MiTek®

RE: P240393

Site Information:

Customer: Clayton Properties   Project Name: P240393
Lot/Block: 192   Model:
Address: 3212 SW Arboridge Cir
City: Lee's Summit   Subdivision: Hawthorne Ridge
                                           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 24 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I65080517	A1	4/23/2024	21	I65080537	V6	4/23/2024
2	I65080518	A2	4/23/2024	22	I65080538	V07	4/23/2024
3	I65080519	A3	4/23/2024	23	I65080539	V7	4/23/2024
4	I65080520	A4	4/23/2024	24	I65080540	V8	4/23/2024
5	I65080521	A6	4/23/2024				
6	I65080522	A7	4/23/2024				
7	I65080523	B01	4/23/2024				
8	I65080524	B02	4/23/2024				
9	I65080525	C1	4/23/2024				
10	I65080526	C2	4/23/2024				
11	I65080527	C3	4/23/2024				
12	I65080528	C4	4/23/2024				
13	I65080529	C5	4/23/2024				
14	I65080530	PB1	4/23/2024				
15	I65080531	PB2	4/23/2024				
16	I65080532	V1	4/23/2024				
17	I65080533	V2	4/23/2024				
18	I65080534	V3	4/23/2024				
19	I65080535	V4	4/23/2024				
20	I65080536	V5	4/23/2024				

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
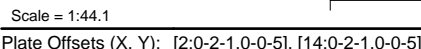My license renewal date for the state of Missouri is December 31, 2025.
Missouri COA: 001193

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.

April 23, 2024

1 of 1   Sevier, Scott

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	I65080517
P240393	A1	Common Supported Gable	1	1		

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,
Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:48:30
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Page: 1

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	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										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

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, 22=20-8-0, 23=20-8-0, 24=20-8-0, 25=20-8-0
Max Horiz   2=106 (LC 20)
Max Uplift   2=-27 (LC 17), 14=-4 (LC 13), 16=-85 (LC 17), 17=-56 (LC 17), 18=-64 (LC 17), 19=-61 (LC 17), 22=-62 (LC 16), 23=-63 (LC 16), 24=-55 (LC 16), 25=-93 (LC 16)
Max Grav   2=183 (LC 1), 14=183 (LC 1), 16=198 (LC 37), 17=218 (LC 24), 18=265 (LC 24), 19=276 (LC 24), 20=161 (LC 29), 22=276 (LC 23), 23=265 (LC 23), 24=218 (LC 23), 25=198 (LC 36)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/12, 2-4=-137/57, 4-5=-85/73, 5-6=-75/101, 6-7=-76/158, 7-8=-83/211, 8-9=-83/211, 9-10=-76/158, 10-11=-75/102, 11-12=-60/39, 12-14=-104/19, 14-15=0/12

BOT CHORD   2-25=-23/121, 24-25=-23/121, 23-24=-23/121, 22-23=-23/121, 20-22=-23/121, 19-20=-23/121, 18-19=-23/121, 17-18=-23/121, 16-17=-23/121, 14-16=-23/121

WEBS   8-20=-120/7, 7-22=-236/96, 6-23=-224/102, 5-24=-180/117, 4-25=-149/185, 9-19=-236/96, 10-18=-224/102, 11-17=-180/118, 12-16=-149/181

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 4-4-0, Exterior(2N) 4-4-0 to 10-4-0, Corner(3R) 10-4-0 to 15-4-0, Exterior(2N) 15-4-0 to 21-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3)   Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 1.5x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 2, 62 lb uplift at joint 22, 63 lb uplift at joint 23, 55 lb uplift at joint 24, 93 lb uplift at joint 25, 61 lb uplift at joint 19, 64 lb uplift at joint 18, 56 lb uplift at joint 17, 85 lb uplift at joint 16 and 4 lb uplift at joint 14.
14) 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

April 23,2024

Job	Truss	Truss Type	Qty	Ply		I65080518
P240393	A2	Common Structural Gable	1	1	Job Reference (optional)	

Scale = 1:59.5

Plate Offsets (X, Y): [2:0-2-1,0-0-5], [3:2-6-7,Edge], [18:Edge,0-2-1]

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	0.85	Vert(LL)	-0.09	18-20	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.19	18-20	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.03	18	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 166 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x3 SPF No.2
OTHERS   2x3 SPF No.2
SLIDER   Left 2x4 SP No.2 -- 4-3-11, Right 2x4 SP
            No.2 -- 4-3-11

BRACING
TOP CHORD   Structural wood sheathing directly applied or
            3-1-9 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc
            bracing,   Except:
            10-0-0 oc bracing: 20-21,18-20.
JOINTS   1 Brace at Jt(s): 30,
            31, 33, 34

REACTIONS (size)   2=10-3-8, 18=0-3-8, 24=0-3-8,
            25=10-3-8, 26=10-3-8, 27=10-3-8,
            28=10-3-8, 29=10-3-8
Max Horiz   2=153 (LC 20)
Max Uplift 2=-42 (LC 17), 18=-213 (LC 17),
            24=-161 (LC 16), 25=-107 (LC 23),
            26=-22 (LC 17), 27=-11 (LC 17),
            28=-62 (LC 16), 29=-101 (LC 16)
Max Grav   2=166 (LC 36), 18=1104 (LC 24),
            24=686 (LC 23), 25=75 (LC 24),
            26=607 (LC 24), 27=331 (LC 24),
            28=153 (LC 36), 29=281 (LC 1)

FORCES   (lb) - Maximum Compression/Maximum
            Tension
TOP CHORD   1-2=0/12, 2-3=-132/254, 3-5=-42/232,
            5-6=0/240, 6-7=-13/159, 7-9=-669/193,
            9-10=-721/221, 10-11=-704/248,
            11-12=-646/255, 12-13=-639/230,
            13-14=-707/213, 14-16=-845/201,
            16-18=-1653/298, 18-19=0/12

BOT CHORD   2-29=-192/119, 28-29=-194/119,
            27-28=-194/119, 26-27=-194/119,
            25-26=-194/119, 24-25=-194/119,
            23-24=-194/119, 21-23=-194/119,
            20-21=-148/1376, 18-20=-148/1376

WEBS   12-21=-65/241, 21-33=-895/294,
            33-34=-871/283, 16-34=-853/280,
            16-20=0/335, 7-32=-42/935, 31-32=-44/930,
            30-31=-41/918, 21-30=-44/947,
            7-26=-570/45, 11-30=-23/60,
            10-31=-283/116, 23-31=-301/120,
            9-32=-274/85, 25-32=-276/91, 6-27=-314/52,
            5-28=-122/83, 3-29=-216/135, 13-33=-47/22,
            14-34=-38/12

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) -0-11-0 to 4-1-0,
    Interior (1) 4-1-0 to 15-4-0, Exterior(2R) 15-4-0 to
    20-4-0, Interior (1) 20-4-0 to 31-7-0 zone; cantilever left
    and right exposed ; end vertical left and right
    exposed;C-C for members and forces & MWFRS for
    reactions shown; Lumber DOL=1.60 plate grip
    DOL=1.60
3)   Truss designed for wind loads in the plane of the truss
    only. For studs exposed to wind (normal to the face),
    see Standard Industry Gable End Details as applicable,
    or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15
    Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate
    DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9;
    Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this
    design.
6) This truss has been designed for greater of min roof live
    load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on
    overhangs non-concurrent with other live loads.
7) All plates are 1.5x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom
    chord live load nonconcurrent with any other live loads.
10) * 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 crushing
    capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to
    bearing plate capable of withstanding 42 lb uplift at joint
    2, 22 lb uplift at joint 26, 213 lb uplift at joint 18, 107 lb
    uplift at joint 25, 11 lb uplift at joint 27, 62 lb uplift at joint
    28, 101 lb uplift at joint 29 and 161 lb uplift at joint 24.
13) 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

April 23,2024

MiTek®

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

Job	Truss	Truss Type	Qty	Ply		I65080519
P240393	A3	Common	6	1	Job Reference (optional)	

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

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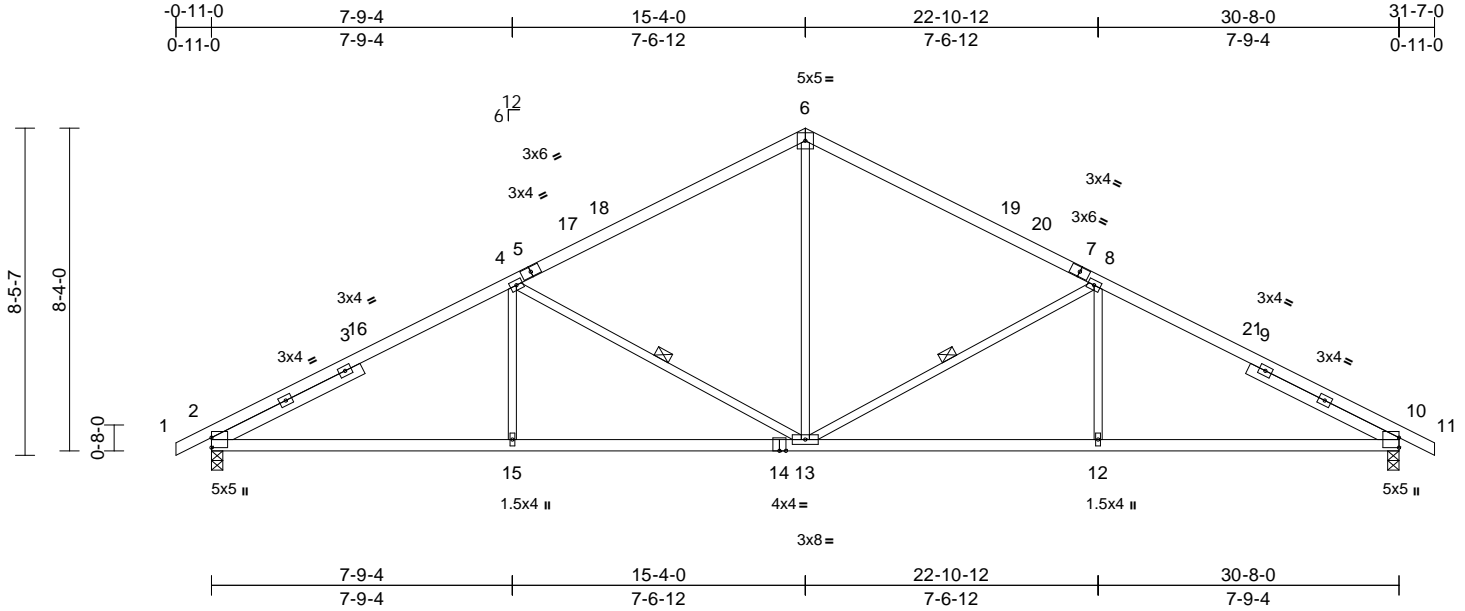
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Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15		TC	0.76	Vert(LL)	-0.10	12-13	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15		BC	0.71	Vert(CT)	-0.22	2-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES		WB	0.58	Horz(CT)	0.10	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014		Matrix-S								
BCDL	10.0											Weight: 139 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP 2400F 2.0E *Except* 1-5,7-11:2x4 SP 1650F 1.5E
BOT CHORD   2x4 SP No.2
WEBS   2x3 SPF No.2
SLIDER   Left 2x4 SP No.2 -- 4-3-11, Right 2x4 SP No.2 -- 4-3-11

