

RE: P250360-01
Roof - BY Lot 2050

MiTek, Inc.
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information:

Customer: Clayton Properties Project Name: P250360-01
Lot/Block: 2050 Model: Heather Transitional
Address: 1432 Silo St. Subdivision: Bailey Farms
City: Lee's Summit State: MO

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-16 Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 23 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I68913058	A1	10/16/2024	21	I68913078	V5	10/16/2024
2	I68913059	A2	10/16/2024	22	I68913079	V6	10/16/2024
3	I68913060	A3	10/16/2024	23	I68913080	V7	10/16/2024
4	I68913061	A4	10/16/2024				
5	I68913062	A5	10/16/2024				
6	I68913063	A6	10/16/2024				
7	I68913064	A7	10/16/2024				
8	I68913065	A8	10/16/2024				
9	I68913066	B1	10/16/2024				
10	I68913067	B2	10/16/2024				
11	I68913068	B3	10/16/2024				
12	I68913069	B4	10/16/2024				
13	I68913070	C1	10/16/2024				
14	I68913071	C2	10/16/2024				
15	I68913072	PB1	10/16/2024				
16	I68913073	PB2	10/16/2024				
17	I68913074	V1	10/16/2024				
18	I68913075	V2	10/16/2024				
19	I68913076	V3	10/16/2024				
20	I68913077	V4	10/16/2024				

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

Truss Design Engineer's Name: Sevier, Scott

My license renewal date for the state of Missouri is December 31, 2025.

Missouri COA: 001193

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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



October 16, 2024

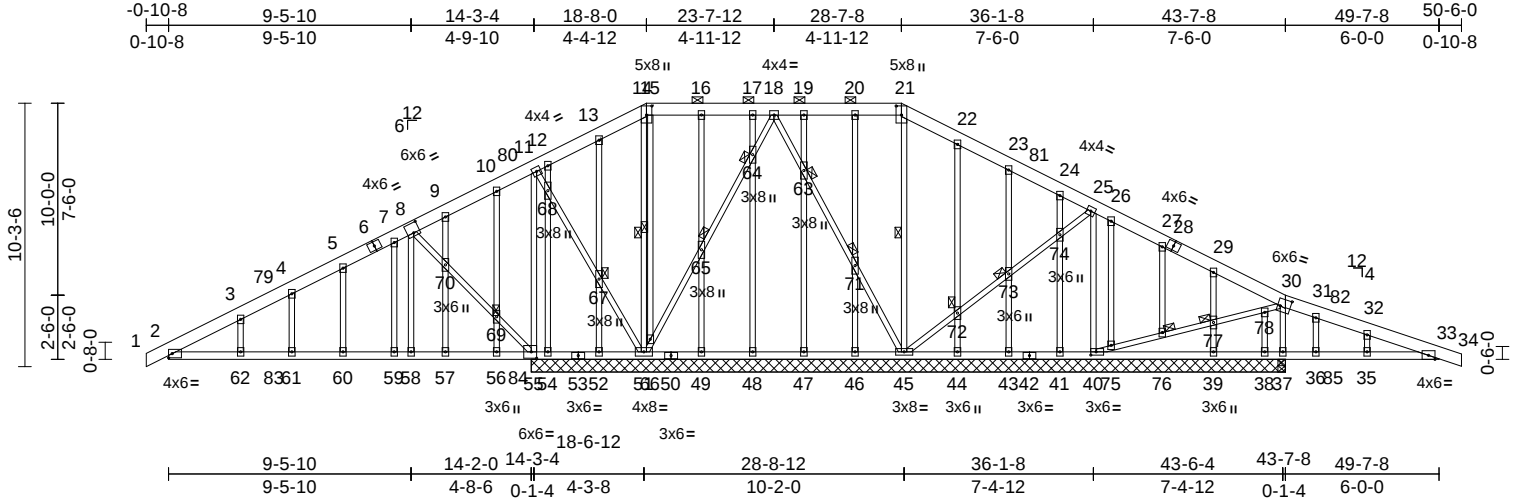
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050	RELEASE FOR CONSTRUCTION
P250360-01	A1	Piggyback Base Structural Gable	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168913058 LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:55 Page: 1

ID: jRjVuSRmtuG2PnuKUZ?DXkg?FV-RfC?PsB70Hq3NSgPqnL8w3ulTXbCKWrcDdnJ423C2f

09/19/2025



Scale = 1:90

Plate Offsets (X, Y): [8:0-3-0,0-4-8], [14:0-4-4,0-2-8], [21:0-4-4,0-2-8], [30:0-4-12,0-3-8], [40:0-2-8,0-1-8], [55:0-2-8,0-3-0]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.01	39-40	>999	240	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.02	39-40	>999	180	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.04	37	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 346 lb FT = 20%											

LUMBER		FORCES	
TOP CHORD	2x6 SPF No.2	(lb) - Maximum Compression/Maximum Tension	
BOT CHORD	2x4 SP No.2	TOP CHORD	
WEBS	2x3 SPF No.2	1-2=0/12, 2-3=-943/798, 3-4=-975/850,	
OTHERS	2x3 SPF No.2	4-5=-995/911, 5-7=-1015/975,	
BRACING		7-8=-1050/1016, 8-9=-1410/1356,	
TOP CHORD	Structural wood sheathing directly applied or 5-1-4 oc purlins, except 2-0-0 oc purlins (8-2-4 max.): 14-21.	9-10=-1485/1463, 10-11=-1450/1460,	
BOT CHORD	Rigid ceiling directly applied or 5-0-4 oc bracing.	11-12=-1159/1177, 12-13=-981/1053,	
WEBS	1 Row at midpt 14-51, 21-45, 15-66	13-14=-899/1004, 14-15=-809/909,	
JOINTS	1 Brace at Jt(s): 63, 64, 65, 67, 69, 71, 72, 73, 76, 77	15-16=-804/904, 16-17=-804/904,	
REACTIONS		17-18=-804/904, 18-19=-391/615,	
(size)	37=0-3-8, 38=29-5-8, 39=29-5-8, 40=29-5-8, 41=29-5-8, 43=29-5-8, 44=29-5-8, 45=29-5-8, 46=29-5-8, 47=29-5-8, 48=29-5-8, 49=29-5-8, 52=29-5-8, 54=29-5-8, 55=29-5-8	19-20=-391/615, 20-21=-392/616,	
Max Horiz	55=-179 (LC 13)	21-22=-468/704, 22-23=-542/730,	
Max Uplift	37=-504 (LC 9), 38=-386 (LC 26), 39=-111 (LC 13), 40=-35 (LC 25), 41=-36 (LC 13), 43=-56 (LC 13), 44=-56 (LC 13), 45=-28 (LC 9), 46=-35 (LC 9), 47=-20 (LC 9), 48=-9 (LC 8), 49=-47 (LC 8), 52=-69 (LC 12), 54=-81 (LC 12), 55=-296 (LC 12)	23-24=-593/722, 24-25=-595/673,	
Max Grav	37=1037 (LC 26), 38=200 (LC 9), 39=326 (LC 26), 40=215 (LC 26), 41=77 (LC 26), 43=161 (LC 1), 44=226 (LC 1), 45=296 (LC 26), 46=218 (LC 1), 47=130 (LC 26), 48=118 (LC 25), 49=332 (LC 25), 52=306 (LC 1), 54=317 (LC 25), 55=1416 (LC 25)	25-26=-498/636, 26-27=-484/590,	
		27-29=-499/541, 29-30=-539/570,	
		30-31=-957/846, 31-32=-992/857,	
		32-33=-960/806, 33-34=0/12	
		BOT CHORD	
		2-62=-731/977, 61-62=-731/977,	
		60-61=-731/977, 59-60=-731/977,	
		58-59=-731/977, 57-58=-731/977,	
		56-57=-731/977, 55-56=-731/977,	
		54-55=-1328/1655, 52-54=-1328/1655,	
		51-52=-1328/1655, 49-51=-738/985,	
		48-49=-738/985, 47-48=-738/985,	
		46-47=-738/985, 45-46=-738/985,	
		44-45=-489/652, 43-44=-489/652,	
		41-43=-489/652, 40-41=-489/652,	
		39-40=-777/995, 38-39=-777/995,	
		37-38=-777/995, 36-37=-755/973,	
		35-36=-755/973, 33-35=-755/973	



October 16, 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 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.sbcsccomponents.com)

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050
P250360-01	A1	Piggyback Base Structural Gable	1	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168913058
LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:55 Page: 2

ID:RjVjVuSRmtuG2PnuKUz?DXKyg?FV-RfC?PsB70Hq3NSgPqnL8w3ulTXbCKWrCDn7d423C2f

05/19/2025

WEBS 8-58=-204/151, 8-70=-897/1040,
69-70=-838/970, 55-69=-867/1003,
14-51=-338/294, 21-45=-369/231,
45-72=-230/270, 72-73=-226/266,
73-74=-227/266, 25-74=-236/278,
25-40=-298/122, 40-75=-369/461,
75-76=-353/446, 76-77=-355/448,
77-78=-353/445, 30-78=-365/460,
30-37=-524/440, 18-63=-407/358,
63-71=-376/331, 45-71=-372/327,
51-66=-477/541, 65-66=-397/480,
64-65=-420/500, 18-64=-458/548,
19-63=-94/37, 47-63=-89/44, 17-64=-78/34,
48-64=-93/32, 16-65=-235/153,
49-65=-261/176, 15-66=-99/71,
13-67=-235/164, 52-67=-227/158,
12-68=-433/392, 54-68=-421/380,
10-69=-123/55, 56-69=-82/38,
9-70=-183/116, 57-70=-85/61, 7-59=-103/67,
5-60=-67/51, 4-61=-67/48, 3-62=-88/57,
20-71=-186/105, 46-71=-182/102,
22-72=-192/141, 44-72=-188/134,
23-73=-118/94, 43-73=-116/94,
24-74=-67/30, 41-74=-72/37, 26-75=-53/51,
27-76=-12/12, 29-77=-215/147,
39-77=-227/155, 38-78=-39/52,
31-36=-122/83, 32-35=-131/77,
11-55=-600/528, 11-68=-873/900,
67-68=-862/890, 51-67=-855/883

