MiTek®

RE: P250394-01 - Roof - BY Lot 2321/2322

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

Site Information:

Project Customer: Clayton Properties Project Name: Twin Wildflower - Farmhouse
Lot/Block: 2321/2322 Subdivision: Bailey Farms
Model:
Address: 1204/1206 SE Windbreak Dr
City: Lee's Summit State: MO

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

Design Code: IRC2018/TPI2014
Wind Code: ASCE 7-16
Wind Speed: 115 mph
Roof Load: 45.0 psf
Mean Roof Height (feet): 35

Design Program: MiTek 20/20 8.6
Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16
Floor Load: N/A psf

Exposure Category: C

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I74608677	A1	7/2/25	35	I74608711	V2	7/2/25
2	I74608678	A2	7/2/25	36	I74608712	V3	7/2/25
3	I74608679	A3	7/2/25	37	I74608713	V4	7/2/25
4	I74608680	A4	7/2/25	38	I74608714	V5	7/2/25
5	I74608681	A5	7/2/25	39	I74608715	V6	7/2/25
6	I74608682	A6	7/2/25	40	I74608716	V7	7/2/25
7	I74608683	A7	7/2/25	41	I74608717	V8	7/2/25
8	I74608684	A8	7/2/25	42	I74608718	V9	7/2/25
9	I74608685	A9	7/2/25				
10	I74608686	B1	7/2/25				
11	I74608687	B2	7/2/25				
12	I74608688	B3	7/2/25				
13	I74608689	C1	7/2/25				
14	I74608690	D1	7/2/25				
15	I74608691	D2	7/2/25				
16	I74608692	D3	7/2/25				
17	I74608693	D4	7/2/25				
18	I74608694	D5	7/2/25				
19	I74608695	E1	7/2/25				
20	I74608696	E2	7/2/25				
21	I74608697	E3	7/2/25				
22	I74608698	J1	7/2/25				
23	I74608699	J2	7/2/25				
24	I74608700	L1	7/2/25				
25	I74608701	L2	7/2/25				
26	I74608702	L3	7/2/25				
27	I74608703	PB1	7/2/25				
28	I74608704	PB2	7/2/25				
29	I74608705	PB3	7/2/25				
30	I74608706	PB4	7/2/25				
31	I74608707	PB5	7/2/25				
32	I74608708	PB6	7/2/25				
33	I74608709	PB7	7/2/25				
34	I74608710	V1	7/2/25				

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Premier Building Supply (Springhill, KS)20300 W 207th Street.

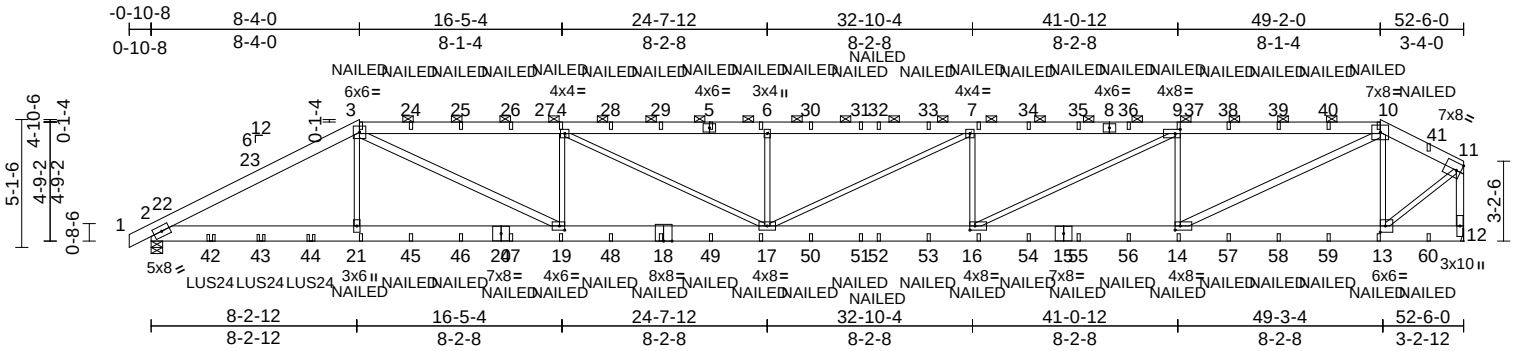
Truss Design Engineer's Name: Lu, Jie
My license renewal date for the state of Missouri is December 31, 2026.

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

July 2,2025
Lu, Jie

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	A1	Hip Girder	2	2	I74608677 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:48 ID:cTQR9QpfPFMhyINVt2S8DmzeLGg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:92.2

Plate Offsets (X, Y): [9:0-2-8,0-2-0], [13:0-2-8,0-3-0], [14:0-2-8,0-2-0], [16:0-2-8,0-2-0], [19:0-2-8,0-2-0]

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	1.00	Vert(LL)	0.66	16-17	>952	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-1.03	16-17	>607	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.13	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 706 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 *Except* 5-8:2x6 SP 2400F 2.0E

BOT CHORD 2x8 SP 2400F 2.0E *Except* 2-20:2x8 SPF No.2

WEBS 2x3 SPF No.2 *Except* 19-3,14-10,12-11:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-8-2 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-13 max.): 3-10.

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

REACTIONS (size) 2=0-5-8, 12= Mechanical
Max Horiz 2=148 (LC 11)
Max Uplift 2=-1518 (LC 9), 12=-1598 (LC 8)
Max Grav 2=4715 (LC 1), 12=4543 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-3=-8769/3010, 3-4=-12316/4508, 4-6=-14262/5265, 6-7=-14262/5265, 7-9=-13435/4977, 9-10=-9750/3624, 10-11=-3732/1347, 11-12=-4577/1624

BOT CHORD 2-21=-2737/7676, 19-21=-2736/7657, 17-19=-4537/12314, 16-17=-5006/13435, 14-16=-3631/9748, 13-14=-1244/3377, 12-13=-59/89

WEBS 3-21=-31/814, 3-19=-2082/5418, 4-19=-2242/1191, 4-17=-880/2275, 6-17=-1124/754, 7-17=-324/936, 7-16=-1553/905, 9-16=-1547/4152, 9-14=-3089/1477, 10-14=-2698/7210, 10-13=-2483/1150, 11-13=-1562/4339