BRACING
TOP CHORD   Structural wood sheathing directly applied or 4-0-8 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   8-13, 4-13

REACTIONS (size)   2=0-3-8, 10=0-3-8
Max Horiz   2=-153 (LC 17)
Max Uplift 2=-233 (LC 16), 10=-233 (LC 17)
Max Grav   2=1451 (LC 23), 10=1451 (LC 24)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/12, 2-4=-2366/375, 4-6=-1634/361, 6-8=-1634/361, 8-10=-2365/375, 10-11=0/12
BOT CHORD   2-15=-339/2003, 13-15=-339/2003, 12-13=-230/2003, 10-12=-230/2003
WEBS   6-13=-95/841, 8-13=-826/288, 8-12=0/322, 4-13=-826/287, 4-15=0/322

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 15-4-0, Exterior(2R) 15-4-0 to 20-4-0, Interior (1) 20-4-0 to 31-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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 233 lb uplift at joint 2 and 233 lb uplift at joint 10.
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

April 23,2024

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

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

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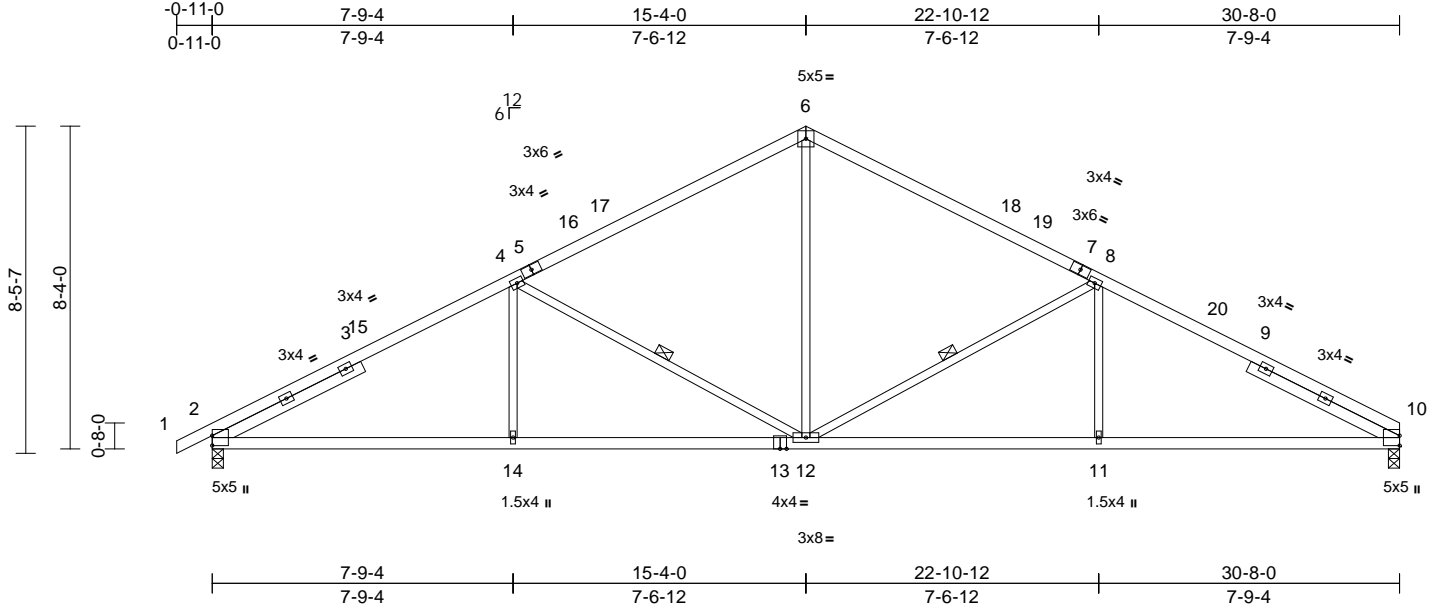
Scale = 1:59.5

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	0.76	Vert(LL)	-0.10	10-11	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.23	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.10	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 138 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP 2400F 2.0E *Except* 1-5,7-10:2x4 SP 1650F 1.5E
BOT CHORD   2x4 SP No.2
WEBS   2x3 SPF No.2
SLIDER   Left 2x4 SP No.2 -- 4-3-11, Right 2x4 SP No.2 -- 4-3-11

BRACING
TOP CHORD   Structural wood sheathing directly applied or 3-10-14 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   8-12, 4-12
REACTIONS   (size)   2=0-3-8, 10=0-3-8
Max Horiz   2=155 (LC 16)
Max Uplift   2=-233 (LC 16), 10=-209 (LC 17)
Max Grav   2=1452 (LC 23), 10=1386 (LC 24)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/12, 2-4=-2367/376, 4-6=-1636/362, 6-8=-1637/366, 8-10=-2371/386
BOT CHORD   2-14=-341/2004, 12-14=-341/2004, 11-12=-235/2009, 10-11=-235/2009
WEBS   6-12=-100/843, 8-12=-831/290, 8-11=0/325, 4-12=-826/287, 4-14=0/323

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 15-4-0, Exterior(2R) 15-4-0 to 20-4-0, Interior (1) 20-4-0 to 30-8-0 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

3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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 233 lb uplift at joint 2 and 209 lb uplift at joint 10.
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

April 23, 2024

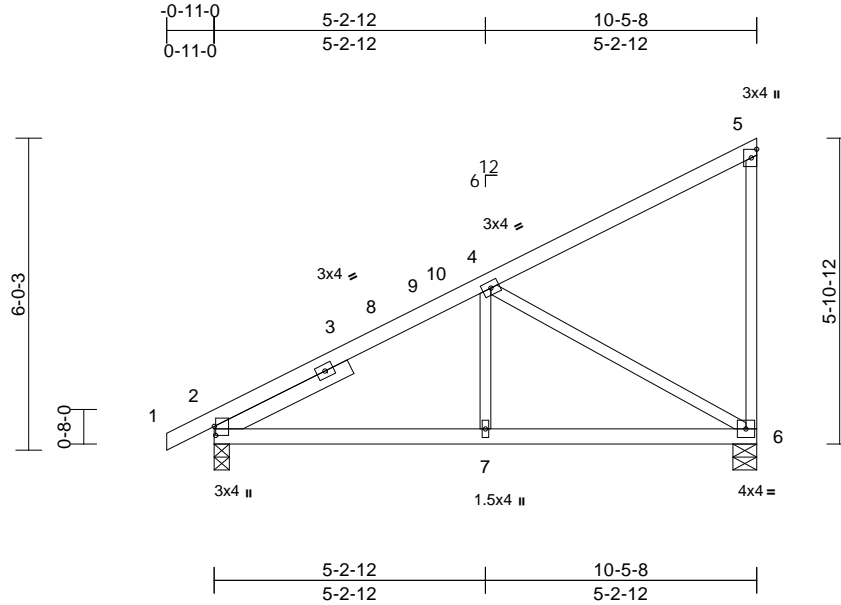| Job	Truss	Truss Type	Qty	Ply	
P240393	A6	Monopitch	3	1	I65080521
					Job Reference (optional)

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

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Scale = 1:44.4

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

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	0.61	Vert(LL)	-0.02	6-7	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.04	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 50 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 -- 2-10-10

BRACING
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 9-7-1 oc bracing.

REACTIONS (size)   2=0-3-8, 6=0-5-8
Max Horiz 2=248 (LC 13)
Max Uplift 2=-93 (LC 16), 6=-134 (LC 16)
Max Grav 2=599 (LC 23), 6=633 (LC 23)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/12, 2-4=-756/178, 4-5=-167/129, 5-6=-241/163
BOT CHORD   2-7=-360/609, 6-7=-360/609
WEBS   4-7=0/241, 4-6=-691/321

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 10-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.

4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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 134 lb uplift at joint 6 and 93 lb uplift at joint 2.
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.
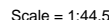
LOAD CASE(S) Standard

April 23,2024

Job	Truss	Truss Type	Qty	Ply	
P240393	A7	Monopitch Supported Gable	1	1	I65080522
					Job Reference (optional)

Scale = 1:44.5

Plate Offsets (X, Y): [2:0-2-1,0-0-5], [9:Edge,0-2-8]

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	0.39	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	9	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 50 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x3 SPF No.2
OTHERS   2x3 SPF No.2
SLIDER   Left 2x4 SP No.2 -- 1-6-7
BRACING
TOP CHORD   Structural wood sheathing directly applied or
            6-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc
            bracing.
REACTIONS (size)   2=10-5-8, 9=10-5-8, 10=10-5-8,
            11=10-5-8, 12=10-5-8, 13=10-5-8
            Max Horiz 2=248 (LC 13)
            Max Uplift 2=-7 (LC 12), 9=-33 (LC 13),
            10=-65 (LC 16), 11=-62 (LC 16),
            12=-52 (LC 16), 13=-106 (LC 16)
            Max Grav   2=192 (LC 27), 9=101 (LC 23),
            10=278 (LC 23), 11=266 (LC 23),
            12=214 (LC 23), 13=211 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
            Tension
TOP CHORD   1-2=0/12, 2-4=-419/244, 4-5=-313/190,
            5-6=-260/170, 6-7=-194/147, 7-8=-109/99,
            8-9=-85/61
BOT CHORD   2-13=-113/123, 12-13=-113/123,
            11-12=-113/123, 10-11=-113/123,
            9-10=-113/123
WEBS   7-10=-235/171, 6-11=-225/123,
            5-12=-177/104, 4-13=-160/195

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) -0-11-0 to 4-1-0,
Interior (1) 4-1-0 to 10-4-4 zone; cantilever left and right
exposed ; end vertical left and right exposed;C-C for
members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss
only. For studs exposed to wind (normal to the face),
see Standard Industry Gable End Details as applicable,
or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15
Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate
DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9;
Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this
design.
5) This truss has been designed for greater of min roof live
load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on
overhangs non-concurrent with other live loads.
6) All plates are 1.5x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
10) * 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 crushing
capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 33 lb uplift at joint
9, 7 lb uplift at joint 2, 65 lb uplift at joint 10, 62 lb uplift
at joint 11, 52 lb uplift at joint 12 and 106 lb uplift at joint
13.

