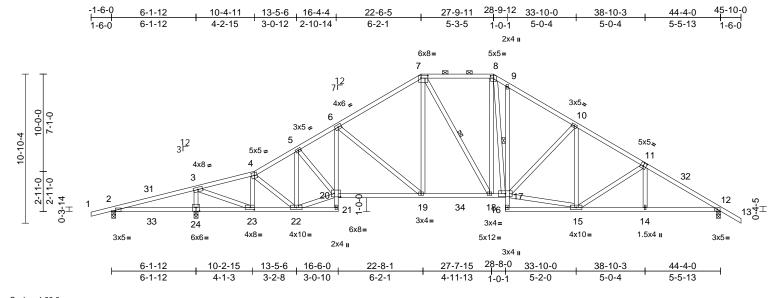
🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	B04	Piggyback Base	1	1	Job Reference (optional)	T33927006

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon May 20 13:27:53 ID:zsndCkewa6Jy0iiWJj1JOozEcKj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:83.9

Plate Offsets (X, Y): [2:0-3-4,Edge], [7:0-6-0,0-2-4], [8:0-2-8,0-2-1], [11:0-2-8,0-3-0], [20:0-5-8,0-3-0], [23:0-3-8,0-2-0], [24:0-3-0,0-3-0], [20:0-5-8,0-3-0], [20:0-5-8,0-3-0], [20:0-5-8,0-3-0], [20:0-3-8,0-	Plate Offsets (X, Y)	: [2:0-3-4,Edge], [7:0-6-0,0-2	2-4], [8:0-2-8,0-2-1], [11:0-2-8,0-	0-3-0], [20:0-5-8,0-3-0], [23:0-3-8,0-2-0], [24:0-3-0,0-3-
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.60	Vert(LL)	-0.18	19-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.34	19-20	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.11	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 302 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied.

except

2-0-0 oc purlins (4-4-2 max.): 7-8. Rigid ceiling directly applied. Except:

BOT CHORD 1 Row at midpt 9-17

WEBS 1 Row at midpt

REACTIONS (size) 2=0-3-8, 12=0-3-8, 24=0-3-8

Max Horiz 2=183 (LC 11)

Max Uplift 2=-119 (LC 8), 12=-36 (LC 12),

24=-40 (LC 12)

7-18

Max Grav 2=55 (LC 23), 12=1734 (LC 18),

24=2358 (LC 17)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/22, 2-3=-27/1390, 3-4=-1659/135,

4-5=-2148/227, 5-6=-2566/272,

6-7=-2018/313, 7-8=-1728/326,

8-9=-2085/379, 9-10=-2142/326

10-12=-2835/285, 12-13=0/45

BOT CHORD 2-23=-1232/94, 22-23=-15/1724 21-22=-30/65, 20-21=0/56, 6-20=0/465,

19-20=-43/2327, 18-19=0/1765,

17-18=-25/1746, 16-17=0/103, 9-17=-150/97,

15-16=0/234, 14-15=-136/2377,

12-14=-135/2381 **WEBS**

4-23=-1017/125, 6-19=-735/121, 7-19=0/688,

3-24=-2137/197, 3-23=-109/3047, 5-20=0/529, 5-22=-769/54, 4-22=-36/303

20-22=-20/2016, 8-18=0/326, 7-18=-123/216, 8-17=-133/668, 10-17=-369/84, 10-15=-19/140, 11-15=-473/70,

15-17=-106/1787, 11-14=0/204

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=44ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-11-3, Zone1 2-11-3 to 22-6-5, Zone3 22-6-5 to 27-9-11, Zone2 27-9-11 to 33-10-0, Zone1 33-10-0 to 45-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left 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.
- * 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 119 lb uplift at joint 2, 36 lb uplift at joint 12 and 40 lb uplift at joint 24.
- This truss design requires that a minimum of 7/16' structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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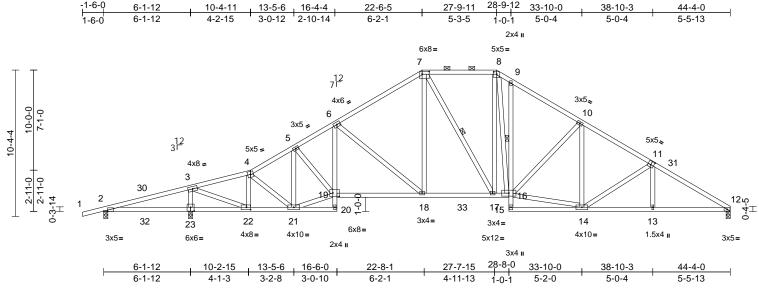
NOTES



Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	B05	Piggyback Base	3	1	Job Reference (optional)	T33927007

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Page: 1



Scale = 1:81.5

Plate Offsets (X, Y): [2:0-3-4,Edge], [7:0-6-0,0-2-4], [8:0-2-8,0-2-1], [11:0-2-8,0-3-0], [19:0-5-8,0-3-0], [22:0-3-8,0-2-0], [23:0-3-0,0-3-4]

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	TC	0.60	Vert(LL)	-0.18	18-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	ВС	0.65	Vert(CT)	-0.34	18-19	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.11	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 299 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

2-0-0 oc purlins (4-4-1 max.): 7-8. Rigid ceiling directly applied. Except:

BOT CHORD 1 Row at midpt 9-16

WEBS 1 Row at midpt

REACTIONS (size)

2=0-3-8, 12=0-3-8, 23=0-3-8

Max Horiz 2=178 (LC 11)

Max Uplift 2=-117 (LC 8), 23=-48 (LC 12)

Max Grav 2=55 (LC 23), 12=1651 (LC 18),

23=2358 (LC 17)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-2=0/22, 2-3=-55/1385, 3-4=-1659/128, TOP CHORD

4-5=-2152/223, 5-6=-2568/273, 6-7=-2020/314, 7-8=-1732/328,

8-9=-2091/381, 9-10=-2147/329

10-12=-2843/286

BOT CHORD 2-22=-1233/90, 21-22=-30/1720,

20-21=-31/65, 19-20=0/56, 6-19=0/465, 18-19=-67/2320, 17-18=-16/1758,

16-17=-45/1740, 15-16=0/103, 9-16=-151/97

14-15=0/235, 13-14=-159/2402,

12-13=-157/2406

WEBS 4-22=-1017/128, 6-18=-735/121, 7-18=0/688, 3-23=-2137/201, 3-22=-116/3047,

5-19=-14/526, 5-21=-766/62, 4-21=-41/301,

19-21=-35/2011, 8-17=0/326, 7-17=-122/218,

8-16=-135/672, 10-16=-372/82,

10-14=-17/142, 11-14=-491/136

14-16=-123/1792, 11-13=0/208

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=44ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-11-3, Zone1 2-11-3 to 22-6-5, Zone3 22-6-5 to 27-9-11, Zone2 27-9-11 to 33-10-0, Zone1 33-10-0 to 44-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left 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.
- * 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 2 and 48 lb uplift at joint 23.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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May 21,2024



NOTES

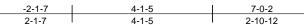
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	CJ01	Diagonal Hip Girder	2	1	Job Reference (optional)	T33927008

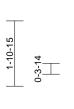
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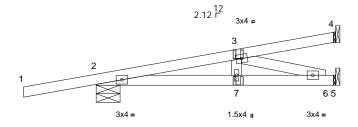
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NAILED

NAILED





NAILED

NAILED

		7-0-2
4-1-5	6-4-1	
4-1-5	2-2-12	0-8-0

Scale = 1:33.7

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	0.33	Vert(LL)	-0.01	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.25	Vert(CT)	-0.03	7-10	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 29 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 or

6-0-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 2=0-8-6, 4= Mechanical, 5= Mechanical

Max Horiz 2=58 (LC 4)

Max Uplift 2=-101 (LC 4), 4=-29 (LC 4), 5=-5

(LC 4)

Max Grav 2=431 (LC 1), 4=74 (LC 1), 5=197

(LC 13)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/22, 2-3=-658/42, 3-4=-17/10 **BOT CHORD**

2-7=-65/648, 6-7=-65/648, 5-6=0/0 3-7=0/155, 3-6=-674/68

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; Partially Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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.
- Bearings are assumed to be: , Joint 2 SP No.2 .
- Refer to girder(s) for truss to truss connections.