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-4-8, Interior (1) 4-4-8 to 8-4-0, Exterior(2R) 8-4-0 to 15-9-2, Interior (1) 15-9-2 to 49-2-0, Exterior(2E) 49-2-0 to 52-4-4 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
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Bearings are assumed to be: Joint 2 SPF No.2 crushing capacity of 425 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1518 lb uplift at joint 2 and 1598 lb uplift at joint 12.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-4-12 from the left end to 6-4-12 to connect truss(es) to front face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-10=-70, 10-11=-70, 2-12=-20
Concentrated Loads (lb)

July 2,2025

Continued on page 2

Vert: 3=-126 (F), 5=-126 (F), 21=-39 (F), 19=-39 (F), 4=-126 (F), 17=-39 (F), 6=-126 (F), 7=-126 (F), 16=-39 (F), 9=-126 (F), 14=-39 (F), 10=-126 (F), 13=-39 (F), 18=-39 (F), 24=-126 (F), 25=-126 (F), 26=-126 (F), 28=-126 (F), 29=-126 (F), 30=-126 (F), 31=-126 (F), 32=-126 (F), 33=-126 (F), 34=-126 (F), 35=-126 (F), 36=-126 (F), 38=-126 (F), 39=-126 (F), 40=-126 (F), 41=-107 (F), 42=-235 (F), 43=-232 (F), 44=-232 (F), 45=-39 (F), 46=-39 (F), 47=-39 (F), 48=-39 (F), 49=-39 (F), 50=-39 (F), 51=-39 (F), 52=-39 (F), 53=-39 (F), 54=-39 (F), 55=-39 (F), 56=-39 (F), 57=-39 (F), 58=-39 (F), 59=-39 (F), 60=-54 (F)

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	A2	Hip	2	1	I74608678 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:50 Page: 1
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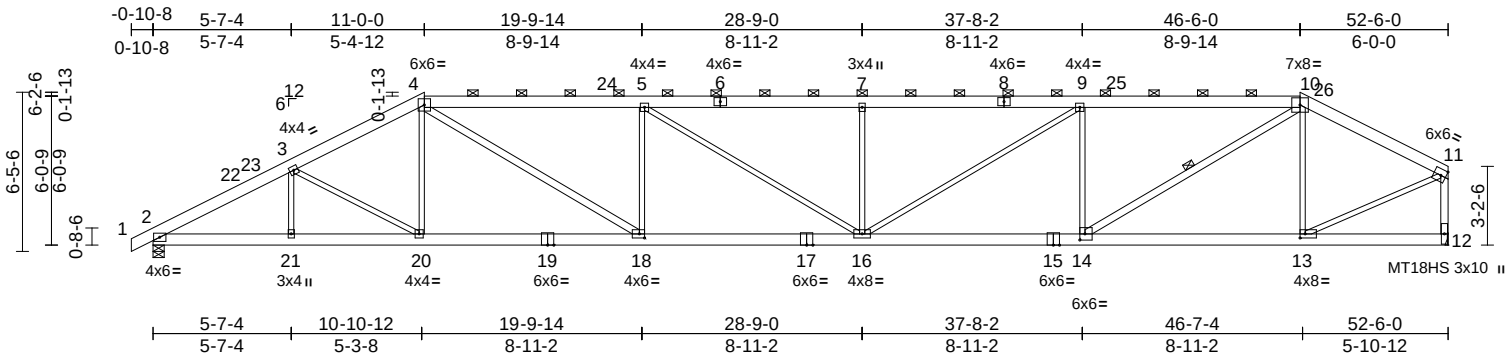

Scale = 1:93.4

Plate Offsets (X, Y): [13:0-2-8,0-2-0], [14:0-2-8,0-3-0], [18:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.45	16-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.82	16-18	>761	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.19	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 336 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x3 SPF No.2 *Except* 18-4,14-10,12-11:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-2-14 oc purlins, except end verticals, and 2-0-0 oc purlins (2-3-3 max.): 4-10.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 10-14

REACTIONS (size) 2=0-5-8, 12= Mechanical
Max Horiz 2=168 (LC 11)
Max Uplift 2=-341 (LC 9), 12=-380 (LC 8)
Max Grav 2=2424 (LC 1), 12=2345 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-4382/675, 3-4=-4083/732, 4-5=-5233/1052, 5-7=-5499/1108, 7-9=-5499/1108, 9-10=-4533/927, 10-11=-2522/478, 11-12=-2297/404
BOT CHORD 2-21=-698/3744, 20-21=-698/3744, 18-20=-697/3597, 16-18=-1065/5231, 14-16=-920/4530, 13-14=-405/2209, 12-13=-53/73
WEBS 3-21=0/168, 3-20=-220/194, 4-20=-8/365, 4-18=-495/2046, 5-18=-925/379, 5-16=-125/417, 7-16=-602/270, 9-16=-240/1170, 9-14=-1325/440, 10-14=-612/2796, 10-13=-885/279, 11-13=-415/2388

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-4-8, Interior (1) 4-4-8 to 11-0-0, Exterior(2R) 11-0-0 to 18-5-2, Interior (1) 18-5-2 to 46-6-0, Exterior(2E) 46-6-0 to 52-4-4 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
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 341 lb uplift at joint 2 and 380 lb uplift at joint 12.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	A3	Hip	2	1	I74608679 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:50 Page: 1
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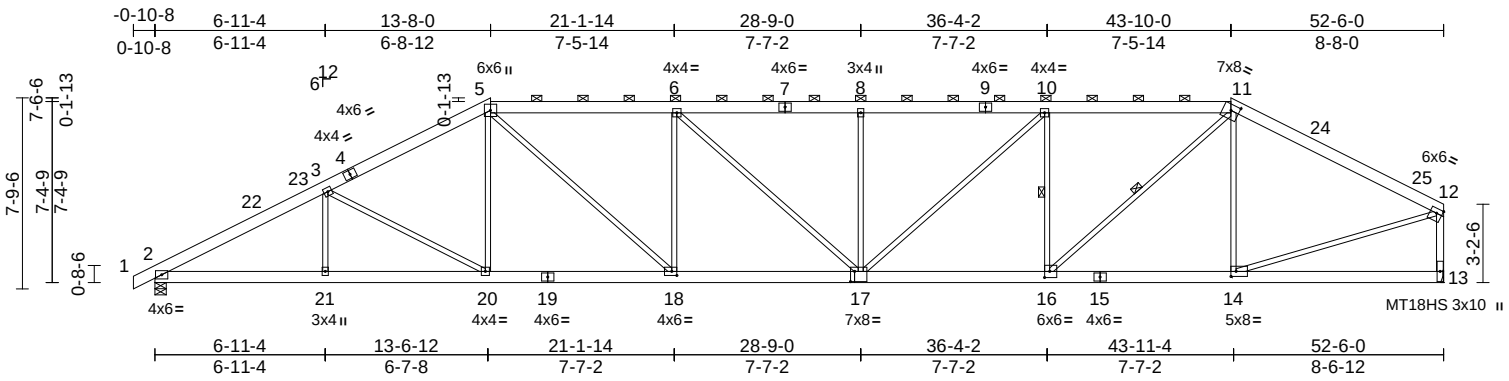