13) 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

April 23,2024

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	
P240393	B01	Common	1	1	I65080523
					Job Reference (optional)

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

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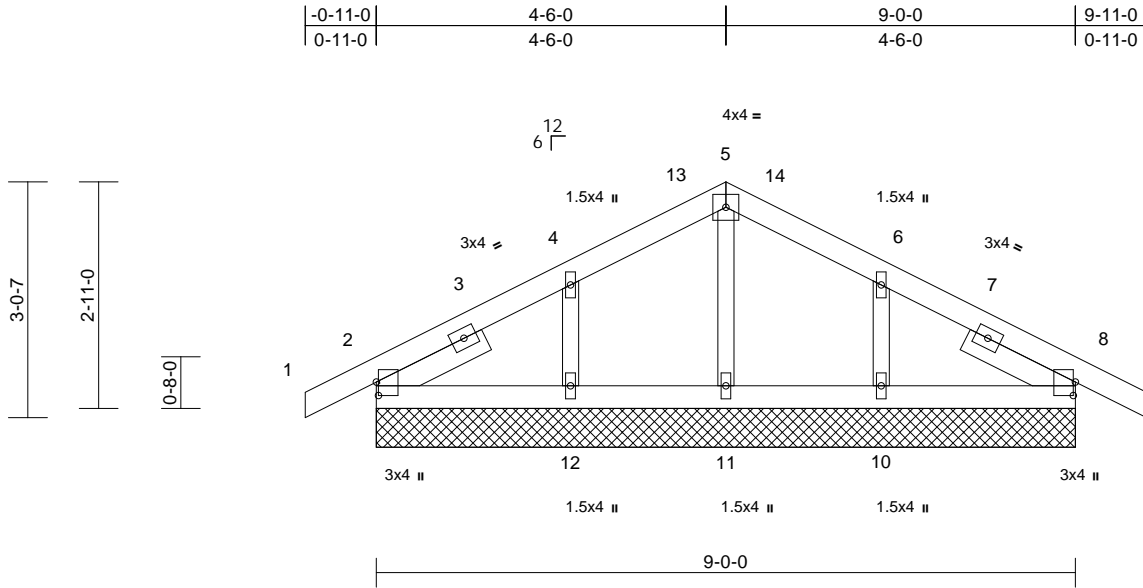
Scale = 1:29.7

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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										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 6-0-0 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 21)
              Max Uplift 2=-38 (LC 16), 8=-49 (LC 17),
                        10=-80 (LC 17), 12=-84 (LC 16)
              Max Grav 2=287 (LC 23), 8=287 (LC 24),
                        10=316 (LC 24), 11=116 (LC 24),
                        12=316 (LC 23)

FORCES   (lb) - Maximum Compression/Maximum
              Tension
TOP CHORD   1-2=0/12, 2-4=-136/77, 4-5=-107/177,
              5-6=-107/175, 6-8=-136/68, 8-9=0/12
BOT CHORD   2-12=-2/54, 11-12=-2/54, 10-11=-2/54,
              8-10=-2/54
WEBS   5-11=-83/0, 4-12=-262/223, 6-10=-262/221

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
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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15
    Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate
    DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9;
    Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this
    design.
6) This truss has been designed for greater of min roof live
    load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on
    overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom
    chord live load nonconcurrent with any other live loads.
10) * 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 crushing
    capacity of 565 psi.
12) 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, 84 lb uplift at joint 12 and 80 lb
    uplift at joint 10.
13) Beveled plate or shim required to provide full bearing
    surface with truss chord at joint(s) 8.

14) 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

SCOTT M. SEVIER
STATE OF MISSOURI
PROFESSIONAL ENGINEER
NUMBER
PE-2001018807

April 23,2024

Job	Truss	Truss Type	Qty	Ply	
P240393	B02	Common	2	1	I65080524
					Job Reference (optional)

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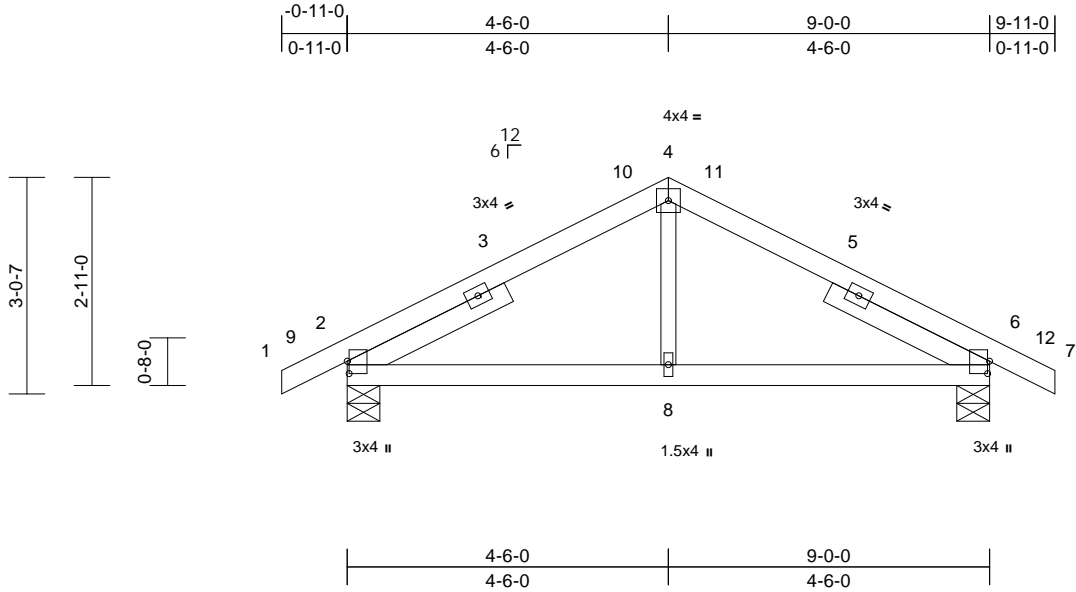
Scale = 1:32.3

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	0.41	Vert(LL)	-0.01	2-8	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.02	2-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										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

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 16), 6=-84 (LC 17)
Max Grav   2=608 (LC 23), 6=608 (LC 24)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/12, 2-4=-590/257, 4-6=-590/257, 6-7=0/12
BOT CHORD   2-8=-111/389, 6-8=-111/389
WEBS   4-8=0/204

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) -0-11-0 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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 84 lb uplift at joint 2 and 84 lb uplift at joint 6.
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.

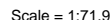**LOAD CASE(S)**   Standard

April 23,2024

Job	Truss	Truss Type	Qty	Ply	
P240393	C1	Piggyback Base Supported Gable	1	1	I65080525
					Job Reference (optional)

Scale = 1:71.9

Plate Offsets (X, Y): [2:0-4-1,Edge], [14:0-3-0,0-2-0], [20:0-3-0,0-2-0], [27:Edge,0-2-8]

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	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	27	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 232 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x3 SPF No.2
OTHERS   2x3 SPF No.2
SLIDER   Left 2x4 SP No.2 -- 1-6-8
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.): 14-20.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   15-38, 13-39, 12-41, 16-37, 17-35, 18-34, 19-33, 21-32, 22-31

REACTIONS (size)   2=39-3-0, 27=39-3-0, 28=39-3-0, 29=39-3-0, 30=39-3-0, 31=39-3-0, 32=39-3-0, 33=39-3-0, 34=39-3-0, 35=39-3-0, 37=39-3-0, 38=39-3-0, 39=39-3-0, 41=39-3-0, 42=39-3-0, 43=39-3-0, 44=39-3-0, 45=39-3-0, 46=39-3-0, 47=39-3-0, 48=39-3-0
Max Horiz   2=272 (LC 13)
Max Uplift   2=-64 (LC 12), 27=-26 (LC 12), 28=-59 (LC 17), 29=-63 (LC 17), 30=-59 (LC 17), 31=-74 (LC 12), 33=-24 (LC 13), 34=-50 (LC 12), 35=-39 (LC 13), 37=-51 (LC 12), 38=-28 (LC 13), 39=-13 (LC 13), 41=-73 (LC 16), 42=-60 (LC 16), 43=-61 (LC 16), 44=-61 (LC 16), 45=-61 (LC 16), 46=-61 (LC 16), 47=-60 (LC 16), 48=-109 (LC 16)