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 18-8-0, Exterior(2R) 18-8-0 to 23-7-12, Interior (1) 23-7-12 to 28-7-8, Exterior(2R) 28-7-8 to 33-7-8, Interior (1) 33-7-8 to 50-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch 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) Provide adequate drainage to prevent water ponding.
- 5) All plates are 3x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 296 lb uplift at joint 55, 28 lb uplift at joint 45, 35 lb uplift at joint 40, 20 lb uplift at joint 47, 9 lb uplift at joint 48, 47 lb uplift at joint 49, 69 lb uplift at joint 52, 81 lb uplift at joint 54, 35 lb uplift at joint 46, 56 lb uplift at joint 44, 56 lb uplift at joint 43, 36 lb uplift at joint 41, 111 lb uplift at joint 39, 386 lb uplift at joint 38 and 504 lb uplift at joint 37.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

 **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.sbcsccomponents.com)

MiTek®

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

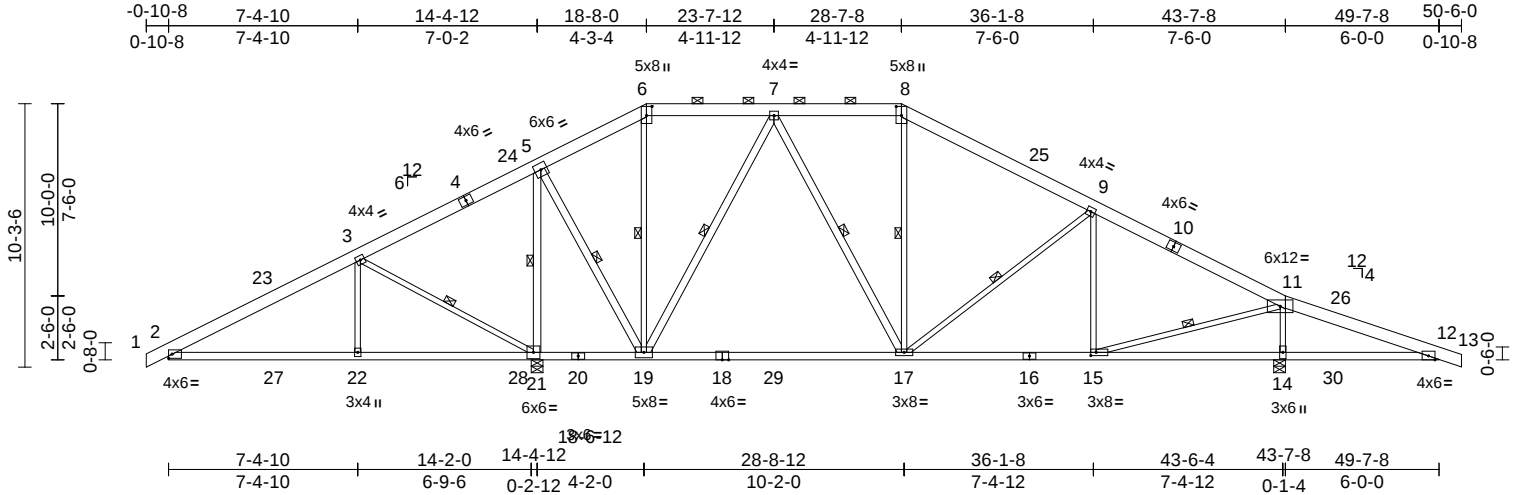
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050	RELEASE FOR CONSTRUCTION
P250360-01	A2	Piggyback Base	6	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168913059 LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:57 Page: 1

ID: jRjVuSRmtuG2PnuKUz?DXKyq?FV-RfC?PsB70Hq3NSgPqnL8w3ulTXbCKWwCDn7d423C2f

05/19/2025



Scale = 1:90

Plate Offsets (X, Y): [6:0-4-4,0-2-8], [8:0-4-4,0-2-8], [15:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.55	0.62	17-19	>560	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	0.48	17-19	>731	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.86	0.01	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S						Weight: 272 lb	FT = 20%

LUMBER		
TOP CHORD	2x6 SPF No.2	
BOT CHORD	2x4 SP No.2	
WEBS	2x3 SPF No.2 *Except*	
	5-21,5-19,7-17,7-19:2x4 SP No.2	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 5-8-6 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-8.	
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 2-2-0 oc bracing: 19-21 6-7-7 oc bracing: 15-17.	
WEBS	1 Row at midpt 6-19, 8-17, 9-17, 11-15, 5-21, 5-19, 3-21, 7-17, 7-19	
REACTIONS (size) 14=0-5-8, 21=0-5-8		
	Max Horiz	21=185 (LC 17)
	Max Uplift	14=568 (LC 9), 21=614 (LC 8)
	Max Grav	14=1826 (LC 26), 21=2948 (LC 1)
FORCES (lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-2=0/12, 2-3=-853/838, 3-5=-1579/1588, 5-6=-347/614, 6-7=-263/504, 7-8=-662/685, 8-9=-871/707, 9-11=-1040/793, 11-12=-1007/922, 12-13=0/12	
BOT CHORD	2-22=-610/833, 21-22=-610/833, 19-21=-1331/1672, 17-19=-146/452, 15-17=-526/834, 14-15=-873/1068, 12-14=-795/1002	
WEBS	6-19=-494/277, 8-17=-216/68, 9-17=-301/395, 9-15=-355/156, 11-15=-1581/1772, 11-14=-1659/1330, 5-21=-2452/2465, 5-19=-2005/1821, 3-21=-829/978, 3-22=-497/327, 7-17=-869/653, 7-19=-1093/1074	

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 18-8-0, Exterior(2R) 18-8-0 to 23-7-12, Interior (1) 23-7-12 to 28-7-8, Exterior(2R) 28-7-8 to 33-7-8, Interior (1) 33-7-8 to 50-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 568 lb uplift at joint 14 and 614 lb uplift at joint 21.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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



October 16,2024

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)

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050
P250360-01	A3	Piggyback Base	2	1	Job Reference (optional)

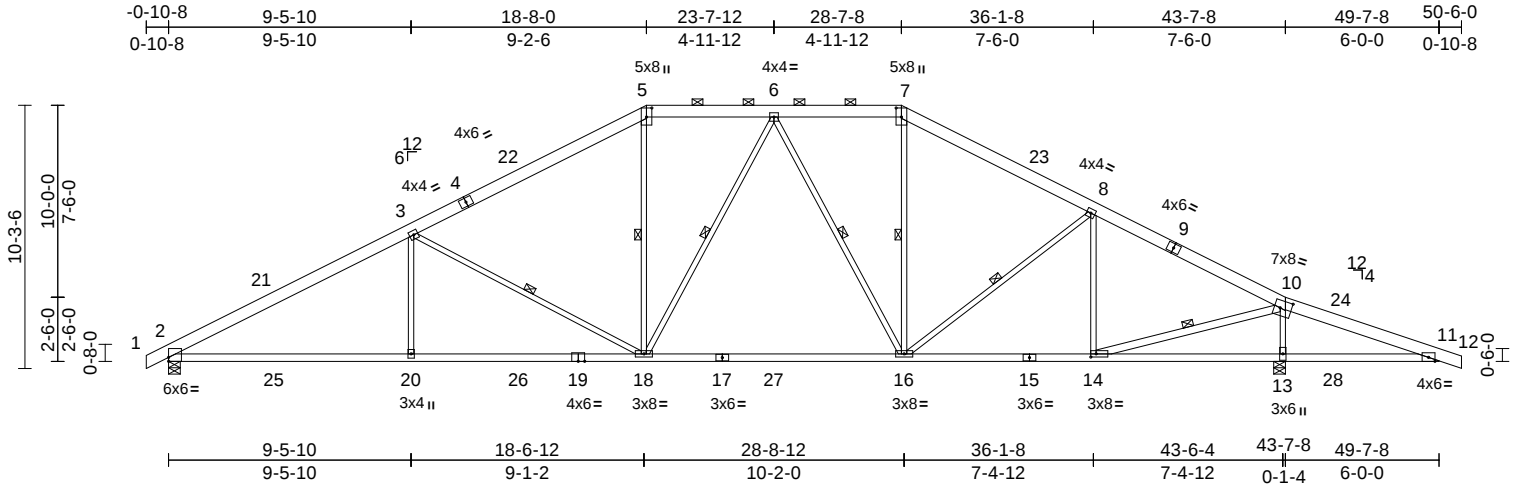
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:57 AM Page: 1

ID: CpRVt7ams0odYdBf7pXnXoyfzw6-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi734zJC7

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168913060
LEE'S SUMMIT, MISSOURI