Scale = 1:93.9

Plate Offsets (X, Y): [11:0-4-0,0-2-14], [12:Edge,0-2-4], [14:0-2-8,0-2-8], [16:0-2-8,0-3-0], [17:0-2-0,0-5-0], [18:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.33	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.60	17-18	>999	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.16	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 332 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x3 SPF No.2 *Except* 13-12:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-14 max.): 5-11.
BOT CHORD Rigid ceiling directly applied or 8-2-15 oc bracing.
WEBS 1 Row at midpt 10-16, 11-16

REACTIONS (size) 2=0-5-8, 13= Mechanical
Max Horiz 2=186 (LC 9)
Max Uplift 2=-293 (LC 9), 13=-320 (LC 8)
Max Grav 2=2424 (LC 1), 13=2345 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-4409/625, 3-5=-3885/645, 5-6=-4301/810, 6-8=-4424/831, 8-10=-4424/831, 10-11=-3815/727, 11-12=-2842/478, 12-13=-2263/396
BOT CHORD 2-21=-657/3775, 20-21=-657/3775, 18-20=-602/3384, 16-18=-806/4299, 14-16=-383/2444, 13-14=-67/107
WEBS 3-21=0/264, 3-20=-445/249, 5-20=-37/434, 5-18=-354/1384, 6-18=-795/334, 6-17=-102/293, 8-17=-523/232, 10-17=-173/871, 10-16=-1183/383, 11-16=-434/1949, 11-14=-606/226, 12-14=-376/2465

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-4-8, Interior (1) 4-4-8 to 13-8-0, Exterior(2R) 13-8-0 to 21-1-14, Interior (1) 21-1-14 to 43-10-0, Exterior(2R) 43-10-0 to 51-3-2, Interior (1) 51-3-2 to 52-4-4 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
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 293 lb uplift at joint 2 and 320 lb uplift at joint 13.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

July 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/21/2025 12:29:20

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	A4	Hip	2	1	I74608680 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:50 Page: 1
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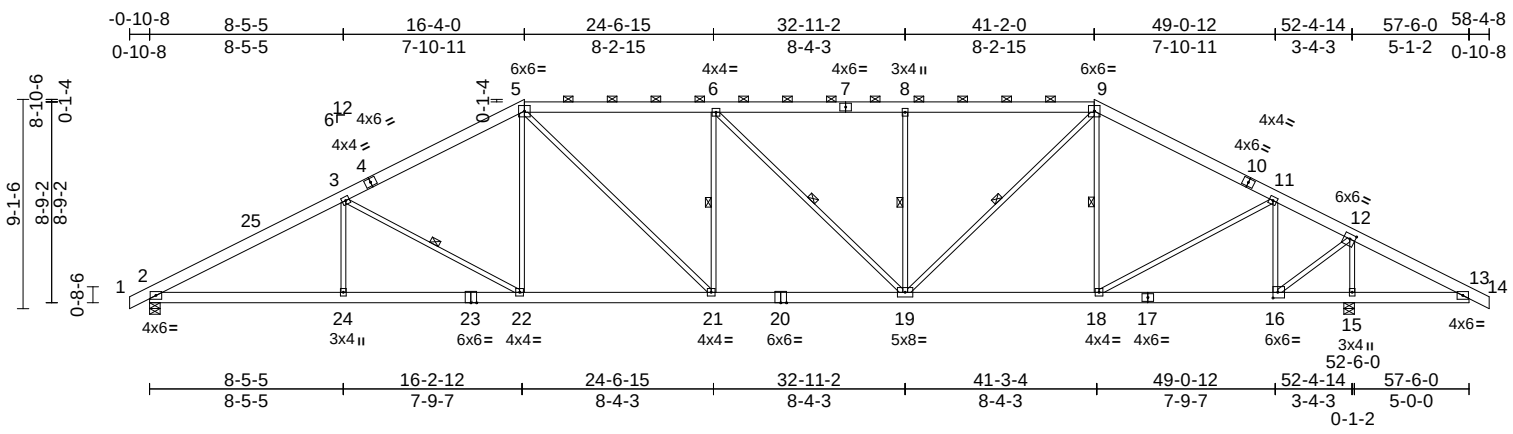


Scale = 1:100.4

Plate Offsets (X, Y): [12:0-2-12,0-2-8], [16:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.25	19-21	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.46	19-21	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.15	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 362 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-10-2 oc purlins, except 2-0-0 oc purlins (3-4-3 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-16,13-15.
WEBS 1 Row at midpt 3-22, 6-21, 6-19, 8-19, 9-19, 9-18

REACTIONS (size) 2=0-5-8, 15=0-5-8
Max Horiz 2=161 (LC 12)
Max Uplift 2=-292 (LC 12), 15=-326 (LC 13)
Max Grav 2=2397 (LC 1), 15=2896 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-4336/591, 3-5=-3615/576, 5-6=-3649/639, 6-8=-3395/589, 8-9=-3396/591, 9-11=-2779/444, 11-12=-1610/248, 12-13=-495/560, 13-14=0/15
BOT CHORD 2-24=-470/3709, 22-24=-470/3709, 21-22=-404/3113, 19-21=-525/3647, 18-19=-236/2382, 16-18=-119/1403, 15-16=-411/491, 13-15=-411/491
WEBS 3-24=0/336, 3-22=-683/307, 5-22=-56/541, 5-21=-277/945, 6-21=-506/299, 6-19=-414/89, 8-19=-629/282, 9-19=-332/1518, 9-18=-371/213, 11-16=-1452/410, 11-18=-243/1121, 12-16=-431/2345, 12-15=-2702/619