Max Grav   2=200 (LC 51), 27=90 (LC 51), 28=264 (LC 41), 29=283 (LC 41), 30=277 (LC 41), 31=283 (LC 41), 32=259 (LC 41), 33=259 (LC 40), 34=282 (LC 40), 35=278 (LC 40), 37=282 (LC 40), 38=258 (LC 40), 39=261 (LC 41), 41=282 (LC 41), 42=278 (LC 41), 43=278 (LC 41), 44=278 (LC 41), 45=279 (LC 41), 46=274 (LC 41), 47=200 (LC 41), 48=155 (LC 43)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/12, 2-4=-276/199, 4-5=-212/165, 5-7=-193/146, 7-8=-177/132, 8-9=-161/153, 9-10=-145/207, 10-11=-152/261, 11-12=-170/314, 12-13=-194/376, 13-14=-190/378, 14-15=-179/375, 15-16=-179/375, 16-17=-179/375, 17-18=-179/375, 18-19=-179/375, 19-20=-179/375, 20-21=-189/377, 21-22=-194/377, 22-23=-171/315, 23-24=-153/262, 24-25=-132/206, 25-26=-125/172, 26-27=-98/126
BOT CHORD   2-48=-92/124, 47-48=-92/124, 46-47=-92/124, 45-46=-92/124, 44-45=-92/124, 43-44=-92/124, 42-43=-92/124, 41-42=-92/124, 39-41=-92/124, 38-39=-92/124, 37-38=-92/124, 35-37=-92/124, 34-35=-92/124, 33-34=-92/124, 32-33=-92/124, 31-32=-92/124, 30-31=-92/124, 29-30=-92/124, 28-29=-92/124, 27-28=-92/124

WEBS   15-38=-218/52, 13-39=-221/37, 12-41=-242/118, 11-42=-238/95, 10-43=-238/97, 9-44=-238/96, 8-45=-239/97, 7-46=-234/96, 5-47=-160/137, 4-48=-118/158, 16-37=-242/92, 17-35=-238/71, 18-34=-242/92, 19-33=-219/48, 21-32=-219/24, 22-31=-243/118, 23-30=-237/109, 24-29=-243/149, 25-28=-226/167

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

April 23,2024

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	I65080525
P240393	C1	Piggyback Base Supported Gable	1	1		

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

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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 18-8-0, Corner(3R) 18-8-0 to 23-7-8, Exterior(2N) 23-7-8 to 28-7-6, Corner(3R) 28-7-6 to 33-7-8, Exterior(2N) 33-7-8 to 39-1-12 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

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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

5) Unbalanced snow loads have been considered for this design.

6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.

7) Provide adequate drainage to prevent water ponding.

8) All plates are 1.5x4 MT20 unless otherwise indicated.

9) Gable requires continuous bottom chord bearing.

10) Gable studs spaced at 2-0-0 oc.

11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

12) * 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.

13) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 27, 64 lb uplift at joint 2, 28 lb uplift at joint 38, 13 lb uplift at joint 39, 73 lb uplift at joint 41, 60 lb uplift at joint 42, 61 lb uplift at joint 43, 61 lb uplift at joint 44, 61 lb uplift at joint 45, 61 lb uplift at joint 46, 60 lb uplift at joint 47, 109 lb uplift at joint 48, 51 lb uplift at joint 37, 39 lb uplift at joint 35, 50 lb uplift at joint 34, 24 lb uplift at joint 33, 74 lb uplift at joint 31, 59 lb uplift at joint 30, 63 lb uplift at joint 29 and 59 lb uplift at joint 28.

15) 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.

16) 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®

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

Job	Truss	Truss Type	Qty	Ply		I65080526
P240393	C2	Piggyback Base	10	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,
Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:48:33 Page: 1
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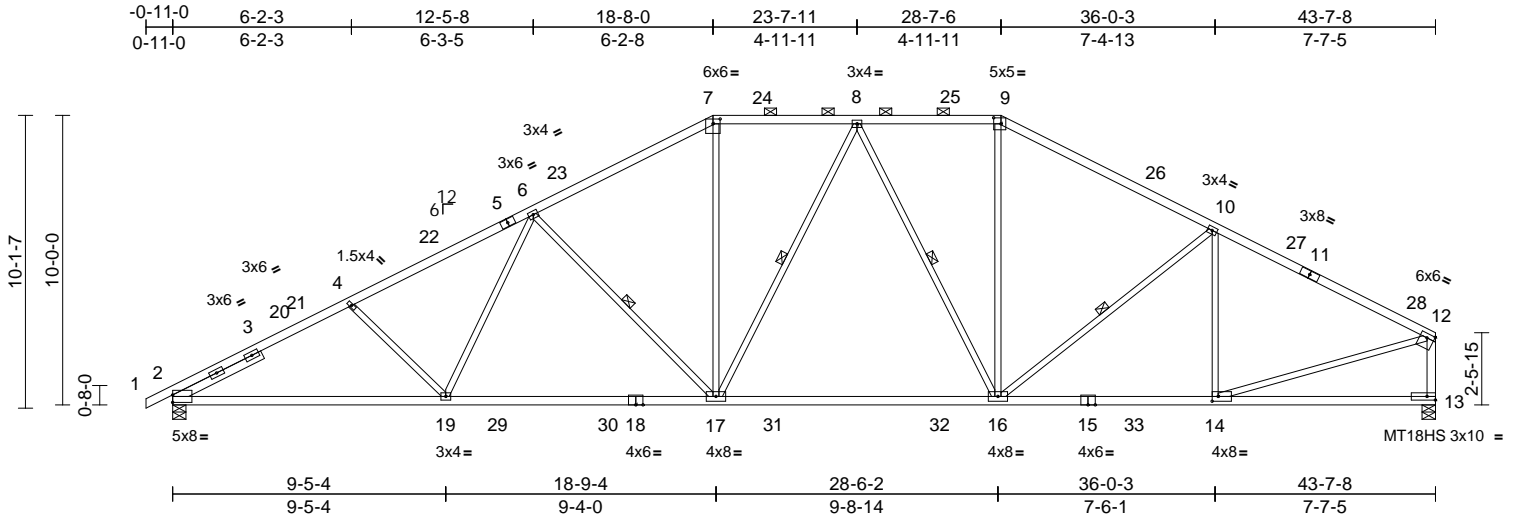
Scale = 1:79.6

Plate Offsets (X, Y): [2:Edge,0-3-1], [7:0-3-0,0-2-0], [9:0-3-0,0-2-8], [12:Edge,0-1-12], [14:0-2-8,0-2-0]

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	0.81	Vert(LL)	-0.39	16-17	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.62	16-17	>841	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.16	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 213 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* 5-7:2x4 SP
1650F 1.5E, 7-9:2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 15-13:2x4 SP
No.2, 18-15:2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2 *Except* 13-12:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-5-1

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

REACTIONS (size) 2=0-5-8, 13=0-5-8
Max Horiz 2=205 (LC 13)
Max Uplift 2=-296 (LC 16), 13=-232 (LC 17)
Max Grav 2=2504 (LC 47), 13=2527 (LC 47)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/12, 2-4=-4488/592, 4-6=-4176/575,
6-7=-3158/553, 7-8=-2698/542,
8-9=-2470/524, 9-10=-2934/518,
10-12=-3141/452, 12-13=-2439/370
BOT CHORD 2-19=-587/3840, 17-19=-494/3412,
16-17=-350/2610, 14-16=-365/2699,
13-14=-55/1300
WEBS 7-17=-90/1000, 9-16=-66/832,
10-16=-407/222, 10-14=-626/188,
12-14=-324/2689, 4-19=-374/230,
6-19=-50/612, 6-17=-1142/309,
8-17=-245/310, 8-16=-583/171

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) -0-11-0 to 4-1-0,
Interior (1) 4-1-0 to 18-8-0, Exterior(2R) 18-8-0 to
23-7-11, Interior (1) 23-7-11 to 28-7-6, Exterior(2R)
28-7-6 to 33-7-6, Interior (1) 33-7-6 to 43-5-12 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15
Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate
DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9;
Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this
design.
5) This truss has been designed for greater of min roof live
load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on
overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members, with BCDL = 10.0psf.
10) Bearings are assumed to be: Joint 2 SP 1650F 1.5E
crushing capacity of 565 psi, Joint 13 SP No.2 crushing
capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 296 lb uplift at
joint 2 and 232 lb uplift at joint 13.
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

April 23,2024

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

Job	Truss	Truss Type	Qty	Ply		I65080527
P240393	C3	Piggyback Base	3	1	Job Reference (optional)	

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

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:48:33 Page: 1
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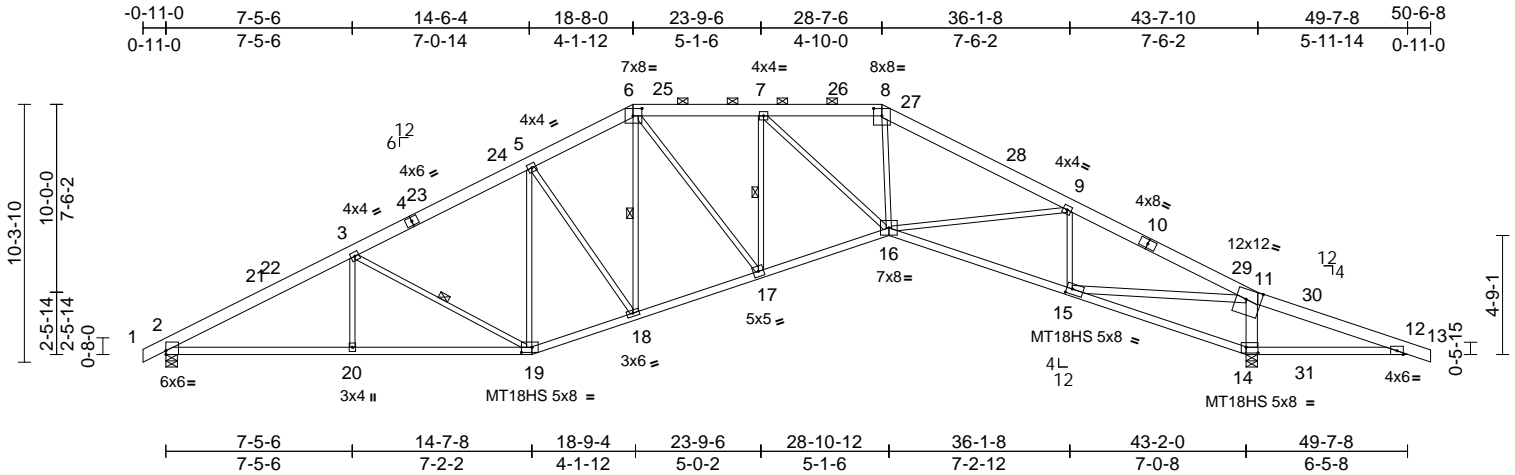
Scale = 1:92.1