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 4, 101 lb uplift at joint 2 and 5 lb uplift at joint 5.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (lb/ft)

Vert: 1-4=-60, 5-8=-20

Concentrated Loads (lb)

Vert: 7=-15 (F=-7, B=-7)

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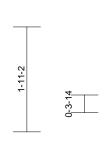


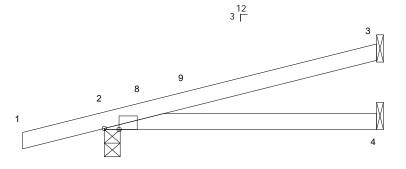
Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	J01	Jack-Open	6	1	Job Reference (optional)	T33927009

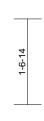
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Page: 1









3x4 =

5-0-0

Scale = 1:21.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.27	Vert(LL)	0.03	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.22	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 18 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 2x4 SP No.2 **BOT CHORD**

BRACING

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

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4=

Mechanical Max Horiz 2=55 (LC 12)

Max Uplift 2=-60 (LC 12), 3=-37 (LC 12) Max Grav 2=301 (LC 1), 3=123 (LC 1), 4=85

(LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/22, 2-3=-111/26

BOT CHORD 2-4=-59/119

- 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: Partially Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 4-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Bearings are assumed to be: , Joint 2 SP No.2 .
- Refer to girder(s) for truss to truss connections.

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 3 and 60 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

May 21,2024



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



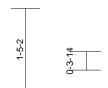
Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	J02	Jack-Open	4	1	Job Reference (optional)	T33927010

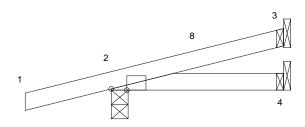
Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries. Inc. Mon May 20 13:27:54 ID:lebniECveF1tRHvGkEr1_VzEcHP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



3 T







3x4 :

3-0-0

Scale = 1:20.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.15	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 11 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4=

Mechanical

Max Horiz 2=38 (LC 12) Max Uplift 2=-57 (LC 12), 3=-16 (LC 12)

Max Grav 2=230 (LC 1), 3=62 (LC 17), 4=48

(LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/22, 2-3=-61/15

BOT CHORD 2-4=-5/56

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; Partially 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
- 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.
- Bearings are assumed to be: , Joint 2 SP No.2 .
- Refer to girder(s) for truss to truss connections.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 3 and 57 lb uplift at joint 2.

LOAD CASE(S) Standard

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

May 21,2024



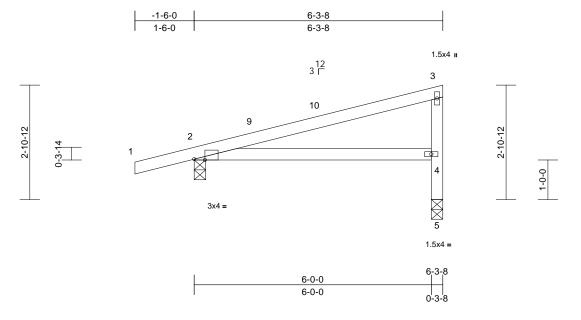
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	M01	Monopitch	9	1	Job Reference (optional)	T33927011

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries. Inc. Mon May 20 13:27:54 ID:lebniECveF1tRHvGkEr1_VzEcHP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:29.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.48	Vert(LL)	0.10	4-8	>775	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.14	4-8	>532	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 25 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS 2=0-3-8, 5=0-3-8 (size)

Max Horiz 2=108 (LC 9)

Max Uplift 2=-61 (LC 8), 5=-38 (LC 12)

Max Grav 2=347 (LC 1), 5=237 (LC 17) (lb) - Maximum Compression/Maximum

FORCES Tension

1-2=0/22, 2-3=-150/70, 4-5=-237/233, TOP CHORD

3-4=-158/224

BOT CHORD 2-4=-147/187

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; Partially Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 6-1-12 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.
- All bearings are assumed to be SP No.2.