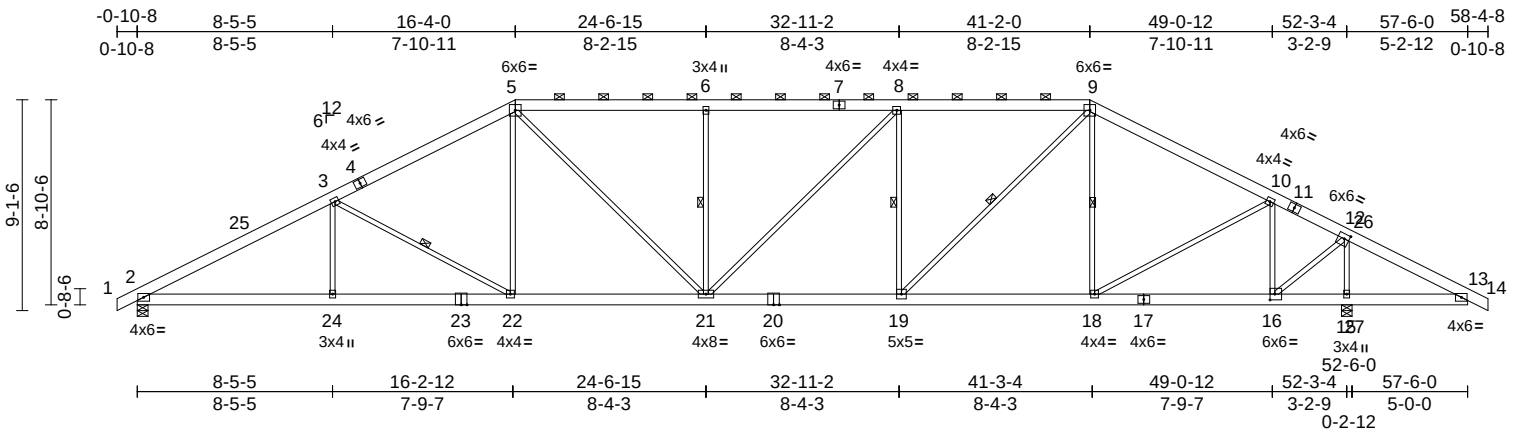
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-10-8, Interior (1) 4-10-8 to 16-4-0, Exterior(2R) 16-4-0 to 24-6-15, Interior (1) 24-6-15 to 41-2-0, Exterior(2R) 41-2-0 to 49-0-12, Interior (1) 49-0-12 to 58-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 292 lb uplift at joint 2 and 326 lb uplift at joint 15.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	A5	Piggyback Base	2	1	I74608681 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:50 Page: 1
ID:UFgx?osATUs7RvhH6uW4OczeLGc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:99.6

Plate Offsets (X, Y): [12:0-2-8,0-2-8], [16:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.25	19-21	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.45	19-21	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.15	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 362 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-10-10 oc purlins, except 2-0-0 oc purlins (3-4-9 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-16,13-15.
WEBS 1 Row at midpt 3-22, 6-21, 8-19, 9-19, 9-18

REACTIONS (size) 2=0-5-8, 15=0-5-8
Max Horiz 2=-162 (LC 17)
Max Uplift 2=-292 (LC 12), 15=-327 (LC 13)
Max Grav 2=2390 (LC 1), 15=2903 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-4321/588, 3-5=-3588/572, 5-6=-3578/630, 6-8=-3578/630, 8-9=-3327/584, 9-10=-2728/439, 10-12=-1517/240, 12-13=-505/575, 13-14=0/15
BOT CHORD 2-24=-469/3697, 22-24=-469/3697, 21-22=-401/3080, 19-21=-461/3326, 18-19=-230/2330, 16-18=-111/1323, 15-16=-422/501, 13-15=-422/501
WEBS 3-24=0/336, 3-22=-706/310, 5-22=-58/550, 5-21=-268/899, 6-21=-611/279, 8-21=-88/411, 8-19=-904/335, 9-19=-329/1497, 9-18=-390/221, 10-16=-1497/422, 10-18=-255/1154, 12-16=-425/2320, 12-15=-2707/618

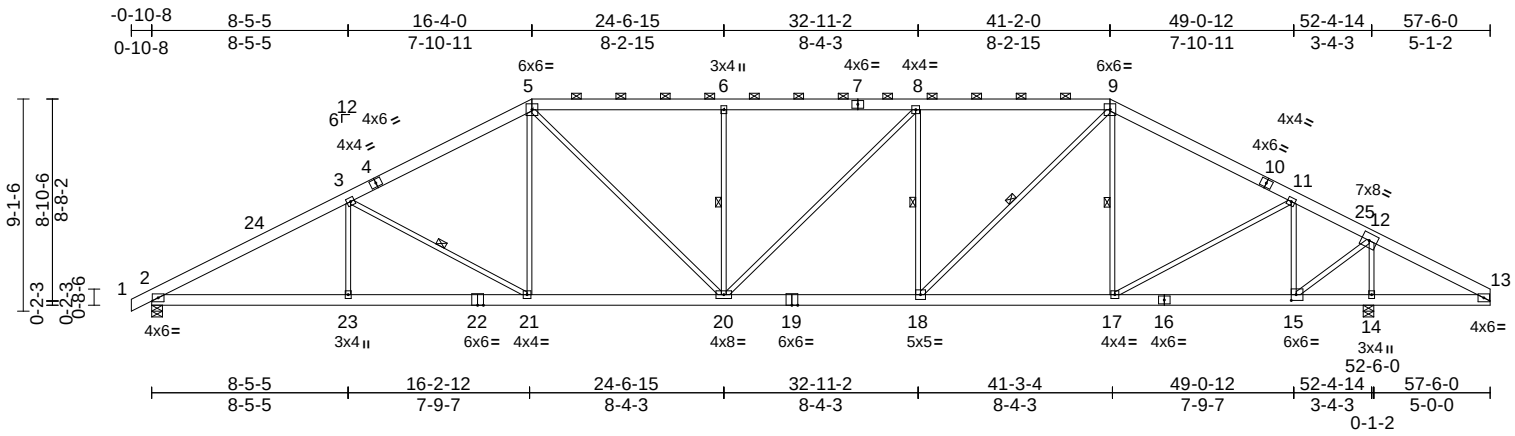
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-10-8, Interior (1) 4-10-8 to 16-4-0, Exterior(2R) 16-4-0 to 24-6-15, Interior (1) 24-6-15 to 41-2-0, Exterior(2R) 41-2-0 to 49-0-12, Interior (1) 49-0-12 to 58-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 292 lb uplift at joint 2 and 327 lb uplift at joint 15.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	A6	Piggyback Base	2	1	I74608682 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:50 Page: 1
ID:yREKC8toEo?_23FTgc1JwpzeLGb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:99