Plate Offsets (X, Y): [2:Edge,0-1-14], [6:0-4-4,0-3-8], [8:0-4-0,0-3-8], [11:0-7-4,0-4-12], [14:0-5-12,0-2-12], [15:0-2-12,0-2-8], [19:0-5-0,0-2-8]

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	0.84	Vert(LL)	-0.41	16	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.66	15-16	>782	180	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.45	14	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 248 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 14-12:2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 11-14:2x6 SPF No.2, 15-11:2x4 SP 1650F 1.5E

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (3-4-6 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
5-7-10 oc bracing: 14-15
5-1-12 oc bracing: 12-14.
WEBS 1 Row at midpt 3-19, 6-18, 7-17

REACTIONS (size) 2=0-5-8, 14=0-5-8
Max Horiz 2=-185 (LC 21)
Max Uplift 2=-298 (LC 16), 14=-388 (LC 17)
Max Grav 2=2449 (LC 43), 14=2927 (LC 43)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-4395/707, 3-5=-3551/665, 5-6=-3341/687, 6-7=-3490/684, 7-8=-4355/647, 8-9=-5206/651, 9-11=-4577/322, 11-12=-1178/1323, 12-13=0/23
BOT CHORD 2-20=-500/3774, 19-20=-500/3774, 18-19=-323/3172, 17-18=-233/3032, 16-17=-278/3693, 15-16=-127/4186, 14-15=-1571/1393, 12-14=-1149/1162
WEBS 3-20=0/326, 3-19=-882/246, 5-19=-463/54, 5-18=-313/294, 6-18=-205/404, 6-17=-82/1199, 8-16=-76/1700, 9-16=-221/988, 9-15=-1322/463, 7-17=-1085/145, 7-16=0/1193, 11-14=-2523/635, 11-15=-1143/4925

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 18-8-0, Exterior(2R) 18-8-0 to 23-9-6, Interior (1) 23-9-6 to 28-7-6, Exterior(2R) 28-7-6 to 33-7-6, Interior (1) 33-7-6 to 50-6-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Bearings are assumed to be: Joint 2 SP 1650F 1.5E crushing capacity of 565 psi, Joint 14 SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 298 lb uplift at joint 2 and 388 lb uplift at joint 14.

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

April 23,2024

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 Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:48:33   Page: 1
ID:V0XEH3vf48ClwKGluuC6V9zwjI7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Scale = 1:92.1

Plate Offsets (X, Y): [5:0-1-12,0-2-0], [6:0-4-4,0-3-8], [11:0-7-0,0-4-12], [19:1-3-12,0-4-12]

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	0.70	Vert(LL)	-0.13	15-16	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.21	15-16	>999	180	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.12	14	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 264 lb	FT = 20%

LUMBER
TOP CHORD   2x6 SPF No.2
BOT CHORD   2x6 SPF No.2
WEBS   2x3 SPF No.2 *Except* 19-5,11-14:2x6 SPF No.2

BRACING
TOP CHORD   Structural wood sheathing directly applied or 4-11-13 oc purlins, except
            2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD   Rigid ceiling directly applied or 5-4-14 oc bracing.
WEBS   1 Row at midpt   5-19, 6-18, 7-17, 9-16, 3-19

REACTIONS (size)   14=0-5-8, 19=0-5-8, (req. 0-5-13)
            Max Horiz   19=-185 (LC 17)
            Max Uplift 14=-350 (LC 17), 19=-446 (LC 16)
            Max Grav   14=1846 (LC 24), 19=3691 (LC 43)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/32, 2-3=-874/932, 3-5=-1633/2034, 5-6=-1124/972, 6-7=-915/449, 7-8=-1231/94, 8-9=-1533/173, 9-11=-1942/124, 11-12=-1225/1352, 12-13=0/32
BOT CHORD   2-20=-649/871, 19-20=-649/871, 18-19=-1845/1860, 17-18=-898/1483, 16-17=-489/1423, 15-16=0/1753, 14-15=-1488/1350, 12-14=-1191/1222
WEBS   3-20=-529/342, 5-19=-2450/884, 6-18=-1492/695, 5-18=-607/1575, 7-17=-1128/153, 8-16=-252/738, 9-15=-565/176, 9-16=-785/442, 3-19=-1149/985, 6-17=-88/1232, 7-16=0/1208, 11-14=-1318/313, 11-15=-248/2408

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 18-8-0, Exterior(2R) 18-8-0 to 23-9-6, Interior (1) 23-9-6 to 28-7-6, Exterior(2R) 28-7-6 to 33-7-6, Interior (1) 33-7-6 to 50-6-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

4) Unbalanced snow loads have been considered for this design.

5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

7) All plates are MT20 plates unless otherwise indicated.

8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

10) WARNING: Required bearing size at joint(s) 19 greater than input bearing size.

11) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 446 lb uplift at joint 19 and 350 lb uplift at joint 14.

13) 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.

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

April 23,2024

Scale = 1:92.1

Plate Offsets (X, Y): [13:0-4-4,0-3-8], [27:0-10-0,0-3-0], [46:0-7-12,0-4-12]

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	0.64	Vert(LL)	0.00	45-46	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	0.00	34-35	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.03	32	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 321 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except* 46-11,27-32:2x6 SPF No.2
OTHERS 2x3 SPF No.2
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-6 oc purlins, except 2-0-0 oc purlins (9-1-1 max.): 13-18.
BOT CHORD Rigid ceiling directly applied or 5-2-6 oc bracing.
WEBS 1 Row at midpt 13-44
JOINTS 1 Brace at Jt(s): 54, 55, 57, 58, 59, 60, 63, 66, 67

REACTIONS (size) 32=29-5-8, 33=29-5-8, 34=29-5-8, 36=29-5-8, 37=29-5-8, 38=29-5-8, 39=29-5-8, 40=29-5-8, 41=29-5-8, 42=29-5-8, 43=29-5-8, 44=29-5-8, 45=29-5-8, 46=29-5-8, 65=29-5-8
Max Horiz 46=-185 (LC 17)
Max Uplift 32=-653 (LC 13), 33=-740 (LC 49), 34=-102 (LC 17), 36=-99 (LC 49), 37=-115 (LC 17), 38=-294 (LC 46), 39=-54 (LC 12), 40=-11 (LC 43), 41=-46 (LC 13), 42=-34 (LC 12), 43=-45 (LC 12), 44=-101 (LC 60), 45=-24 (LC 16), 46=-496 (LC 16), 65=-83 (LC 17)
Max Grav 32=1704 (LC 49), 33=287 (LC 13), 34=507 (LC 43), 36=110 (LC 55), 37=515 (LC 43), 38=142 (LC 17), 39=379 (LC 42), 40=46 (LC 7), 41=201 (LC 42), 42=244 (LC 42), 43=324 (LC 42), 44=72 (LC 12), 45=196 (LC 43), 46=2904 (LC 43), 65=376 (LC 48)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-858/720, 3-4=-836/742, 4-5=-823/809, 5-6=-875/888, 6-7=-1549/1729, 7-9=-1617/1876, 9-10=-1607/1925, 10-11=-1603/1994, 11-12=-993/1337, 12-13=-926/1318, 13-14=-652/997, 14-15=-651/996, 15-16=-651/996, 16-17=-368/619, 17-18=-369/619, 18-19=-476/811, 19-20=-504/727, 20-21=-595/808, 21-22=-587/727, 22-23=-610/709, 23-24=-599/713, 24-26=-610/680, 26-27=-662/672, 27-28=-1082/1225, 28-29=-1083/1255, 29-30=0/32
BOT CHORD 2-53=-626/852, 52-53=-626/852, 51-52=-626/852, 50-51=-626/852, 49-50=-626/852, 48-49=-626/852, 47-48=-626/852, 46-47=-625/852, 45-46=-1857/1875, 44-45=-1804/1834, 43-44=-1257/1340, 42-43=-1252/1337, 41-42=-1252/1334, 40-41=-1051/1143, 39-40=-1056/1144, 38-39=-1056/1144, 37-38=-655/813, 36-37=-637/804, 35-36=-666/822, 34-35=-1267/1227, 33-34=-1253/1229, 32-33=-1489/1427, 31-32=-1115/1089, 29-31=-1116/1089

April 23,2024

Job	Truss	Truss Type	Qty	Ply	
P240393	C5	Piggyback Base Structural Gable	1	1	I65080529
					Job Reference (optional)

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

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:48:34   Page: 2
ID:Te_6WVOtZR9We_0Ly9vPsbzwjEv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

WEBS   6-50=-346/357, 11-58=-802/894,
          44-58=-846/943, 13-44=-790/576,
          22-35=-257/242, 11-46=-1454/1076,
          16-41=-383/261, 18-38=-527/279,
          38-62=-299/201, 62-63=-291/196,
          63-64=-292/197, 22-64=-297/200,
          6-61=-1250/1051, 60-61=-1174/985,
          59-60=-1182/990, 46-59=-1176/987,
          13-57=-291/295, 56-57=-297/303,
          41-56=-305/310, 16-55=-403/538,
          54-55=-382/508, 38-54=-386/515,
          27-32=-327/315, 35-65=-416/614,
          65-66=-398/584, 66-67=-398/584,
          67-68=-398/584, 27-68=-397/582,
          17-54=-339/137, 39-54=-336/140,
          40-55=-31/43, 15-56=-202/108,
          42-56=-207/117, 14-57=-289/172,
          43-57=-292/179, 12-58=-263/122,
          45-58=-324/177, 10-59=-80/43,
          47-59=-92/46, 9-60=-128/65, 48-60=-112/61,
          7-61=-166/102, 49-61=-52/36, 5-51=-140/92,
          4-52=-103/60, 3-53=-83/73, 19-62=-62/36,
          20-63=-410/182, 37-63=-437/194,
          21-64=-81/19, 36-64=-98/36, 23-65=-228/55,
          24-66=-30/9, 26-67=-405/146,
          34-67=-422/152, 33-68=-16/26,
          28-31=-185/109

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 18-8-0, Exterior(2R) 18-8-0 to 23-9-6, Interior (1) 23-9-6 to 28-7-6, Exterior(2R) 28-7-6 to 33-7-6, Interior (1) 33-7-6 to 50-6-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 3x4 MT20 unless otherwise indicated.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) Bearings are assumed to be: Joint 33 SPF No.2 crushing capacity of 425 psi, Joint 32 SPF No.2 crushing capacity of 425 psi.
13) Bearing at joint(s) 65 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 496 lb uplift at joint 46, 294 lb uplift at joint 38, 653 lb uplift at joint 32, 101 lb uplift at joint 44, 46 lb uplift at joint 41, 54 lb uplift at joint 39, 11 lb uplift at joint 40, 34 lb uplift at joint 42, 45 lb uplift at joint 43, 24 lb uplift at joint 45, 115 lb uplift at joint 37, 99 lb uplift at joint 36, 83 lb uplift at joint 65, 102 lb uplift at joint 34 and 740 lb uplift at joint 33.