05/19/2025



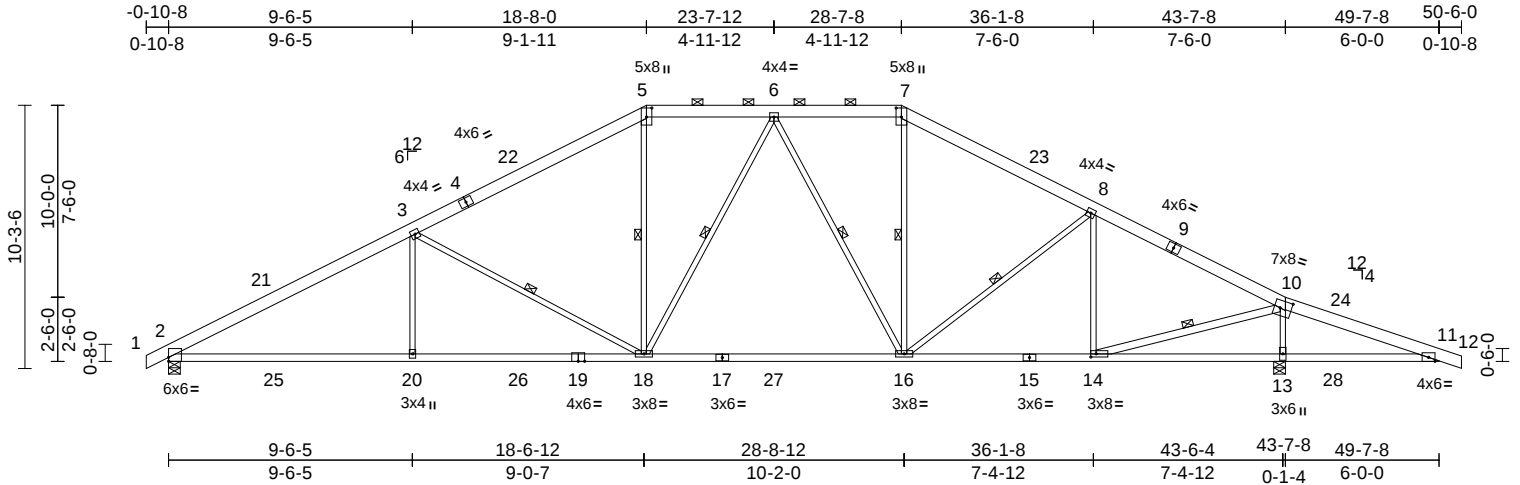
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050	RELEASE FOR CONSTRUCTION
P250360-01	A4	Piggyback Base	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168913061 LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:57 AM Page: 1

ID: iRkjcRmBkBN0lyG89lvmGyfzti-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWCD0i7J4zC0H

05/19/2025



Scale = 1:90

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	0.70	16-18	>737	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	0.53	16-18	>978	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.11	13	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 243 lb FT = 20%											

LUMBER
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SP 2400F 2.0E *Except*
17-15,19-17:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 14-10:2x4 SP No.2

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

REACTIONS (size) 2=0-5-8, 13=0-5-8
Max Horiz 2=-185 (LC 13)
Max Uplift 2=-523 (LC 9), 13=-750 (LC 9)
Max Grav 2=1978 (LC 1), 13=2606 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/12, 2-3=-3376/3430, 3-5=-2506/2671,
5-6=-2088/2438, 6-7=-1864/2238,
7-8=-2221/2432, 8-10=-2139/2249,
10-11=-994/911, 11-12=0/12
BOT CHORD 2-20=-2887/2886, 18-20=-2887/2886,
16-18=-1937/2054, 14-16=-1828/1816,
13-14=-902/1103, 11-13=-785/990
WEBS 5-18=-946/571, 7-16=-840/534,
8-16=-147/216, 8-14=-643/407,
10-14=-2870/2822, 10-13=-2430/2279,
3-18=-917/1000, 3-20=-571/385,
6-16=-543/337, 6-18=-220/190

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8,
Interior (1) 4-1-8 to 18-8-0, Exterior(2R) 18-8-0 to
23-7-12, Interior (1) 23-7-12 to 28-7-8, Exterior(2R)
28-7-8 to 33-7-8, Interior (1) 33-7-8 to 50-6-0 zone;
cantilever left and right exposed; end vertical left and
right exposed; porch right exposed;C-C for members
and forces & MWFRS for reactions shown; Lumber
DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 5) All bearings are assumed to be SP 2400F 2.0E crushing
capacity of 805 psi.
- 6) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 523 lb uplift at
joint 2 and 750 lb uplift at joint 13.
- 7) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 8) 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



October 16,2024

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.sbcsccomponents.com)

MiTek®

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

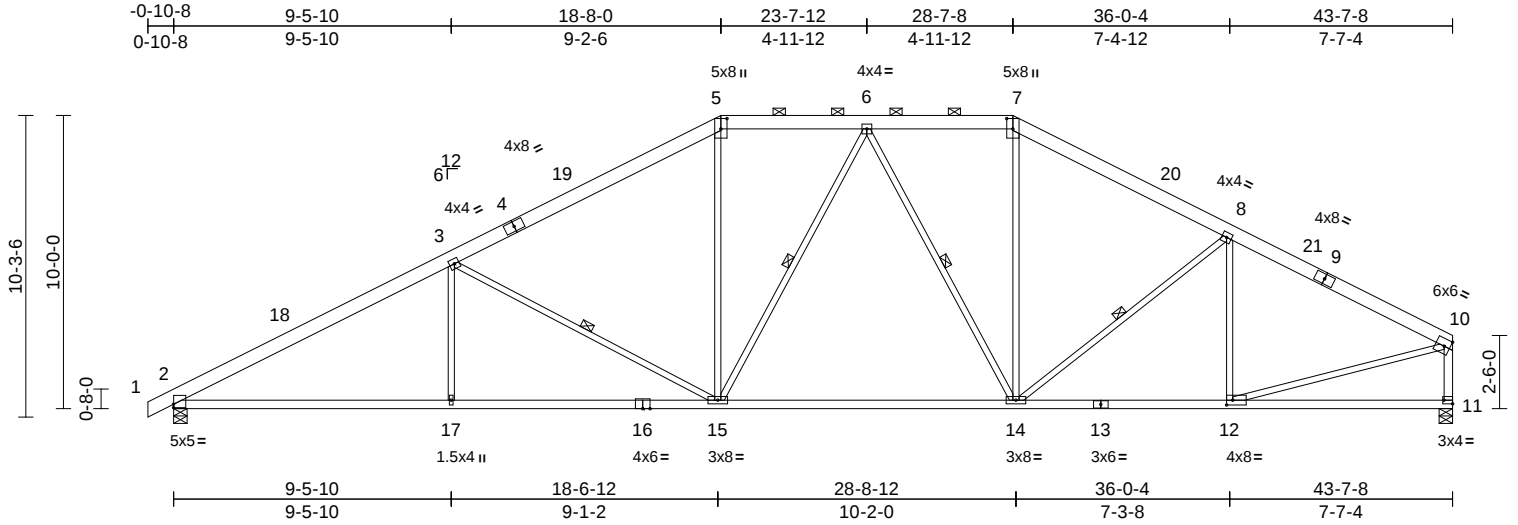
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050	RELEASE FOR CONSTRUCTION
P250360-01	A5	Piggyback Base	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168913062 LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:57 AM Page: 1

ID:yFuqM6NfS_ism7L39qByOVyfsV-RfC?PsB70Hq3NSgPqnL8w3uITXbGfWwCD0i73420C7f

05/19/2025



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

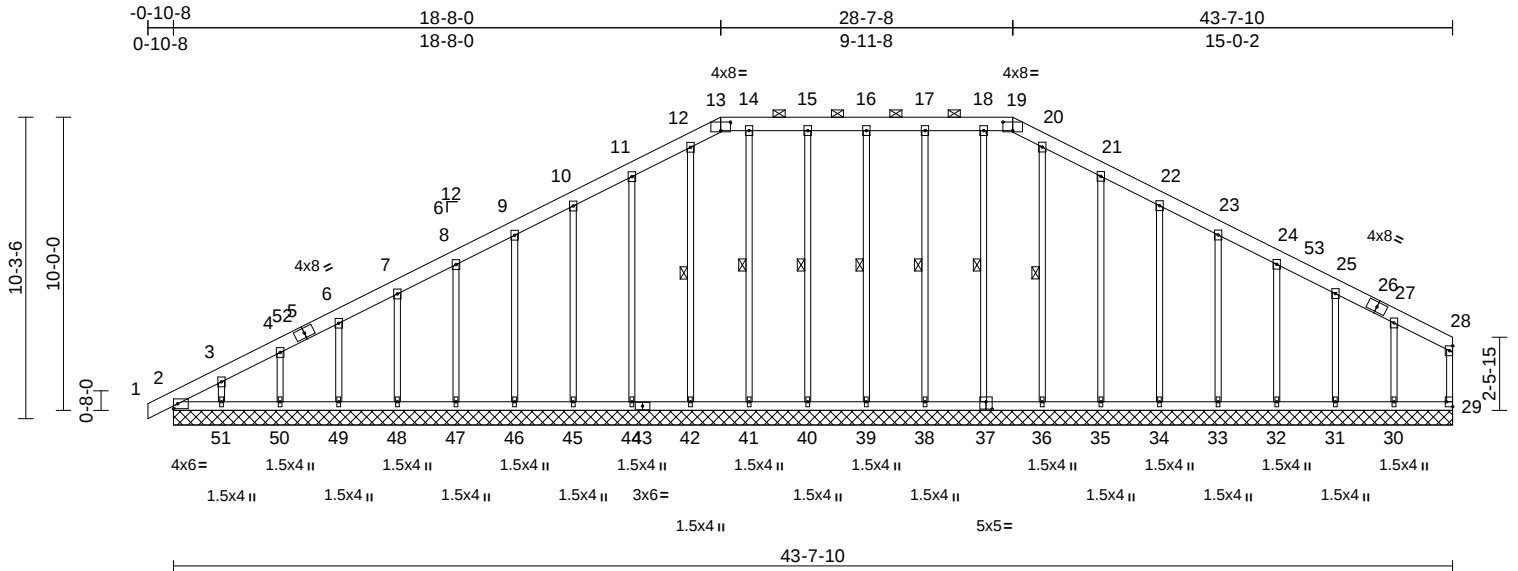
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168913064 LEE'S SUMMIT, MISSOURI
P250360-01	A7	Piggyback Base Supported Gable	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:57 Page: 1

ID:0f61Y0b5thaOB1TXH_PexyflxL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKVrCDoi7J4zJCn

05/19/2025



Scale = 1:78.6

Plate Offsets (X, Y): [13:0-4-0,0-3-8], [19:0-4-0,0-3-8], [29:Edge,0-2-8], [37:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	29	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 259 lb FT = 20%											