Plate Offsets (X, Y): [15:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.25	18-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.46	18-20	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.15	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 360 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-10-6 oc purlins, except 2-0-0 oc purlins (3-4-5 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-15,13-14.
WEBS 1 Row at midpt 3-21, 6-20, 8-18, 9-18, 9-17

REACTIONS (size) 2=0-5-8, 14=0-5-8
Max Horiz 2=167 (LC 16)
Max Uplift 2=-293 (LC 12), 14=-302 (LC 13)
Max Grav 2=2404 (LC 1), 14=2828 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-4350/600, 3-5=-3618/579, 5-6=-3619/636, 6-8=-3618/636, 8-9=-3381/590, 9-11=-2805/447, 11-12=-1692/258, 12-13=-382/427
BOT CHORD 2-23=-479/3723, 21-23=-479/3723, 20-21=-411/3107, 18-20=-475/3381, 17-18=-247/2399, 15-17=-133/1477, 14-15=-290/375, 13-14=-290/375
WEBS 3-23=0/336, 3-21=-706/310, 5-21=-58/550, 5-20=-270/918, 6-20=-611/279, 8-20=-84/400, 8-18=-897/333, 9-18=-326/1486, 9-17=-341/194, 11-15=-1410/380, 12-15=-394/2285, 12-14=-2642/568, 11-17=-201/1056

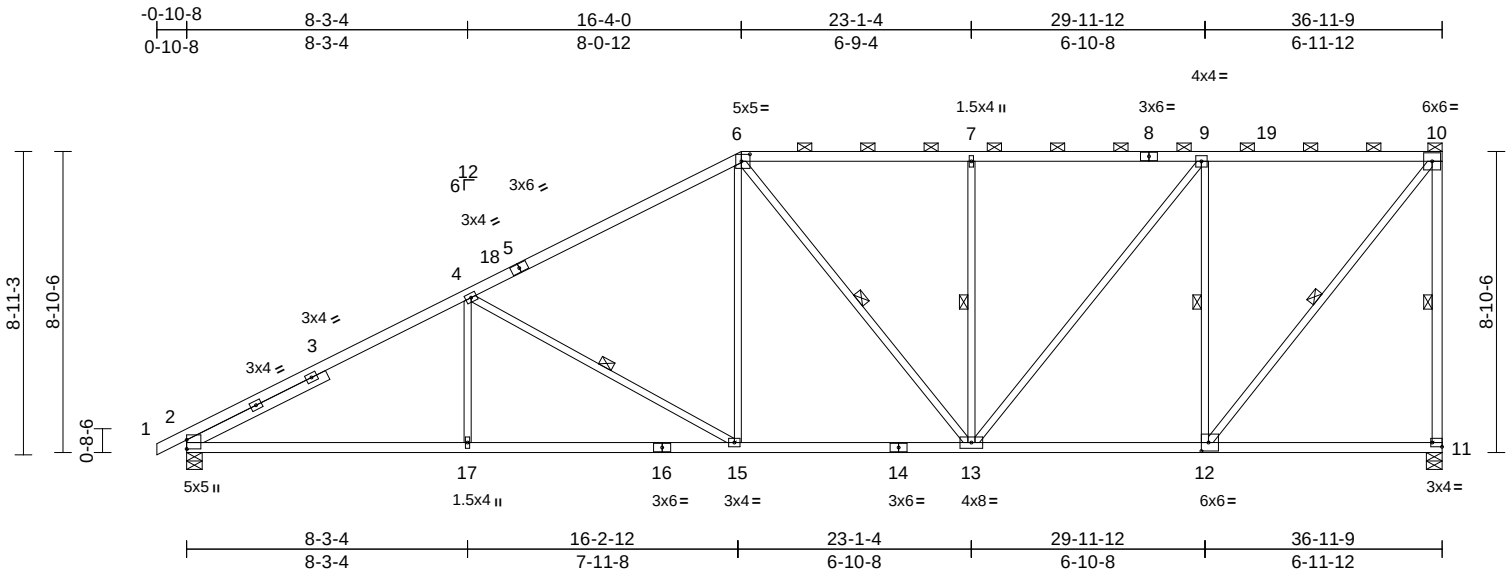
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-10-8, Interior (1) 4-10-8 to 16-4-0, Exterior(2R) 16-4-0 to 24-6-15, Interior (1) 24-6-15 to 41-2-0, Exterior(2R) 41-2-0 to 49-0-12, Interior (1) 49-0-12 to 57-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 293 lb uplift at joint 2 and 302 lb uplift at joint 14.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	A7	Piggyback Base	16	1	I74608683 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:50 Page: 1
ID:yREKC8toEo?_23FTgc1JwpzeLGb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:67.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.14	15-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.31	15-17	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.10	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 190 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 10-11:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 4-7-3

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

REACTIONS (size) 2=0-5-8, 11=0-5-8
Max Horiz 2=383 (LC 9)
Max Uplift 2=-254 (LC 12), 11=-345 (LC 9)
Max Grav 2=1719 (LC 1), 11=1656 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/3, 2-4=-2871/424, 4-6=-2140/409, 6-7=-1701/407, 7-9=-1701/407, 9-10=-1122/323, 10-11=-1595/369
BOT CHORD 2-17=-705/2434, 15-17=-705/2434, 13-15=-516/1789, 12-13=-315/1122, 11-12=-158/180
WEBS 4-17=0/344, 4-15=-734/305, 6-15=-63/534, 6-13=-212/122, 7-13=-480/232, 9-13=-203/925, 9-12=-1243/389, 10-12=-366/1779