15) 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.
16) 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		I65080530
P240393	PB1	Piggyback	2	1	Job Reference (optional)	

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

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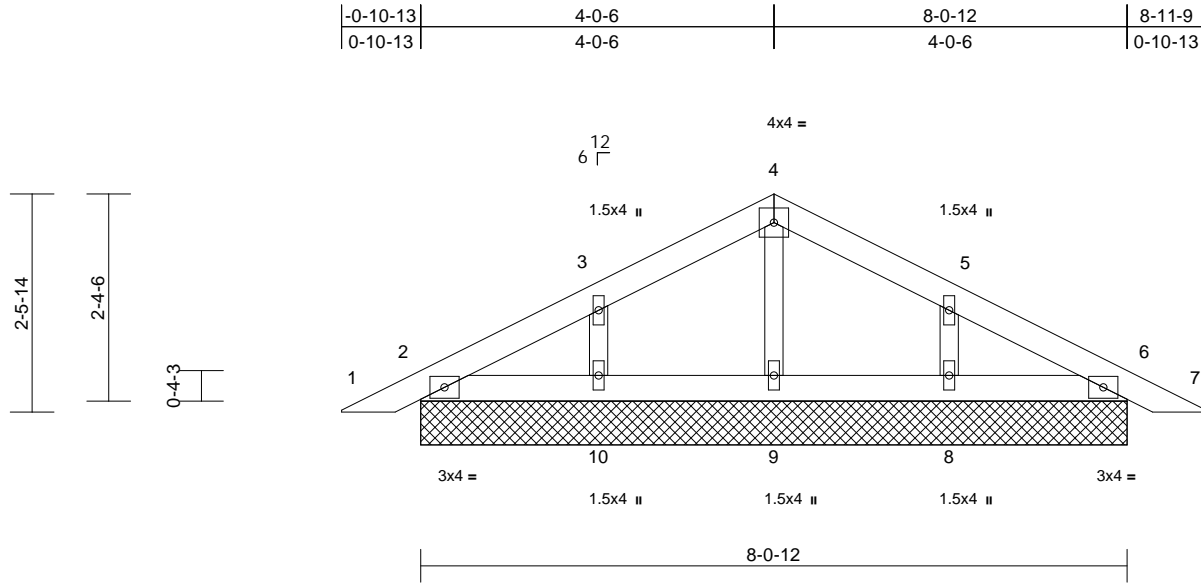
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										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=8-0-12, 6=8-0-12, 8=8-0-12,
                         9=8-0-12, 10=8-0-12
              Max Horiz 2=-44 (LC 17)
              Max Uplift 2=-19 (LC 16), 6=-27 (LC 17),
                         8=-75 (LC 17), 10=-75 (LC 16)
              Max Grav   2=185 (LC 23), 6=185 (LC 24),
                         8=306 (LC 24), 9=134 (LC 23),
                         10=306 (LC 23)

FORCES   (lb) - Maximum Compression/Maximum
               Tension
TOP CHORD   1-2=0/29, 2-3=-60/42, 3-4=-76/93,
             4-5=-76/99, 5-6=-60/42, 6-7=0/29
BOT CHORD   2-10=-13/49, 9-10=-13/49, 8-9=-13/49,
             6-8=-13/49
WEBS   4-9=-97/13, 3-10=-260/213, 5-8=-260/173

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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15
    Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate
    DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9;
    Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this
    design.
6) This truss has been designed for greater of min roof live
    load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on
    overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom
    chord live load nonconcurrent with any other live loads.
10) * 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 crushing
    capacity of 565 psi.
12) 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, 75 lb uplift at joint 10 and 75 lb
    uplift at joint 8.
13) 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.
14) See Standard Industry Piggyback Truss Connection
    Detail for Connection to base truss as applicable, or
    consult qualified building designer.

LOAD CASE(S)   Standard

April 23,2024

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

Job	Truss	Truss Type	Qty	Ply		I65080531
P240393	PB2	Piggyback	19	1	Job Reference (optional)	

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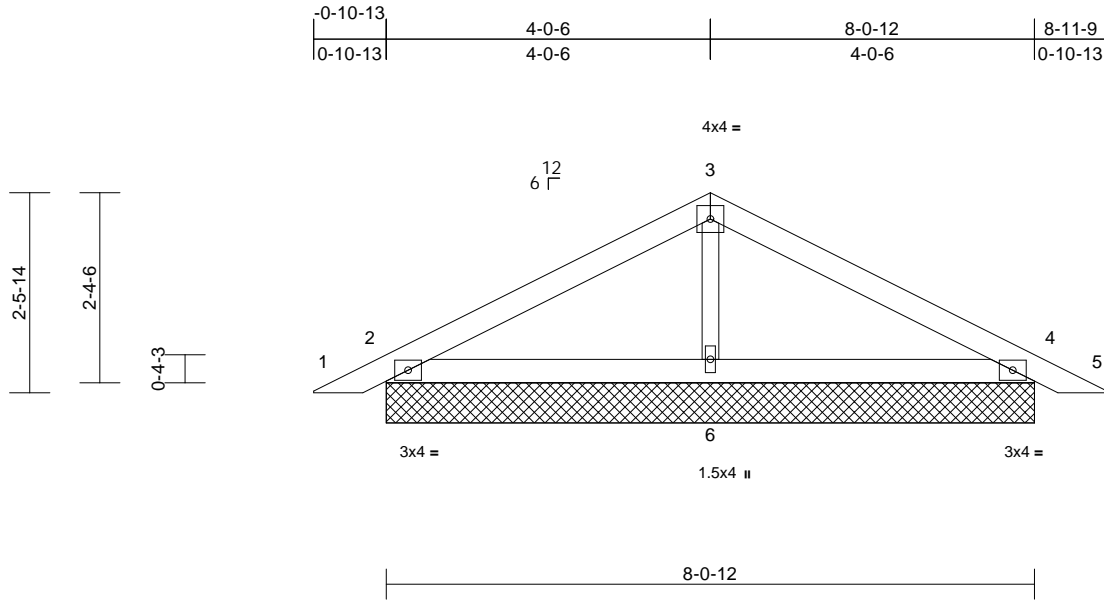
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										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=8-0-12, 4=8-0-12, 6=8-0-12
Max Horiz 2=44 (LC 20)
Max Uplift 2=-67 (LC 16), 4=-75 (LC 17), 6=-8 (LC 16)
Max Grav 2=340 (LC 23), 4=340 (LC 24), 6=348 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=0/29, 2-3=-123/76, 3-4=-123/87, 4-5=0/29
BOT CHORD   2-6=0/46, 4-6=0/46
WEBS   3-6=-248/180

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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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 crushing capacity of 565 psi.
12) 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.
13) 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.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

April 23,2024

Job	Truss	Truss Type	Qty	Ply		I65080532
P240393	V1	Valley	1	1	Job Reference (optional)	

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

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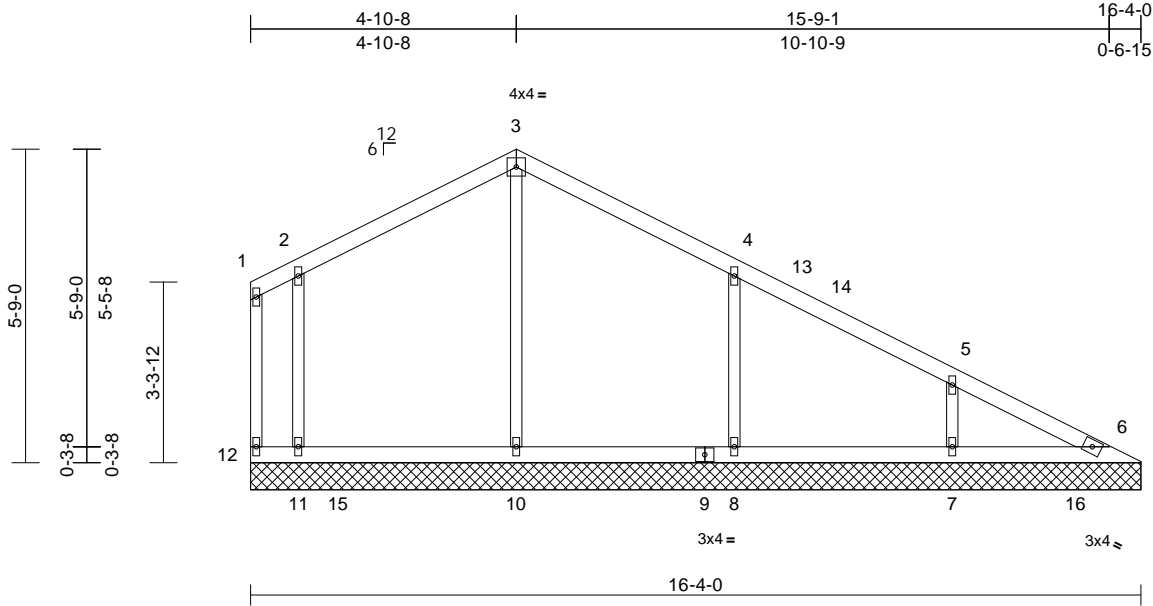
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horiz(TL)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 63 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP 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.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc
             bracing.
REACTIONS (size)   6=16-4-0, 7=16-4-0, 8=16-4-0,
                        10=16-4-0, 11=16-4-0, 12=16-4-0
            Max Horiz   12=-169 (LC 12)
            Max Uplift 6=-6 (LC 13), 7=-113 (LC 17),
                        8=-137 (LC 17), 11=-131 (LC 16),
                        12=-168 (LC 5)
            Max Grav   6=120 (LC 25), 7=344 (LC 6),
                        8=543 (LC 23), 10=429 (LC 26),
                        11=549 (LC 22), 12=49 (LC 16)