LUMBER

TOP CHORD	2x6 SPF No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 13-19.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
WEBS	1 Row at midpt	20-36, 18-37, 17-38, 16-39, 15-40, 14-41, 12-42

REACTIONS (size)

Max Horiz	2=202 (LC 9)
Max Uplift	2=-78 (LC 8), 29=-13 (LC 12), 30=-78 (LC 13), 31=-60 (LC 13), 32=-61 (LC 13), 33=-61 (LC 13), 34=-65 (LC 13), 35=-69 (LC 13), 37=-8 (LC 9), 38=-41 (LC 8), 39=-46 (LC 8), 40=-43 (LC 8), 41=-14 (LC 9), 42=-2 (LC 9), 44=-67 (LC 12), 45=-64 (LC 12), 46=-61 (LC 12), 47=-61 (LC 12), 48=-61 (LC 12), 49=-61 (LC 12), 50=-64 (LC 12), 51=-85 (LC 12)

Max Grav	2=170 (LC 20), 29=74 (LC 1), 30=189 (LC 26), 31=180 (LC 1), 32=180 (LC 26), 33=180 (LC 1), 34=180 (LC 1), 35=180 (LC 1), 36=178 (LC 26), 37=180 (LC 1), 38=184 (LC 25), 39=181 (LC 26), 40=183 (LC 26), 41=180 (LC 25), 42=179 (LC 25), 44=180 (LC 1), 45=180 (LC 1), 46=180 (LC 25), 47=180 (LC 25), 48=180 (LC 25), 49=179 (LC 1), 50=184 (LC 25), 51=157 (LC 25)
----------	---

FORCES

TOP CHORD	(lb) - Maximum Compression/Maximum Tension 1-2=0/12, 2-3=-233/141, 3-4=-178/135, 4-6=-153/149, 6-7=-138/175, 7-8=-122/202, 8-9=-123/249, 9-10=-141/303, 10-11=-161/359, 11-12=-181/416, 12-13=-178/414, 13-14=-169/413, 14-15=-169/413, 15-16=-169/413, 16-17=-169/413, 17-18=-169/413, 18-19=-169/413, 19-20=-178/414, 20-21=-181/417, 21-22=-161/360, 22-23=-141/304, 23-24=-122/250, 24-25=-104/197, 25-27=-85/143, 27-28=-65/87, 28-29=-61/67, 2-51=-44/66, 50-51=-44/66, 49-50=-44/66, 48-49=-44/66, 47-48=-44/66, 46-47=-44/66, 45-46=-44/66, 44-45=-44/66, 42-44=-44/66, 41-42=-44/66, 40-41=-44/66, 39-40=-44/66, 38-39=-44/66, 36-38=-45/66, 35-36=-45/65, 34-35=-45/65, 33-34=-45/65, 32-33=-45/65, 31-32=-45/65, 30-31=-45/65, 29-30=-45/65
BOT CHORD	

WEBS

27-30=-147/171, 25-31=-140/142, 24-32=-140/105, 23-33=-140/96, 22-34=-140/101, 21-35=-140/105, 20-36=-139/0, 18-37=-140/32, 17-38=-143/75, 16-39=-141/83, 15-40=-143/74, 14-41=-140/38, 12-42=-139/26, 11-44=-140/106, 10-45=-140/101, 9-46=-140/96, 8-47=-140/96, 7-48=-140/97, 6-49=-139/96, 4-50=-144/137, 3-51=-120/144

NOTES

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



October 16, 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 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.sbcsccomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050
P250360-01	A7	Piggyback Base Supported Gable	1	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168913064
LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:57 Page: 2

ID:0f61Y0b5thaOB1TXH_PexqyfxL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKvtrCDoi7J4zdCn

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Corner(3E) -0-10-8 to 4-1-8,
Exterior(2N) 4-1-8 to 18-8-0, Corner(3R) 18-8-0 to
23-7-10, Exterior(2N) 23-7-10 to 28-7-8, Corner(3R)
28-7-8 to 33-7-10, Exterior(2N) 33-7-10 to 43-6-6 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) Provide adequate drainage to prevent water ponding.
- 5) All plates are 3x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 9) All bearings are assumed to be SP No.2 crushing
capacity of 565 psi.
- 10) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 13 lb uplift at joint
29, 78 lb uplift at joint 2, 78 lb uplift at joint 30, 60 lb
uplift at joint 31, 61 lb uplift at joint 32, 61 lb uplift at joint
33, 65 lb uplift at joint 34, 69 lb uplift at joint 35, 8 lb
uplift at joint 37, 41 lb uplift at joint 38, 46 lb uplift at joint
39, 43 lb uplift at joint 40, 14 lb uplift at joint 41, 2 lb
uplift at joint 42, 67 lb uplift at joint 44, 64 lb uplift at joint
45, 61 lb uplift at joint 46, 61 lb uplift at joint 47, 61 lb
uplift at joint 48, 61 lb uplift at joint 49, 64 lb uplift at joint
50 and 85 lb uplift at joint 51.
- 11) Beveled plate or shim required to provide full bearing
surface with truss chord at joint(s) 2.
- 12) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.

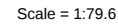
LOAD CASE(S) Standard

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

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.sbcsccomponents.com)

MiTek®

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



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.33	19	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.74	21-23	>705	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.80	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 247 lb	FT = 20%

WEBS 3-25=0/382, 3-23=-914/366, 5-23=-47/613,
7-21=-109/690, 11-18=-1351/289,
13-15=-89/229, 6-21=-527/169,
6-23=-237/182, 8-21=-278/217,
8-18=-646/3406, 8-20=-1257/255,
18-20=-403/2467, 12-15=-873/182,
11-17=-16/200

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8,
Interior (1) 4-1-8 to 18-8-0, Exterior(2R) 18-8-0 to
23-7-12, Interior (1) 23-7-12 to 28-7-8, Exterior(2R)
28-7-8 to 33-7-8, Interior (1) 33-7-8 to 43-5-14 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) The Fabrication Tolerance at joint 18 = 12%
- 6) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 7) All bearings are assumed to be SP 1650F 1.5E crushing
capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 299 lb uplift at
joint 2 and 232 lb uplift at joint 14.
- 9) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.

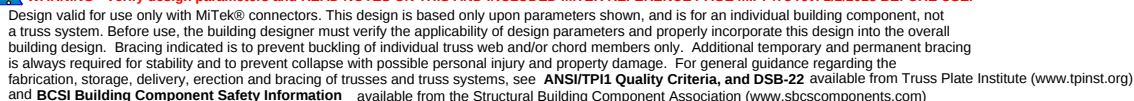
LOAD CASE(S) Standard

TOP CHORD 1-2=0/12, 2-3=-3475/567, 3-5=-2607/539,
5-6=-2178/547, 6-7=-1994/518,
7-8=-2320/537, 8-10=-5182/1020,
10-11=-5299/975, 11-12=-6117/1113,
12-13=-870/213, 13-14=-1600/279

BOT CHORD 2-25=-554/2974, 23-25=-554/2974,
21-23=-346/2168, 20-21=-343/2116,
19-20=-3/34, 18-19=0/94, 10-18=0/122,
17-18=-1062/5779, 12-17=-1010/5524,
16-17=-74/434, 15-16=-52/259,
14-15=-50/109



October 16, 2024



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

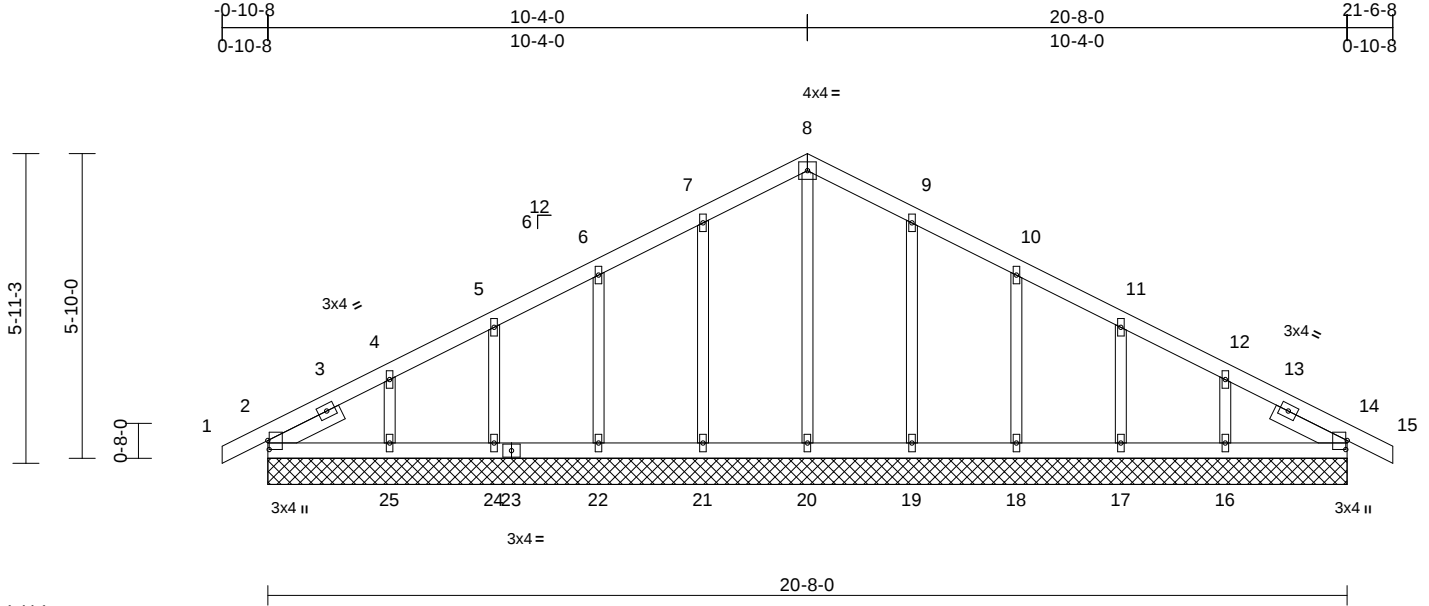
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050	RELEASE FOR CONSTRUCTION
P250360-01	B1	Common Supported Gable	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						168913066
						LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:58 Page: 1