- 6) Bearing at joint(s) 5 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 61 lb uplift at joint 2 and 38 lb uplift at joint 5.

LOAD CASE(S) Standard



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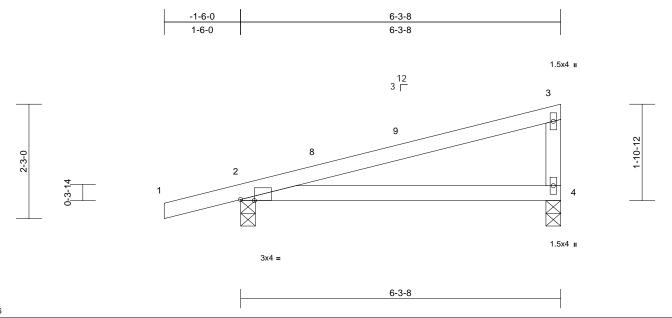




Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	M02	Monopitch	9	1	Job Reference (optional)	T33927012

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries. Inc. Mon May 20 13:27:54 ID:lebniECveF1tRHvGkEr1_VzEcHP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:22.6

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

Loading	(ncf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
Loaumy	(psf)	-	2-0-0	COI		DEFE	in	(IUC)	i/ueii	L/u	FLAILS	GKIF
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.44	Vert(LL)	0.09	4-7	>852	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.36	Vert(CT)	-0.13	4-7	>577	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 23 lb	FT = 20%

LUMBER

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

BRACING

Structural wood sheathing directly applied, TOP CHORD except end verticals.

BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 4=0-3-8

Max Horiz 2=49 (LC 11) Max Uplift 2=-69 (LC 12), 4=-24 (LC 12)

Max Grav 2=347 (LC 1), 4=235 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/22, 2-3=-139/44, 3-4=-159/209

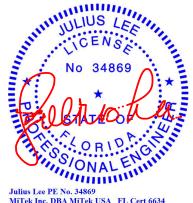
BOT CHORD 2-4=-89/161

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; Partially Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 6-1-12 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 4 and 69 lb uplift at joint 2.

7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	M03	Half Hip Girder	2	1	Job Reference (optional)	T33927013

Run: 8,73 E Nov 16 2023 Print: 8,730 E Nov 16 2023 MiTek Industries, Inc. Tue May 21 14:03:04 ID:oOsSz3t01EEHLJetgchx?UzEc6D-aFEdl9wdoGbNFlsbDtkwKazjjuhamcBHpSOwxFzEQHN

NAILED

9-8-0

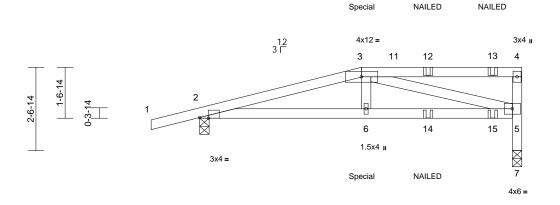
4-6-4

9-11-8

0-3-8

Page: 1





5-1-12

5-1-12



Scale = 1:35.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.51	Vert(LL)	-0.04	6-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.52	Vert(CT)	-0.09	6-10	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.56	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 43 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

4-5-15 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

2=656/0-3-8, 7=705/0-3-8 REACTIONS (lb/size)

Max Horiz 2=90 (LC 5)

Max Uplift 2=-94 (LC 8), 7=-61 (LC 5)

Max Grav 2=656 (LC 1), 7=707 (LC 13)

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

TOP CHORD 2-3=-1511/122. 5-7=-707/61

BOT CHORD 2-6=-158/1485, 6-14=-150/1525

14-15=-150/1525, 5-15=-150/1525

WEBS 3-6=0/411, 3-5=-1412/111

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=24ft; eave=4ft; Cat. II; Exp B; Partially Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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.