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) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 16-4-0, Exterior(2R) 16-4-0 to 23-1-4, Interior (1) 23-1-4 to 36-9-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 345 lb uplift at joint 11 and 254 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	A8	Piggyback Base	2	1	I74608684 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:51 Page: 1
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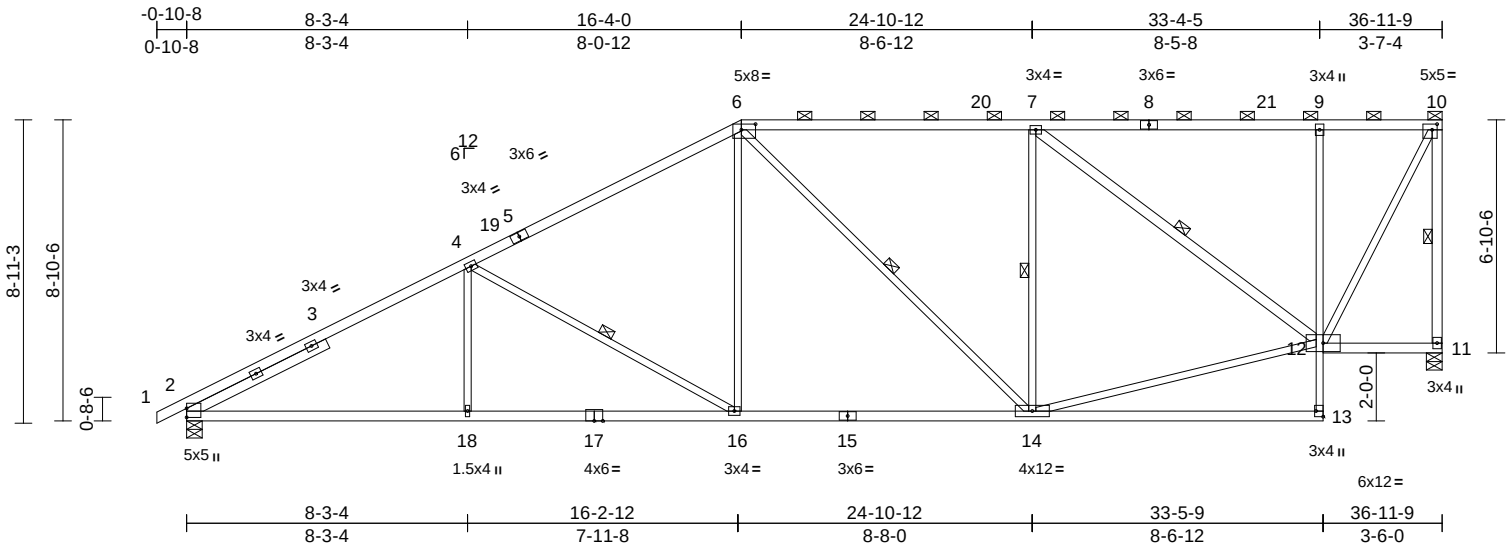

Scale = 1:67.8

Plate Offsets (X, Y): [6:0-5-0,0-2-0], [10:0-1-12,0-2-0], [13: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	0.87	Vert(LL)	-0.15	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.33	13-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.10	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 199 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* 1-5,8-10:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 13-9:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 10-11,12-7:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 4-7-3

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-0-6 max.): 6-10.
BOT CHORD Rigid ceiling directly applied or 7-2-2 oc bracing.
WEBS 1 Row at midpt 10-11, 4-16, 6-14, 7-14, 7-12

REACTIONS (size) 2=0-5-8, 11=0-5-8
Max Horiz 2=347 (LC 9)
Max Uplift 2=-253 (LC 12), 11=-344 (LC 9)
Max Grav 2=1719 (LC 1), 11=1656 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/3, 2-4=-2869/424, 4-6=-2144/408, 6-7=-1634/395, 7-9=-827/257, 9-10=-823/255, 10-11=-1603/350
BOT CHORD 2-18=-662/2431, 16-18=-662/2431, 14-16=-474/1795, 13-14=0/56, 12-13=0/145, 9-12=-462/221, 11-12=-129/144
WEBS 4-18=0/337, 4-16=-725/306, 6-16=-54/557, 6-14=-276/140, 7-14=-29/259, 12-14=-392/1633, 7-12=-1021/176, 10-12=-384/1756

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) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 16-4-0, Exterior(2R) 16-4-0 to 23-4-14, Interior (1) 23-4-14 to 36-9-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are 3x4 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 344 lb uplift at joint 11 and 253 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	A9	Piggyback Base Supported Gable	2	1	I74608685 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:51 Page: 1
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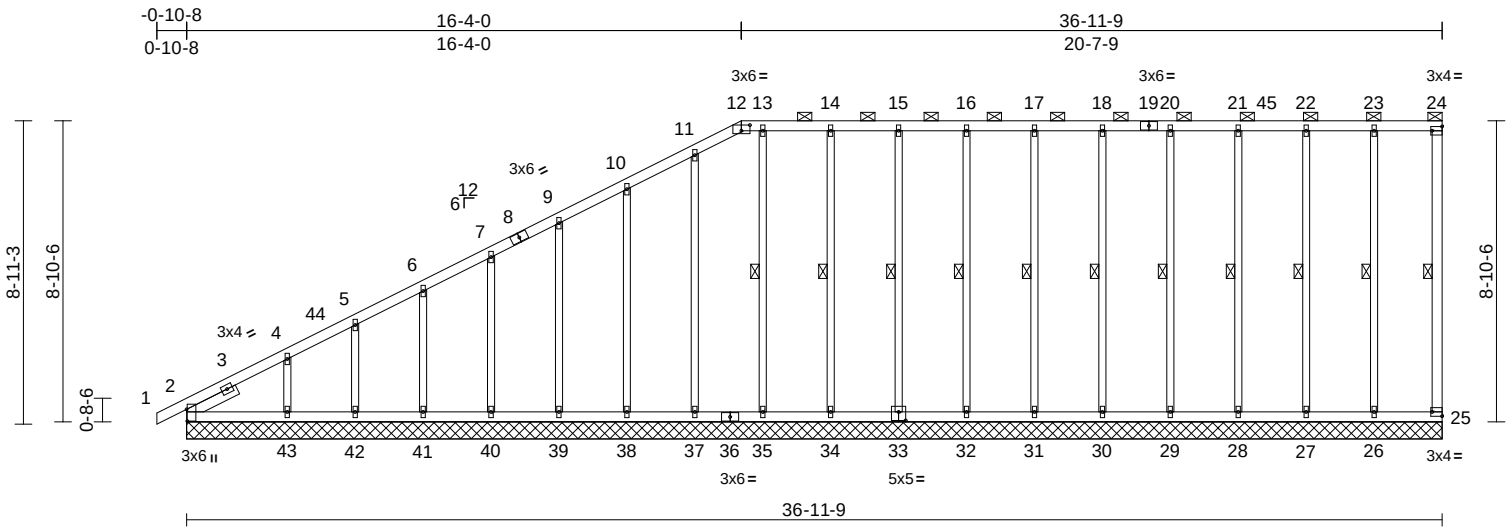