ID: QVJbkrrd9q5Za6?NSBmKI2yfx1-RfC?PsB70Hq3NSgPqnL8w3uITxbGKwTCDoi7J4zJCn

05/19/2025



Scale = 1:44.1									
Plate Offsets (X, Y): [2:0-2-1,0-0-5], [14:0-2-1,0-0-5]									
Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	14	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
PLATES MT20 GRIP 197/144									
Weight: 95 lb FT = 20%									

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-6-7, Right 2x4 SP No.2 -- 1-6-7

WEBS
8-20=-116/6, 7-21=-145/93, 6-22=-135/99,
5-24=-134/113, 4-25=-146/180,
9-19=-145/93, 10-18=-135/99,
11-17=-134/114, 12-16=-146/177

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=20-8-0, 14=20-8-0, 16=20-8-0,
17=20-8-0, 18=20-8-0, 19=20-8-0,
20=20-8-0, 21=20-8-0, 22=20-8-0,
24=20-8-0, 25=20-8-0
Max Horiz 2=102 (LC 12)
Max Uplift 2=-25 (LC 13), 14=-3 (LC 9),
16=-83 (LC 13), 17=-54 (LC 13),
18=-62 (LC 13), 19=-59 (LC 13),
21=-60 (LC 12), 22=-61 (LC 12),
24=-53 (LC 12), 25=-91 (LC 12)
Max Grav 2=174 (LC 1), 14=174 (LC 1),
16=194 (LC 26), 17=170 (LC 1),
18=174 (LC 1), 19=183 (LC 26),
20=155 (LC 22), 21=183 (LC 25),
22=174 (LC 1), 24=170 (LC 1),
25=194 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-133/55, 4-5=-83/70,
5-6=-65/98, 6-7=-62/153, 7-8=-80/204,
8-9=-80/204, 9-10=-62/152, 10-11=-58/99,
11-12=-59/38, 12-14=-101/18, 14-15=0/5
2-25=-22/116, 24-25=-22/116, 22-24=-22/116,
21-22=-22/116, 20-21=-22/116,
19-20=-22/116, 18-19=-22/116,
17-18=-22/116, 16-17=-22/116,
14-16=-22/116

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-10-8 to 4-4-0, Exterior(2N) 4-4-0 to 10-4-0, Corner(3R) 10-4-0 to 15-4-0, Exterior(2N) 15-4-0 to 21-6-8 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.
 - 4) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 2, 3 lb uplift at joint 14, 60 lb uplift at joint 21, 61 lb uplift at joint 22, 53 lb uplift at joint 24, 91 lb uplift at joint 25, 59 lb uplift at joint 19, 62 lb uplift at joint 18, 54 lb uplift at joint 17 and 83 lb uplift at joint 16.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 16, 2024

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 the 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.sbcsccomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050
P250360-01	B2	Common	8	1	Job Reference (optional)

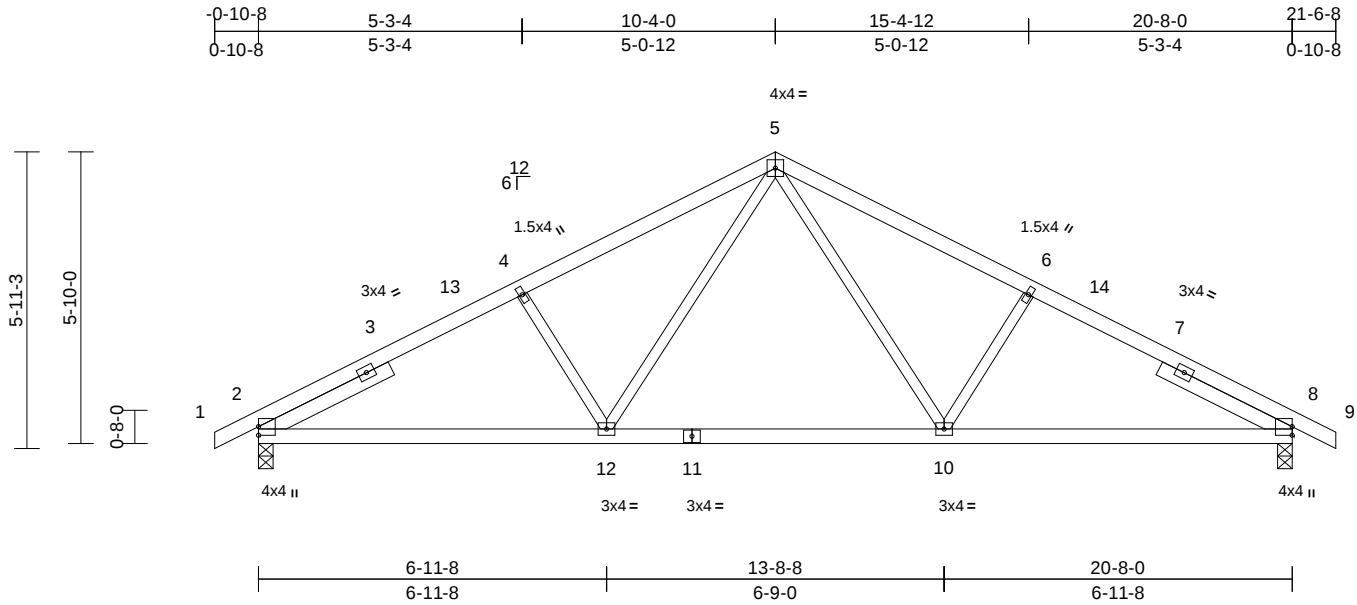
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168913067
LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:58 Page: 1

ID:0BAuge0Ps8saGG33G70cK?yflwp-RfC?PsB70Hq3NSgPqnL8w3uITxbGhWrCD0i13420C?

05/19/2025



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.06	2-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.13	2-12	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 92 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 2-11-0, Right 2x4 SP No.2 -- 2-11-0

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 2 and 163 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard**BRACING**

TOP CHORD	Structural wood sheathing directly applied or 4-5-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	2=0-3-8, 8=0-3-8
Max Horiz	2=106 (LC 16)
Max Uplift	2=-163 (LC 12), 8=-163 (LC 13)
Max Grav	2=991 (LC 1), 8=991 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/6, 2-4=-1495/366, 4-5=-1316/378, 5-6=-1316/378, 6-8=-1495/366, 8-9=0/6
BOT CHORD	2-12=-249/1244, 10-12=-87/876, 8-10=-242/1244
WEBS	5-10=-113/466, 6-10=-298/211, 5-12=-113/466, 4-12=-298/211

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 10-4-0, Exterior(2R) 10-4-0 to 15-5-11, Interior (1) 15-5-11 to 21-6-8 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



October 16, 2024

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.sbcsccomponents.com)

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050
P250360-01	B3	Common	1	1	Job Reference (optional)

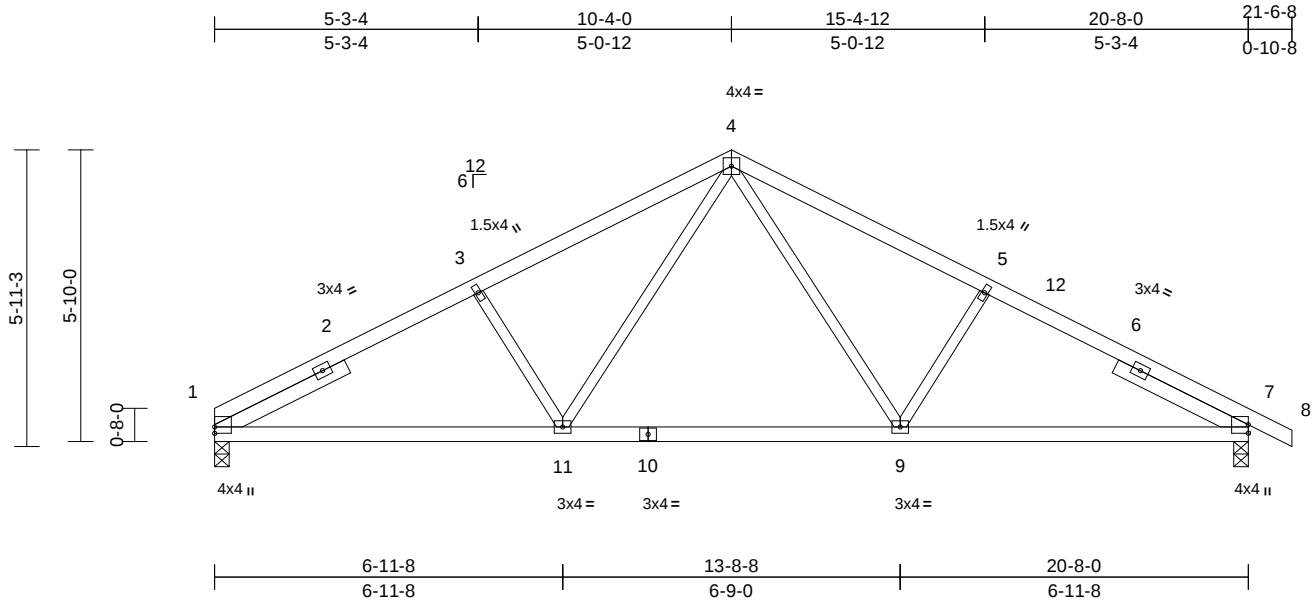
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168913068
LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:58 Page: 1

ID:UfFhSoEidg70Q1RXKvLq2oyflwX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwVrCDoi7J42JGZ1