- * 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.
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 2 and 61 lb uplift at joint 7.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 102 lb down and 50 lb up at 5-0-0 on top chord, and 215 lb down and 6 lb up at 5-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (lb/ft)

Vert: 1-3=-60, 3-4=-60, 5-8=-20

Concentrated Loads (lb)

Vert: 6=-206 (F), 3=-63 (F), 12=-63 (F), 13=-70 (F),

14=-41 (F), 15=-44 (F)



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May 21,2024



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

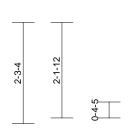


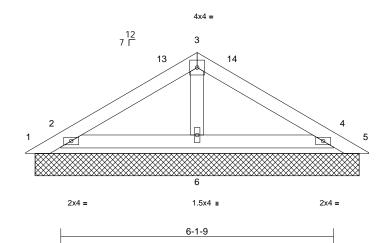
Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	PB01	Piggyback	2	1	Job Reference (optional)	T33927014

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries. Inc. Mon May 20 13:27:54 ID:bK_LR3f61KxY3iSM?hymO7zEcoP-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

-0-9-8	3-0-12	6-1-9	6-11-1
0-0-8	3-0-12	3-0-12	0-9-8





Scale = 1:25.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	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(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 25 lb	FT = 20%

LUMBER

2x4 SP No.2 TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 OTHERS

BRACING

TOP CHORD Structural wood sheathing directly applied. Rigid ceiling directly applied. **BOT CHORD**

REACTIONS (size) $1=7-3-7,\ 2=7-3-7,\ 4=7-3-7,\ 5=7-3-7,$ 6=7-3-7, 7=7-3-7, 10=7-3-7

Max Horiz 1=36 (LC 11)

Max Uplift 1=-116 (LC 17), 2=-19 (LC 12),

4=-26 (LC 12), 5=-102 (LC 24), 7=-19 (LC 12), 10=-26 (LC 12)

1=15 (LC 12), 2=306 (LC 23), Max Grav 4=293 (LC 24), 5=16 (LC 12), 6=190 (LC 1), 7=306 (LC 23),

10=293 (LC 24)

FORCES (lb) - Maximum Compression/Maximum

TOP CHORD 1-2=-36/101, 2-3=-78/78, 3-4=-78/73,

4-5=-45/73

BOT CHORD 2-6=-38/47, 4-6=-39/48

WEBS 3-6=-101/35

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=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-10-10 to 3-10-10, Zone1 3-10-10 to 4-5-11, Zone3 4-5-11 to 8-0-11 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- 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.
- All bearings are assumed to be SP No.2.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 2, 26 lb uplift at joint 4, 116 lb uplift at joint 1, 102 lb uplift at joint 5, 19 lb uplift at joint 2 and 26 lb uplift at joint 4.
- 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



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May 21,2024





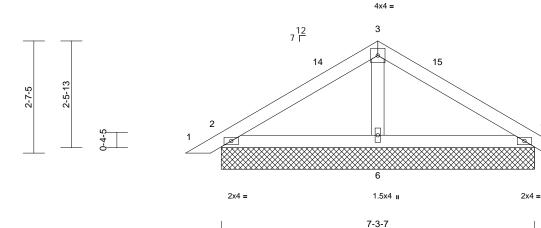


Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	PB02	Piggyback	17	1	Job Reference (optional)	T33927015

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries. Inc. Mon May 20 13:27:54 ID:T5DsHRid4ZRzYKI7EW0iYzzEcoL-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

-0-9-15	3-7-12	7-3-7	8-1-6
0-9-15	3-7-12	3-7-12	0-9-15



Scale = 1:26.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	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	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 29 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 OTHERS

BRACING

TOP CHORD Structural wood sheathing directly applied. Rigid ceiling directly applied. **BOT CHORD**

REACTIONS (size) 2=7-3-7, 4=7-3-7, 6=7-3-7, 7=7-3-7,

11=7-3-7 Max Horiz 2=-42 (LC 10), 7=-42 (LC 10) Max Uplift 2=-26 (LC 12), 4=-26 (LC 12),

7=-26 (LC 12), 11=-26 (LC 12) Max Grav 2=194 (LC 1), 4=194 (LC 1), 6=260 (LC 1), 7=194 (LC 1), 11=194 (LC