Scale = 1:67.8

Plate Offsets (X, Y): [2:0-4-3,0-0-4], [12:0-3-0,0-2-0], [24:Edge,0-1-8], [25:Edge,0-1-8], [33:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	25	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 223 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-7-9

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.): 12-24.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 24-25, 23-26, 22-27, 21-28, 20-29, 18-30, 17-31, 16-32, 15-33, 14-34, 13-35

REACTIONS (size) 2=36-11-9, 25=36-11-9, 26=36-11-9, 27=36-11-9, 28=36-11-9, 29=36-11-9, 30=36-11-9, 31=36-11-9, 32=36-11-9, 33=36-11-9, 34=36-11-9, 35=36-11-9, 37=36-11-9, 38=36-11-9, 39=36-11-9, 40=36-11-9, 41=36-11-9, 42=36-11-9, 43=36-11-9
Max Horiz 2=383 (LC 9)
Max Uplift 2=-1 (LC 8), 25=-21 (LC 9), 26=-50 (LC 8), 27=-47 (LC 9), 28=-43 (LC 8), 29=-40 (LC 9), 30=-40 (LC 8), 31=-39 (LC 9), 32=-39 (LC 9), 33=-39 (LC 9), 34=-47 (LC 8), 35=-67 (LC 9), 37=-44 (LC 12), 38=-66 (LC 12), 39=-61 (LC 12), 40=-60 (LC 12), 41=-66 (LC 12), 42=-38 (LC 12), 43=-141 (LC 12)
Max Grav 2=244 (LC 20), 25=70 (LC 1), 26=186 (LC 26), 27=181 (LC 1), 28=180 (LC 26), 29=180 (LC 1), 30=180 (LC 1), 31=180 (LC 26), 32=180 (LC 26), 33=180 (LC 1), 34=184 (LC 26), 35=181 (LC 1), 37=179 (LC 1), 38=180 (LC 1), 39=180 (LC 1), 40=179 (LC 1), 41=185 (LC 1), 42=157 (LC 1), 43=253 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/3, 2-4=-571/355, 4-5=-451/296, 5-6=-413/289, 6-7=-356/267, 7-9=-303/249, 9-10=-248/230, 10-11=-197/215, 11-12=-181/219, 12-13=-166/216, 13-14=-166/216, 14-15=-166/216, 15-16=-166/216, 16-17=-166/216, 17-18=-166/216, 18-20=-166/216, 20-21=-166/216, 21-22=-166/216, 22-23=-166/216, 23-24=-166/216, 24-25=-114/140
BOT CHORD 2-43=-166/216, 42-43=-166/216, 41-42=-166/216, 40-41=-166/216, 39-40=-166/216, 38-39=-166/216, 37-38=-166/216, 35-37=-166/216, 34-35=-166/216, 32-34=-166/216, 31-32=-166/216, 30-31=-166/216, 29-30=-166/216, 28-29=-166/216, 27-28=-166/216, 26-27=-166/216, 25-26=-166/216
WEBS 23-26=-171/184, 22-27=-141/103, 21-28=-140/79, 20-29=-140/72, 18-30=-140/72, 17-31=-140/72, 16-32=-140/72, 15-33=-140/73, 14-34=-144/82, 13-35=-143/126, 11-37=-139/115, 10-38=-140/106, 9-39=-140/97, 7-40=-139/96, 6-41=-143/104, 5-42=-126/78, 4-43=-190/237

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-1-8, Exterior(2N) 4-1-8 to 16-4-0, Corner(3R) 16-4-0 to 21-4-0, Exterior(2N) 21-4-0 to 36-9-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

July 2,2025

Continued on page 2

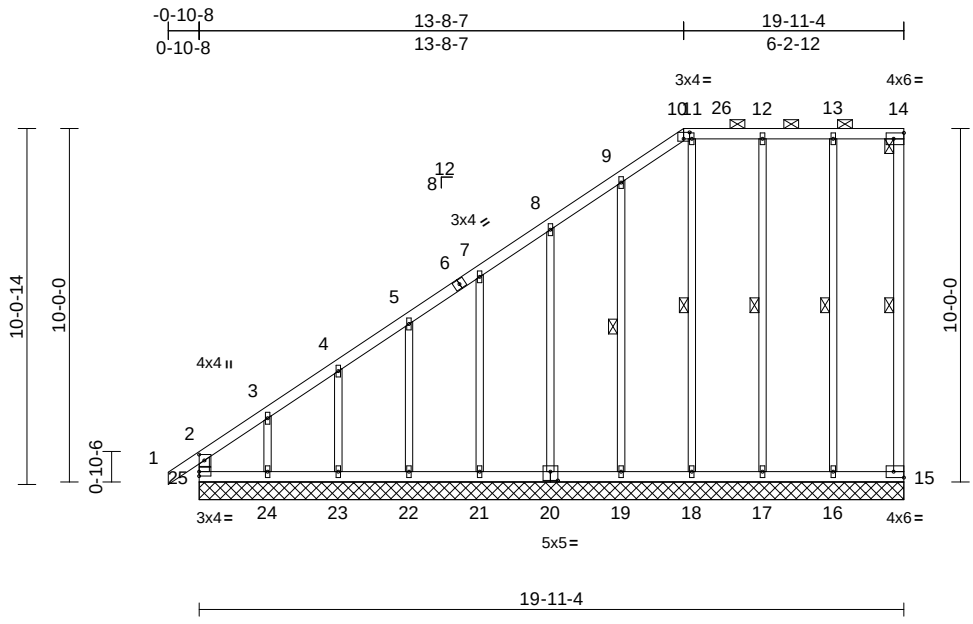
MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