05/19/2025



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.06	1-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.14	1-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 91 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-11-0, Right 2x4 SP No.2 -- 2-11-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-4-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 7=0-3-8
Max Horiz 1=-107 (LC 13)
Max Uplift 1=-140 (LC 12), 7=-163 (LC 13)
Max Grav 1=929 (LC 1), 7=993 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1501/374, 3-4=-1323/387, 4-5=-1319/382, 5-7=-1497/370, 7-8=0/6
BOT CHORD 1-11=-252/1252, 9-11=-88/879, 7-9=-246/1246
WEBS 4-9=-113/465, 5-9=-298/211, 4-11=-115/472, 3-11=-302/213

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-2-5, Interior (1) 5-2-5 to 10-4-0, Exterior(2R) 10-4-0 to 15-5-11, Interior (1) 15-5-11 to 21-6-8 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
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 140 lb uplift at joint 1 and 163 lb uplift at joint 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard



October 16, 2024

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.sbcsccomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050
P250360-01	B4	Common	2	1	Job Reference (optional)

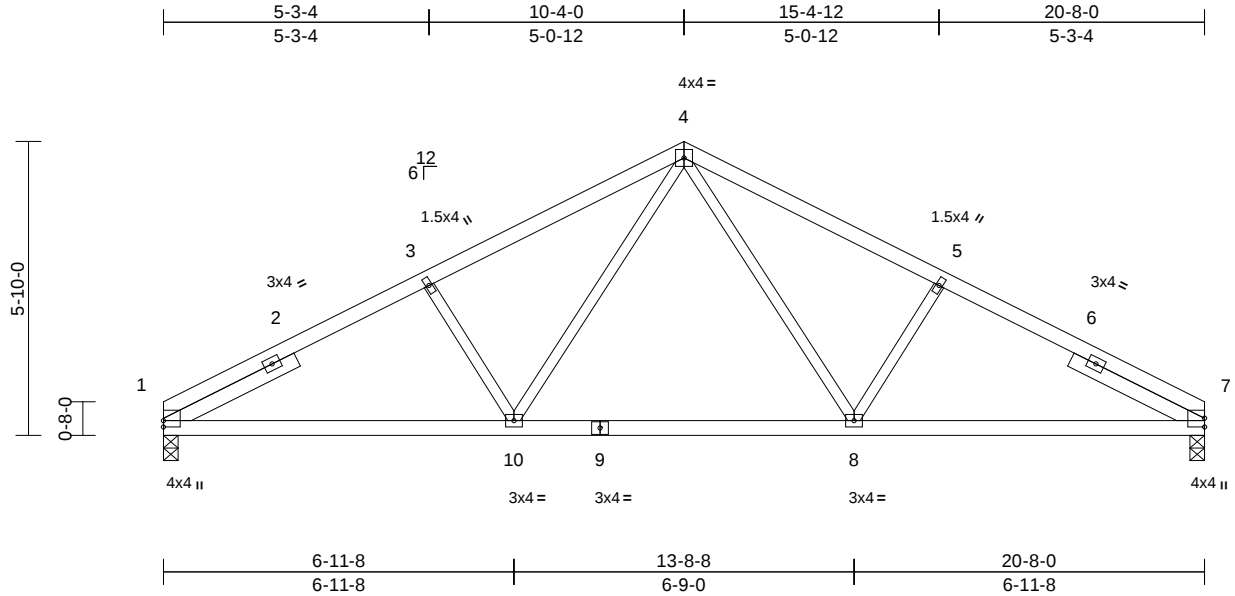
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168913069
LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:58 Page: 1

ID:jOI5LSLLVQGk?PdGMI?xwhyflwO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcD0i734z3C4f

05/19/2025



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.06	1-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.14	1-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 89 lb	FT = 20%

LUMBER		
TOP CHORD	2x4 SP No.2	
BOT CHORD	2x4 SP No.2	
WEBS	2x3 SPF No.2	
SLIDER	Left 2x4 SP No.2 -- 2-11-0, Right 2x4 SP No.2 -- 2-11-0	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 4-4-14 oc purlins.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
REACTIONS		
(size)	1=0-3-8, 7=0-3-8	
Max Horiz	1=104 (LC 16)	
Max Uplift	1=-140 (LC 12), 7=-140 (LC 13)	
Max Grav	1=930 (LC 1), 7=930 (LC 1)	
FORCES		
(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-3=-1504/375, 3-4=-1325/388, 4-5=-1325/388, 5-7=-1504/375	
BOT CHORD	1-10=-260/1254, 8-10=-95/881, 7-8=-252/1254	
WEBS	4-8=-115/471, 5-8=-302/213, 4-10=-115/471, 3-10=-302/213	

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 140 lb uplift at joint 1 and 140 lb uplift at joint 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-2-5, Interior (1) 5-2-5 to 10-4-0, Exterior(2R) 10-4-0 to 15-5-11, Interior (1) 15-5-11 to 20-8-0 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
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



October 16, 2024

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.sbcsccomponents.com)

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

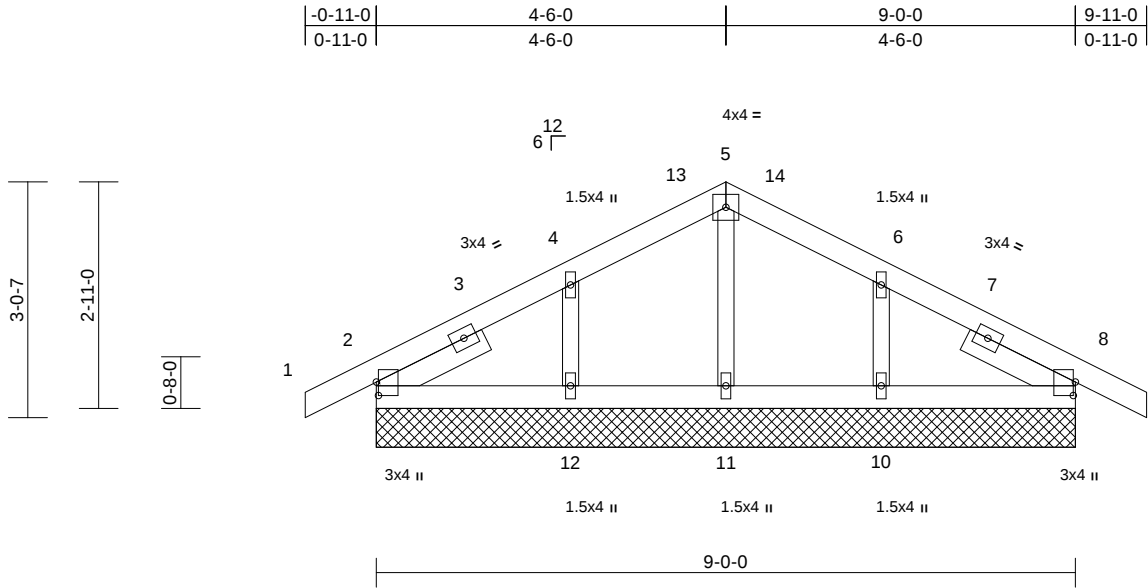
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168913070 LEE'S SUMMIT, MISSOURI
P250360-01	C1	Common Supported Gable	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:58 Page: 1

ID:WmYWIMzx9NMmnWJn4KNvGBByVCTs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrC00n74zJCm

05/19/2025



Scale = 1:29.7

Plate Offsets (X, Y): [2:0-2-1,0-0-5], [8:0-2-1,0-0-5]												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 40 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-6-7, Right 2x4 SP No.2 -- 1-6-7

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=9-0-0, 8=9-0-0, 10=9-0-0, 11=9-0-0, 12=9-0-0
Max Horiz 2=-51 (LC 13)
Max Uplift 2=-38 (LC 12), 8=-49 (LC 13), 10=-82 (LC 13), 12=-86 (LC 12)
Max Grav 2=194 (LC 1), 8=194 (LC 1), 10=226 (LC 26), 11=103 (LC 1), 12=226 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/7, 2-4=-97/72, 4-5=-83/179, 5-6=-83/177, 6-8=-97/64, 8-9=0/7
BOT CHORD 2-12=-1/50, 11-12=-1/50, 10-11=-1/50, 8-10=-1/50
WEBS 5-11=-71/0, 4-12=-172/240, 6-10=-172/239

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 4-6-0, Corner(3R) 4-6-0 to 9-6-0, Exterior(2N) 9-6-0 to 9-11-0 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.
- 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.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 2, 49 lb uplift at joint 8, 86 lb uplift at joint 12 and 82 lb uplift at joint 10.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 16, 2024

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.sbcsccomponents.com)

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050
P250360-01	C2	Common	3	1	Job Reference (optional)

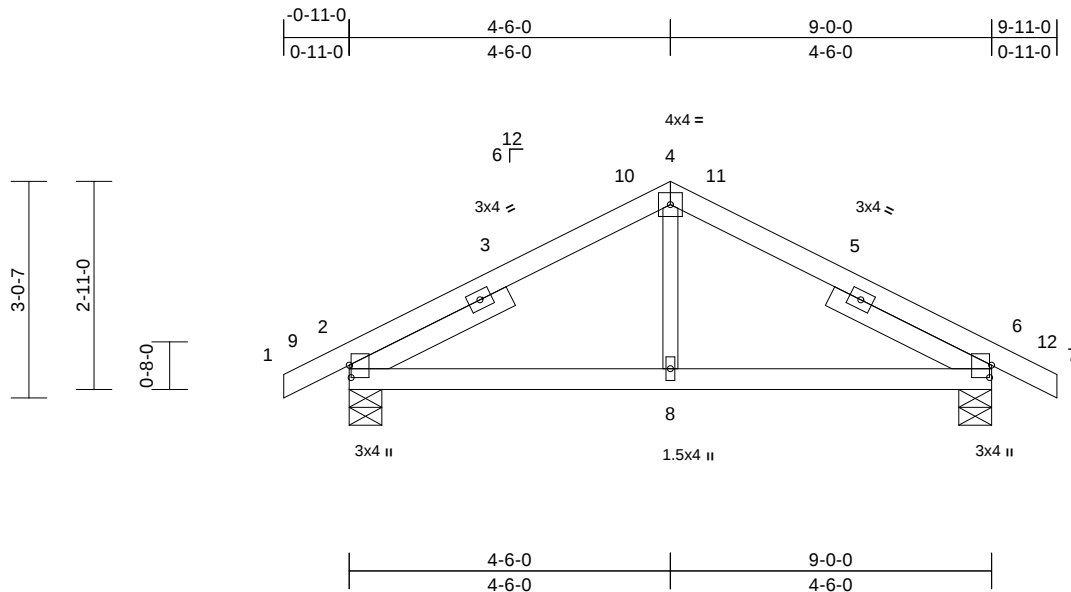
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168913071
LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:59 Page: 1