FORCES   (lb) - Maximum Compression/Maximum
              Tension
TOP CHORD   1-12=-93/145, 1-2=-78/102, 2-3=-117/179,
             3-4=-118/191, 4-5=-123/96, 5-6=-196/118
BOT CHORD   11-12=-101/196, 10-11=-101/196,
             8-10=-101/196, 7-8=-101/196, 6-7=-101/196
WEBS   3-10=-269/126, 2-11=-476/220,
             4-8=-463/239, 5-7=-258/188

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) 0-1-4 to 4-10-8,
    Exterior(2R) 4-10-8 to 9-10-8, Interior (1) 9-10-8 to
    15-8-15 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15
    Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate
    DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9;
    Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this
    design.
6) All plates are 1.5x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom
    chord live load nonconcurrent with any other live loads.
10) * 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.
11) All bearings are assumed to be SP No.2 crushing
    capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to
    bearing plate capable of withstanding 168 lb uplift at
    joint 12, 6 lb uplift at joint 6, 131 lb uplift at joint 11, 137
    lb uplift at joint 8 and 113 lb uplift at joint 7.
13) 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

April 23,2024

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

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

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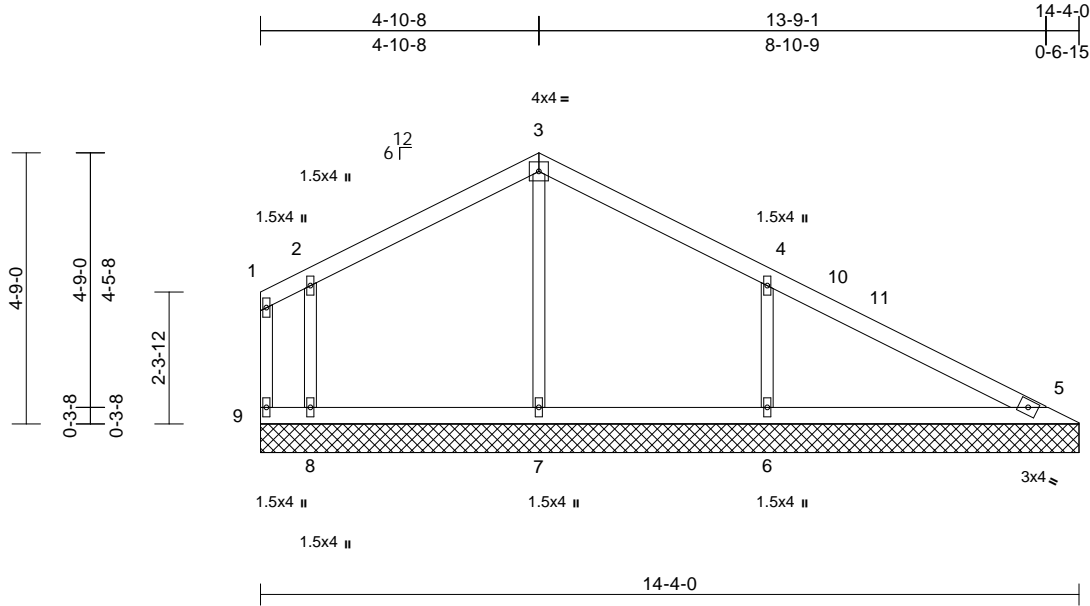
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 53 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP 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.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc
             bracing.

REACTIONS (size)   5=14-4-0, 6=14-4-0, 7=14-4-0,
                         8=14-4-0, 9=14-4-0
               Max Horiz 9=-124 (LC 12)
               Max Uplift 5=-3 (LC 17), 6=-170 (LC 17),
                         8=-138 (LC 16), 9=-177 (LC 22)
               Max Grav 5=177 (LC 23), 6=643 (LC 23),
                         7=330 (LC 22), 8=567 (LC 22),
                         9=52 (LC 16)

FORCES   (lb) - Maximum Compression/Maximum
              Tension
TOP CHORD   1-9=-85/154, 1-2=-61/106, 2-3=-113/161,
             3-4=-119/179, 4-5=-115/117
BOT CHORD   8-9=-70/143, 7-8=-70/143, 6-7=-70/143,
             5-6=-70/143
WEBS   3-7=-258/110, 2-8=-488/269, 4-6=-528/298

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) 0-1-4 to 4-10-8,
   Exterior(2R) 4-10-8 to 9-10-8, Interior (1) 9-10-8 to
   13-8-15 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15
    Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate
    DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9;
    Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this
    design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom
    chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf
    on the bottom chord in all areas where a rectangle
    3-06-00 tall by 2-00-00 wide will fit between the bottom
    chord and any other members.
10) All bearings are assumed to be SP No.2 crushing
    capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to
    bearing plate capable of withstanding 177 lb uplift at
    joint 9, 3 lb uplift at joint 5, 138 lb uplift at joint 8 and 170
    lb uplift at joint 6.
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.

LOAD CASE(S) Standard

April 23,2024

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	
P240393	V3	Valley	1	1	I65080534
					Job Reference (optional)

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

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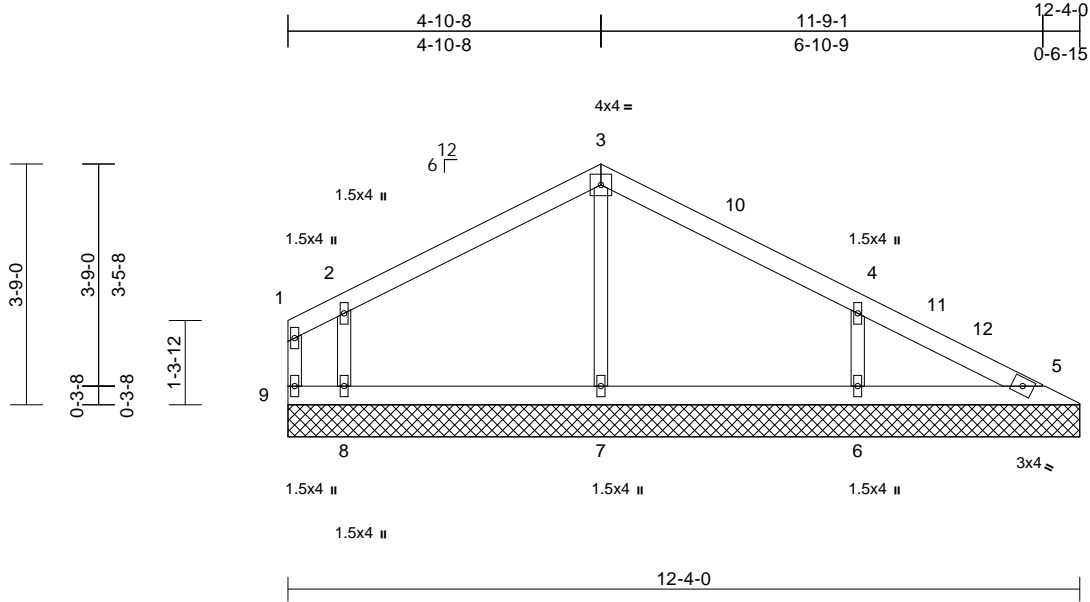
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 43 lb	FT = 20%

LUMBER
TOP CHORD   2x4 SP 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.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc
             bracing.
REACTIONS   (size)   5=12-4-0, 6=12-4-0, 7=12-4-0,
                          8=12-4-0, 9=12-4-0
              Max Horiz 9=-80 (LC 12)
              Max Uplift 5=-10 (LC 16), 6=-131 (LC 17),
                          8=-150 (LC 16), 9=-175 (LC 22)
              Max Grav   5=91 (LC 23), 6=523 (LC 23),
                          7=348 (LC 22), 8=563 (LC 22),
                          9=62 (LC 16)
FORCES   (lb) - Maximum Compression/Maximum
               Tension
TOP CHORD   1-9=-93/159, 1-2=-44/106, 2-3=-115/136,
             3-4=-117/149, 4-5=-72/83
BOT CHORD   8-9=-34/85, 7-8=-34/85, 6-7=-34/85,
             5-6=-34/85
WEBS   3-7=-265/116, 2-8=-493/309, 4-6=-445/271
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) 0-1-4 to 4-10-8,
    Exterior(2R) 4-10-8 to 9-10-8, Interior (1) 9-10-8 to
    11-8-15 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15
    Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate
    DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9;
    Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this
    design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom
    chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf
    on the bottom chord in all areas where a rectangle
    3-06-00 tall by 2-00-00 wide will fit between the bottom
    chord and any other members.
10) All bearings are assumed to be SP No.2 crushing
    capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to
    bearing plate capable of withstanding 175 lb uplift at
    joint 9, 10 lb uplift at joint 5, 150 lb uplift at joint 8 and
    131 lb uplift at joint 6.
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.