FORCES (lb) - Maximum Compression/Maximum

TOP CHORD 1-2=0/16, 2-3=-111/98, 3-4=-111/88, 4-5=0/16

BOT CHORD 2-6=-7/55, 4-6=-16/55

WEBS 3-6=-118/34

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=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-3-8 to 3-3-8, Zone1 3-3-8 to 4-5-11, Zone3 4-5-11 to 8-7-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- 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.
- All bearings are assumed to be SP No.2.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 2, 26 lb uplift at joint 4, 26 lb uplift at joint 2 and 26 lb uplift at joint 4.
- 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

May 21,2024



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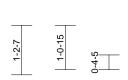


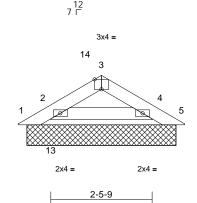
Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	PB03	Piggyback	2	1	Job Reference (optional)	T33927016

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Page: 1

-0-9-8	1-2-12	2-5-9	3-3-1
0-9-8	1-2-12	1-2-12	0-9-8





Scale = 1:28

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

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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 11 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size)

1=3-7-7, 2=3-7-7, 4=3-7-7, 5=3-7-7, 6=3-7-7, 9=3-7-7

Max Horiz 1=18 (LC 11)

Max Uplift 1=-12 (LC 17), 5=-28 (LC 3) Max Grav 1=10 (LC 11), 2=197 (LC 1), 4=159 (LC 1), 5=-6 (LC 12), 6=197 (LC 1),

9=159 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-19/37, 2-3=-67/47, 3-4=-62/52, 4-5=0/30 BOT CHORD 2-4=-51/51

NOTES

- Unbalanced roof live loads have been considered for 1) 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 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.

- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 28 lb uplift at joint 5.
- 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



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May 21,2024



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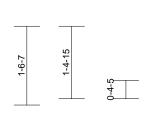


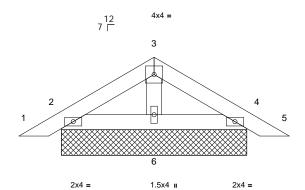
Job	Truss	Truss Type	Qty	Ply	Shaw	
0524-036	PB04	Piggyback	12	1	Job Reference (optional)	T33927017

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Page: 1

-0-9-15	1-9-11	3-7-7	4-5-6
0-9-15	1-9-11	1-9-11	0-9-15





3-7-7

Scale = 1:22.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 16 lb	FT = 20%

LUMBER

2x4 SP No.2 TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 OTHERS

BRACING

TOP CHORD Structural wood sheathing directly applied. Rigid ceiling directly applied. **BOT CHORD**

REACTIONS (size)

2=3-7-7, 4=3-7-7, 6=3-7-7, 7=3-7-7, 11=3-7-7 Max Horiz 2=-24 (LC 10), 7=-24 (LC 10)

Max Uplift 2=-21 (LC 12), 4=-21 (LC 12), 7=-21 (LC 12), 11=-21 (LC 12) Max Grav 2=110 (LC 1), 4=110 (LC 1), 6=135

(LC 1), 7=110 (LC 1), 11=110 (LC

FORCES

(lb) - Maximum Compression/Maximum

TOP CHORD 1-2=0/16, 2-3=-34/50, 3-4=-33/45, 4-5=0/16

BOT CHORD 2-6=-4/39, 4-6=-4/39 WEBS 3-6=-62/25

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=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
- 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 verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 4-0-0 oc.
- 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.
- All bearings are assumed to be SP No.2.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 2, 21 lb uplift at joint 4, 21 lb uplift at joint 2 and 21 lb uplift at joint 4.
- 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



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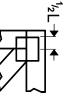


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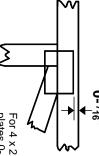


Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

4 × 4

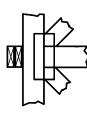
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



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

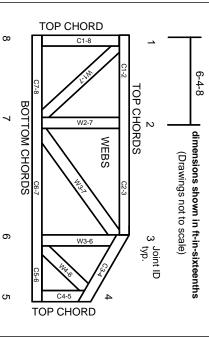
Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction Design Standard for Bracing.

Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-22:

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282 ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- 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 Tor I bracing should be considered.

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Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.

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- 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.

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- 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.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- 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.
- 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.
- 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.
- The design does not take into account any dynamic or other loads other than those expressly stated.