ID:w4IDMZp9S4bI6MF5GO7diEyVCU4-RfC?PsB70Hq3NSgPqnL8w3uITXbCKWvCDnFd423C2f

05/19/2025



Scale = 1:32.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.01	6-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.03	2-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 41 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 2-5-12, Right 2x4 SP No.2 -- 2-5-12

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 2 and 84 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard**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=0-5-8, 6=0-5-8

Max Horiz	2=-51 (LC 17)
Max Uplift	2=-84 (LC 12), 6=-84 (LC 13)
Max Grav	2=469 (LC 1), 6=469 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/7, 2-4=-504/219, 4-6=-504/219, 6-7=0/7

BOT CHORD 2-8=-78/358, 6-8=-78/358

WEBS 4-8=0/223

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 4-6-0, Exterior(2R) 4-6-0 to 9-6-0, Interior (1) 9-6-0 to 9-11-0 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.



October 16, 2024

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.sbcsccomponents.com)

MiTek®

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

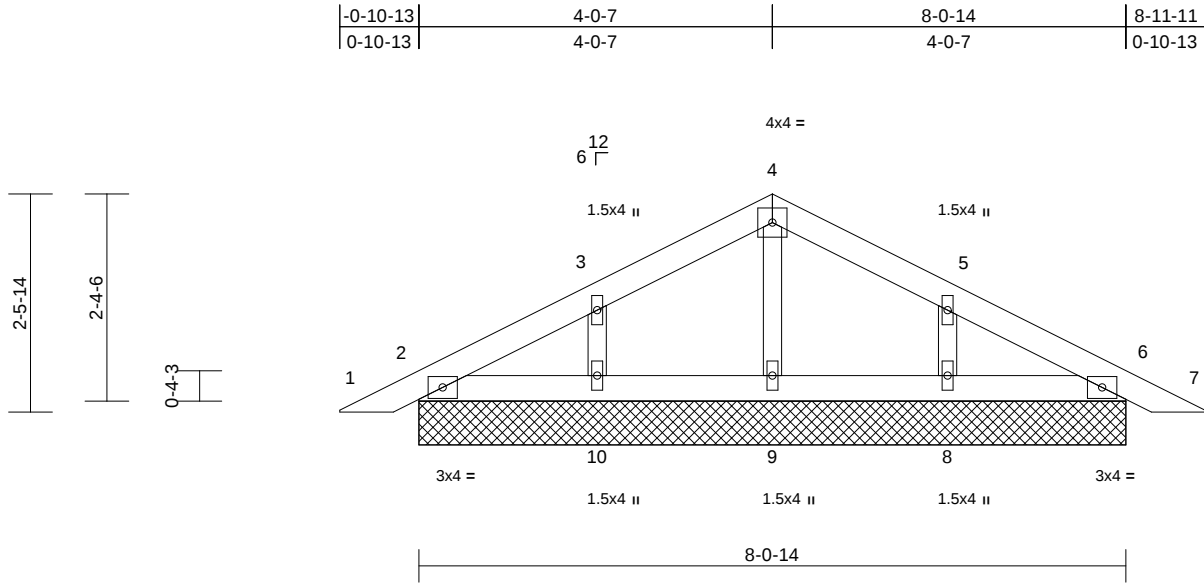
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050	RELEASE FOR CONSTRUCTION
P250360-01	PB1	Piggyback	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168913072 LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:59 Page: 1

ID:bVprKjSRme?E92axrqcClOyEKKk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwVrCDoi7J42JG4H

05/19/2025



Scale = 1:26.3

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 31 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x3 SPF No.2

BRACING

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

REACTIONS	(size)	2=8-0-14, 6=8-0-14, 8=8-0-14, 9=8-0-14, 10=8-0-14
	Max Horiz	2=42 (LC 12)
	Max Uplift	2=-19 (LC 12), 6=-27 (LC 13), 8=-73 (LC 13), 10=-73 (LC 12)
	Max Grav	2=123 (LC 1), 6=123 (LC 1), 8=206 (LC 1), 9=127 (LC 1), 10=206 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/16, 2-3=-53/37, 3-4=-52/91, 4-5=-52/96, 5-6=-43/26, 6-7=0/16
BOT CHORD	2-10=-13/47, 9-10=-13/47, 8-9=-13/47, 6-8=-13/47
WEBS	4-9=-91/12, 3-10=-161/207, 5-8=-161/167

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- 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.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 2, 27 lb uplift at joint 6, 73 lb uplift at joint 10 and 73 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



October 16, 2024

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.sbcsccomponents.com)

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050
P250360-01	PB2	Piggyback	19	1	Job Reference (optional)

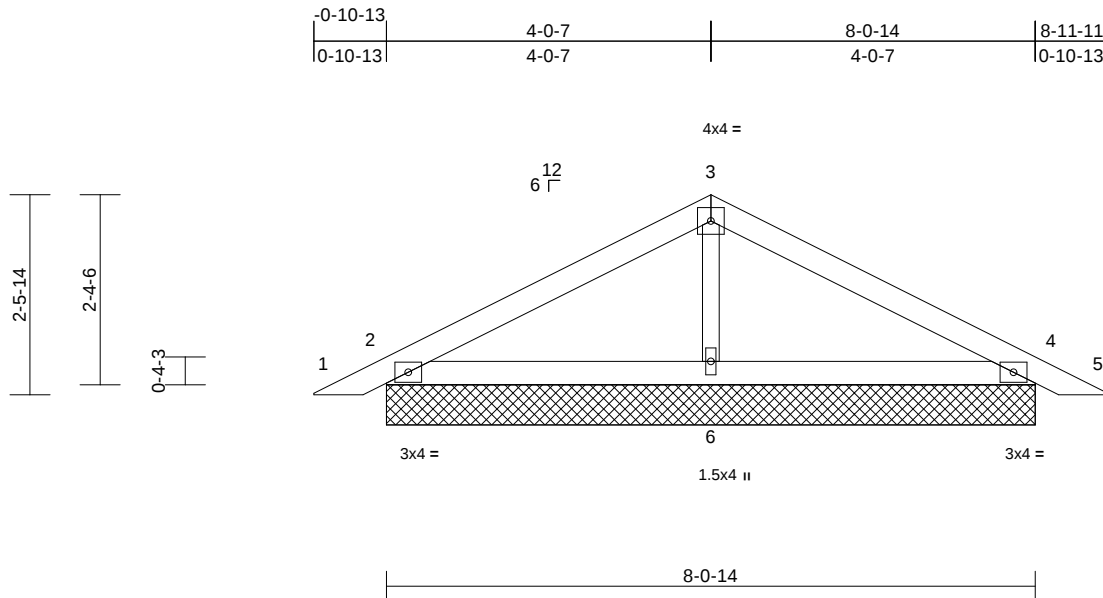
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168913073
LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:59 Page: 1

ID:2gTEca?b?MopBwu2y9rhbyEKGA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDof4423C#f

05/19/2025



Scale = 1:28.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.35	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P						Weight: 30 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2

BRACING

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

REACTIONS

(size) 2=8-0-14, 4=8-0-14, 6=8-0-14
Max Horiz 2=44 (LC 12)
Max Uplift 2=-67 (LC 12), 4=-75 (LC 13), 6=-8 (LC 12)
Max Grav 2=234 (LC 1), 4=234 (LC 1), 6=341 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/17, 2-3=-92/76, 3-4=-92/87, 4-5=0/17
BOT CHORD 2-6=0/46, 4-6=0/46
WEBS 3-6=-240/180

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- 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.