LOAD CASE(S)   Standard

April 23,2024

MiTek®

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

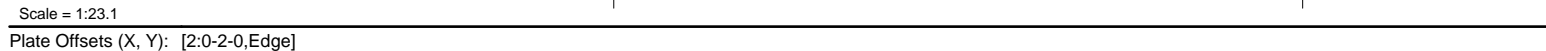| Job	Truss	Truss Type	Qty	Ply	
P240393	V4	Valley	1	1	I65080535
					Job Reference (optional)

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

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:48:35   Page: 1
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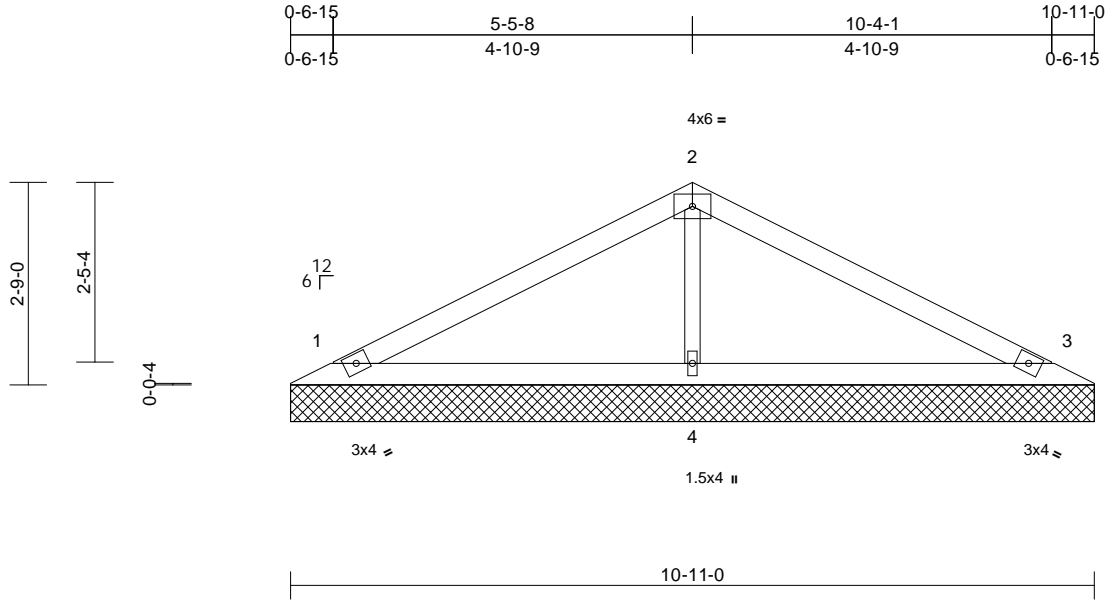
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 34 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=10-11-0, 3=10-11-0, 4=10-11-0
Max Horiz   1=-46 (LC 21)
Max Uplift 1=-49 (LC 16), 3=-57 (LC 17), 4=-37 (LC 16)
Max Grav   1=304 (LC 22), 3=304 (LC 23), 4=479 (LC 22)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=-175/78, 2-3=-175/85
BOT CHORD   1-4=-3/53, 3-4=-3/53
WEBS   2-4=-330/219

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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 1, 57 lb uplift at joint 3 and 37 lb uplift at joint 4.
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.

LOAD CASE(S) Standard

April 23,2024

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

Job	Truss	Truss Type	Qty	Ply	
P240393	V5	Valley	1	1	I65080536
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,
Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:48:35 Page: 1
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Scale = 1:23.1

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

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	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.43	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 20 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 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS   (size)   1=6-11-0, 3=6-11-0
Max Horiz   1=27 (LC 16)
Max Uplift   1=-39 (LC 16), 3=-39 (LC 17)
Max Grav   1=300 (LC 22), 3=300 (LC 23)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=-270/212, 2-3=-270/224
BOT CHORD   1-3=-144/200

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) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
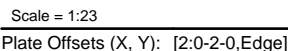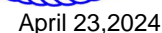6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 1 and 39 lb uplift at joint 3.
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.

LOAD CASE(S)   Standard

April 23,2024

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

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

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          1-5-8      2-4-1    2-11-0
        ┤─────────┤─────────┤────┤
          1-5-8      0-10-9
                            0-6-15
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              3x4 =
       12
     6 ┌
                   2
         1       ╱   ╲      3
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              2-11-0
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Scale = 1:23

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

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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 7 lb	FT = 20%

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

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

REACTIONS (size)   1=2-11-0, 3=2-11-0
Max Horiz 1=8 (LC 16)
Max Uplift 1=-12 (LC 16), 3=-12 (LC 17)
Max Grav 1=82 (LC 22), 3=82 (LC 23)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=-78/70, 2-3=-78/74
BOT CHORD   1-3=-48/60

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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.

6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 12 lb uplift at joint 3.
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.

LOAD CASE(S)   Standard

April 23,2024

Job	Truss	Truss Type	Qty	Ply	
P240393	V07	Valley	1	1	I65080538
					Job Reference (optional)

Scale = 1:18.7

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	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 12 lb	FT = 20%

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

BRACING
TOP CHORD   Structural wood sheathing directly applied or 4-1-13 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)   1=4-1-13, 3=4-1-13
Max Horiz   1=50 (LC 15)
Max Uplift 1=-27 (LC 12), 3=-34 (LC 16)
Max Grav   1=181 (LC 22), 3=181 (LC 22)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=-71/43, 2-3=-150/142
BOT CHORD   1-3=-22/23

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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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 27 lb uplift at joint 1 and 34 lb uplift at joint 3.
11) 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

April 23,2024

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

Scale = 1:26.5

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	0.43	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										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)   1=9-6-12, 3=9-6-12, 4=9-6-12
Max Horiz   1=40 (LC 16)
Max Uplift 1=-42 (LC 16), 3=-49 (LC 17), 4=-32 (LC 16)
Max Grav   1=256 (LC 22), 3=256 (LC 23), 4=406 (LC 23)

FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD   1-2=-147/69, 2-3=-147/77
BOT CHORD   1-4=-3/46, 3-4=-3/46
WEBS   2-4=-278/200

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) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 1, 49 lb uplift at joint 3 and 32 lb uplift at joint 4.
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.

LOAD CASE(S) Standard

April 23,2024

Job	Truss	Truss Type	Qty	Ply	
P240393	V8	Valley	1	1	I65080540
					Job Reference (optional)

	2-9-6		4-11-13	5-6-12
	2-9-6		2-2-7	0-6-15

3x4 =

2

6 ⌐12

1   3

3x4 ⚊   3x4 ⚊

5-6-12

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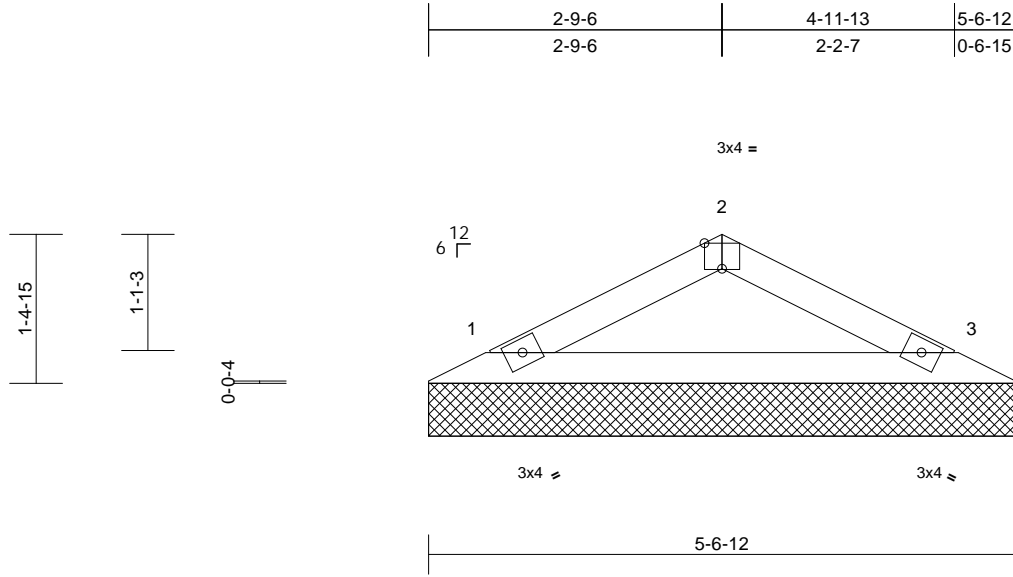
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Plate Offsets (X, Y): [2:0-2-0,Edge]

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 16 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 5-7-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (size)   1=5-6-12, 3=5-6-12
Max Horiz 1=21 (LC 16)
Max Uplift 1=-30 (LC 16), 3=-30 (LC 17)
Max Grav 1=223 (LC 22), 3=223 (LC 23)
FORCES   (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-200/174, 2-3=-200/184
BOT CHORD 1-3=-119/153
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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.

6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1 and 30 lb uplift at joint 3.
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.

LOAD CASE(S) Standard

April 23,2024

Symbols

PLATE LOCATION AND ORIENTATION

½L

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.

0-¹⁄₁₆"

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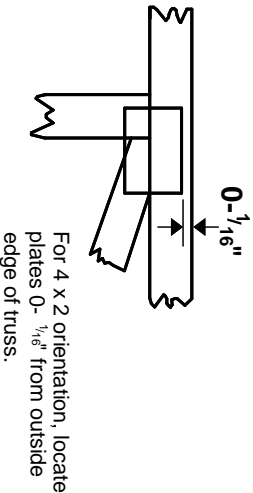
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 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.
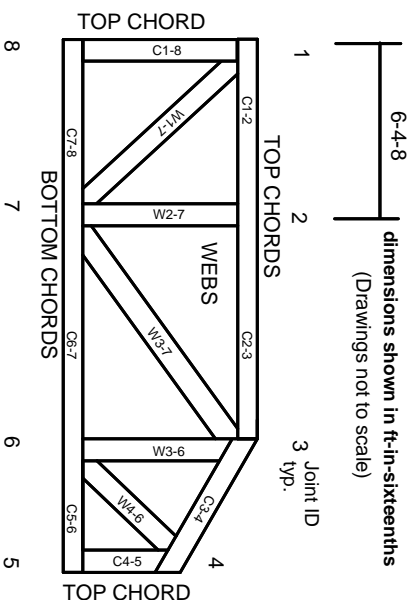
BEARING

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/TPI1: 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.

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

Numbering System

6-4-8

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

TOP CHORD

C7-8	C1-8	
		C1-2

TOP CHORDS

WEBS

W1-7

W2-7

W3-7

BOTTOM CHORDS

C6-7

W3-6

C5-6

W4-6

C4-5

C2-3

C3-4

TOP CHORD

1
2
3 Joint ID typ.
4
5
6
7
8

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.

MiTek®

⚠ 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 T or I bracing should be considered.

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

4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

5. Cut members to bear tightly against each other.

6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.

8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.

11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.

12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.

13. Top chords must be sheathed or purlins provided at spacing indicated on design.

14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.

15. Connections not shown are the responsibility of others.

16. Do not cut or alter truss member or plate without prior approval of an engineer.

17. Install and load vertically unless indicated otherwise.

18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.

19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.

20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

21. The design does not take into account any dynamic or other loads other than those expressly stated.