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 2, 75 lb uplift at joint 4 and 8 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



October 16, 2024

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.sbcsccomponents.com)

MiTek®

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

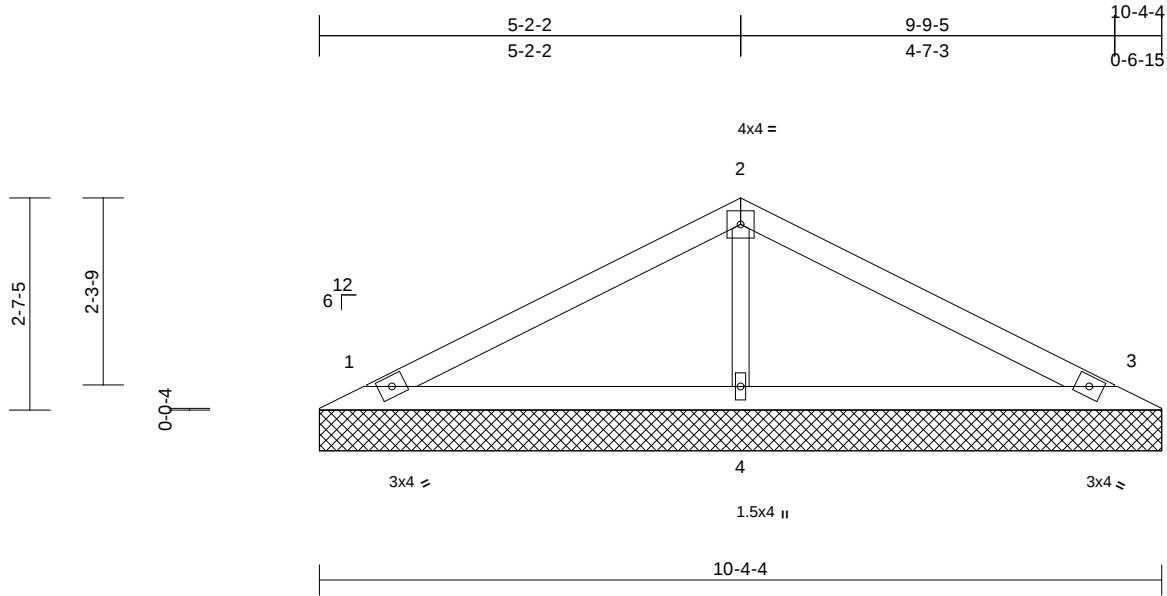
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168913074 LEE'S SUMMIT, MISSOURI
P250360-01	V1	Valley	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:59 Page: 1

ID: CxUcOGNIFs5XKdCnOMY6Payfiv2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoh7J423Cpf

05/19/2025



Scale = 1:28.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 32 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x3 SPF No.2

BRACING

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

REACTIONS	(size)	1=10-4-4, 3=10-4-4, 4=10-4-4
	Max Horiz	1=43 (LC 16)
	Max Uplift	1=-46 (LC 12), 3=-54 (LC 13), 4=-35 (LC 12)
	Max Grav	1=195 (LC 25), 3=195 (LC 26), 4=438 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-119/74, 2-3=-119/81
BOT CHORD	1-4=-3/50, 3-4=-3/50
WEBS	2-4=-299/210

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 1, 54 lb uplift at joint 3 and 35 lb uplift at joint 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 16, 2024

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.sbcsccomponents.com)

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050
P250360-01	V2	Valley	1	1	Job Reference (optional)

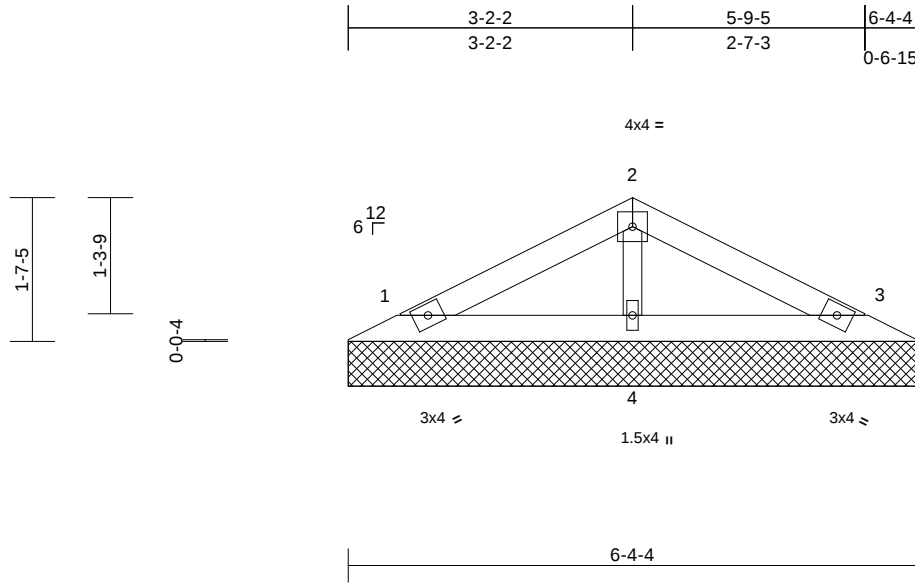
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168913075
LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:59 Page: 1

ID:5ik6EeQoJ4czoEWZdCd2Zgyflv_RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4ZJC9

05/19/2025



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2

BRACING

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

REACTIONS

(size) 1=6-4-4, 3=6-4-4, 4=6-4-4
Max Horiz 1=25 (LC 12)
Max Uplift 1=-32 (LC 12), 3=-36 (LC 13), 4=-8 (LC 12)
Max Grav 1=122 (LC 1), 3=122 (LC 1), 4=223 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-59/47, 2-3=-59/54
BOT CHORD 1-4=-1/26, 3-4=-1/26
WEBS 2-4=-158/139

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- 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.

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 1, 36 lb uplift at joint 3 and 8 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 16, 2024

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.sbcsccomponents.com)

MiTek®

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

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

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2050
P250360-01	V4	Valley	1	1	Job Reference (optional)

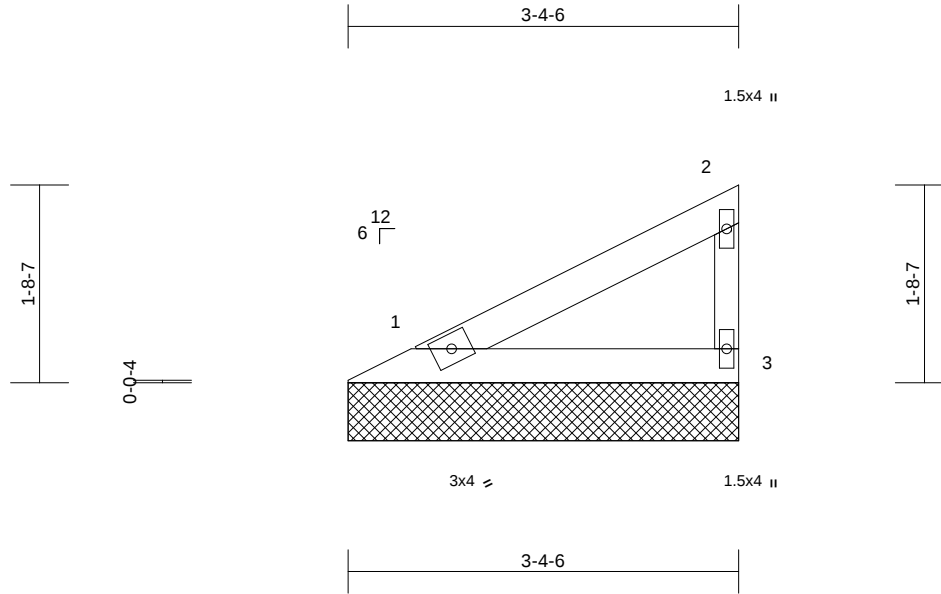
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168913077
LEE'S SUMMIT, MISSOURI

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:59 Page: 1

ID:RgX?HLUX8dEGv0OWQICDGjyfluv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoh74423C#f

05/19/2025



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2

8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-4-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=3-4-6, 3=3-4-6
Max Horiz 1=60 (LC 9)
Max Uplift 1=-19 (LC 12), 3=-34 (LC 12)
Max Grav 1=120 (LC 1), 3=120 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-84/57, 2-3=-94/121
BOT CHORD 1-3=-28/30

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) zone; cantilever left
and right exposed ; end vertical left and right
exposed;C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss
only. For studs exposed to wind (normal to the face),
see Standard Industry Gable End Details as applicable,
or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 4-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 6) All bearings are assumed to be SP No.2 crushing
capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 19 lb uplift at joint
1 and 34 lb uplift at joint 3.



October 16, 2024

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.sbcsccomponents.com)

MiTek®

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

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Oct 15 11:07:59 Page: 1

ID: _15GiA9FkqWtQZIfziGqc7zaioo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWCDoi7J4z5C?1

Scale = 1:33.3

LUMBER

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 1, 67 lb uplift at joint 3 and 43 lb uplift at joint 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

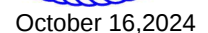
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

LOAD CASE(S) Standard

(lb) - Maximum Compression/Maximum Tension

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
 Vasd=91mph; TCdL=6.0psf; BCdL=6.0psf; h=35ft;
 Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
 exterior zone and C-C Exterior(2E) -0.1-15 to 4-10-1,
 Interior (1) 4-10-1 to 5-6-8, Exterior(2R) 5-6-8 to 10-6-8,
 Interior (1) 10-6-8 to 11-2-15 zone; cantilever left and
 right exposed ; end vertical left and right exposed; C-C
 for members and forces & MWFRS for reactions shown;
 Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4'-0" oc.



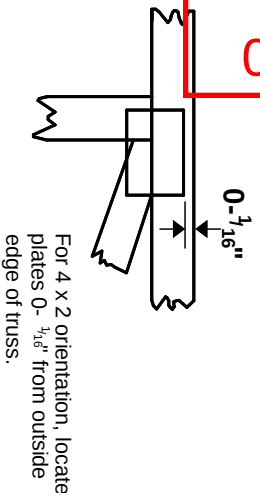
WARNING – Verify design parameters and READ NOTES ON THIS and INCLUDED MIRROR REFERENCE PAGE MIP7475 Rev. 12/2023 BEFORE USE. Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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/TP1 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.sbcsccomponents.com)

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

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.



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

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

PLATE SIZE

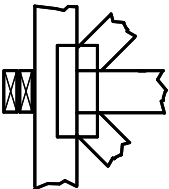
4 X 4
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

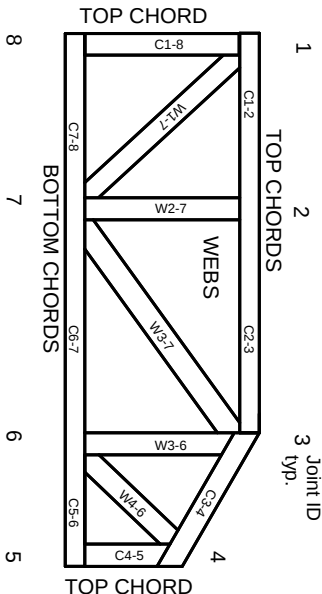


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:
ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

© 2023 MITek® All Rights Reserved



MITek Engineering Reference Sheet: MIL-7473 rev. 1/12/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.