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 21 lb uplift at joint 25, 1 lb uplift at joint 2, 50 lb uplift at joint 26, 47 lb uplift at joint 27, 43 lb uplift at joint 28, 40 lb uplift at joint 29, 40 lb uplift at joint 30, 39 lb uplift at joint 31, 39 lb uplift at joint 32, 39 lb uplift at joint 33, 47 lb uplift at joint 34, 67 lb uplift at joint 35, 44 lb uplift at joint 37, 66 lb uplift at joint 38, 61 lb uplift at joint 39, 60 lb uplift at joint 40, 66 lb uplift at joint 41, 38 lb uplift at joint 42 and 141 lb uplift at joint 43.
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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	B1	Piggyback Base Supported Gable	1	1	I74608686 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:51 Page: 1
ID:QMGHrghm?t_F8c1OkFlZHRzeLGr-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:65.2

Plate Offsets (X, Y): [2:0-2-0,0-1-12], [10:0-2-0,0-2-3], [14:Edge,0-2-0], [15:Edge,0-2-0], [20:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 127 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 10-14.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 14-15, 13-16, 12-17, 11-18, 9-19

REACTIONS (size) 15=19-11-4, 16=19-11-4, 17=19-11-4, 18=19-11-4, 19=19-11-4, 20=19-11-4, 21=19-11-4, 22=19-11-4, 23=19-11-4, 24=19-11-4, 25=19-11-4
Max Horiz 25=425 (LC 9)
Max Uplift 15=-24 (LC 9), 16=-56 (LC 8), 17=-51 (LC 9), 18=-81 (LC 9), 19=-70 (LC 12), 20=-82 (LC 12), 21=-75 (LC 12), 22=-86 (LC 12), 23=-44 (LC 12), 24=-233 (LC 12), 25=-136 (LC 10)
Max Grav 15=70 (LC 1), 16=186 (LC 1), 17=187 (LC 26), 18=177 (LC 1), 19=196 (LC 19), 20=188 (LC 19), 21=188 (LC 19), 22=193 (LC 19), 23=185 (LC 1), 24=255 (LC 19), 25=333 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-25=-422/316, 1-2=0/40, 2-3=-699/522, 3-4=-538/417, 4-5=-483/393, 5-7=-405/352, 7-8=-332/314, 8-9=-260/279, 9-10=-213/255, 10-11=-185/238, 11-12=-185/238, 12-13=-185/238, 13-14=-185/238, 14-15=-143/167
BOT CHORD 24-25=-185/238, 23-24=-185/238, 22-23=-185/238, 21-22=-185/238, 19-21=-185/238, 18-19=-185/238, 17-18=-185/238, 16-17=-185/238, 15-16=-185/238
WEBS 13-16=-205/166, 12-17=-148/90, 11-18=-205/155, 9-19=-155/120, 8-20=-148/116, 7-21=-149/108, 5-22=-150/116, 4-23=-144/111, 3-24=-230/270

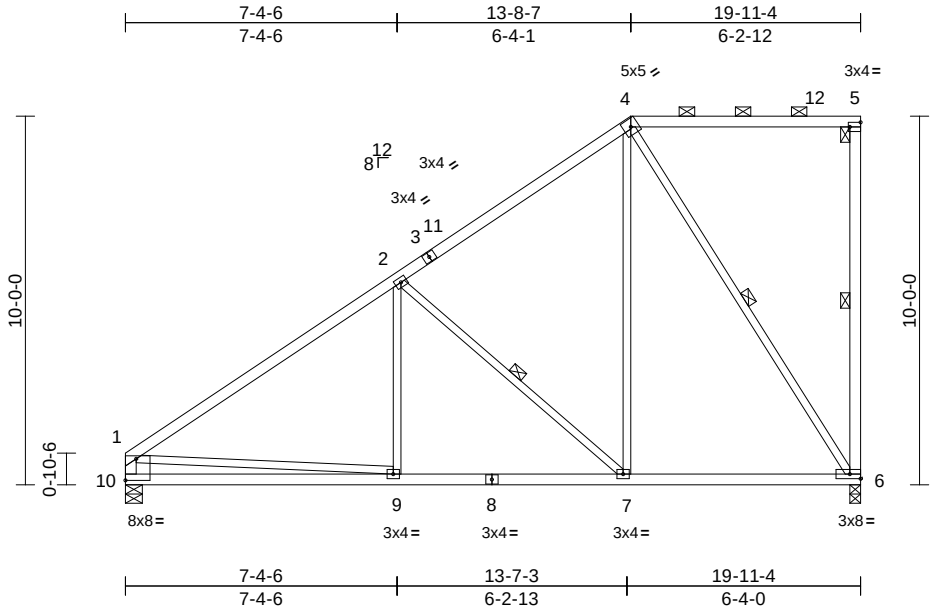
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 3-11-4, Exterior(2N) 3-11-4 to 13-8-7, Corner(3R) 13-8-7 to 18-8-7, Exterior(2N) 18-8-7 to 19-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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) 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 136 lb uplift at joint 25, 24 lb uplift at joint 15, 56 lb uplift at joint 16, 51 lb uplift at joint 17, 81 lb uplift at joint 18, 70 lb uplift at joint 19, 82 lb uplift at joint 20, 75 lb uplift at joint 21, 86 lb uplift at joint 22, 44 lb uplift at joint 23 and 233 lb uplift at joint 24.
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

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	B2	Piggyback Base	22	1	I74608687 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:51 Page: 1
ID:QMGHrghm?t_F8c1OkFlZHRzeLGr-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:62.5

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

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	0.80	Vert(LL)	-0.07	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.15	9-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 111 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 5-6,10-1:2x4 SP No.2

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

REACTIONS (size) 6=0-3-8, 10=0-5-8
Max Horiz 10=413 (LC 9)
Max Uplift 6=-207 (LC 9), 10=-122 (LC 12)
Max Grav 6=884 (LC 1), 10=884 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1106/194, 2-4=-631/244, 4-5=-191/203, 5-6=-201/112, 1-10=-814/163
BOT CHORD 9-10=-624/744, 7-9=-442/868, 6-7=-277/506
WEBS 2-9=0/255, 2-7=-591/276, 4-7=-122/511, 4-6=-740/286, 1-9=0/473

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) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 13-8-7, Exterior(2R) 13-8-7 to 18-8-7, Interior (1) 18-8-7 to 19-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 207 lb uplift at joint 6 and 122 lb uplift at joint 10.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	B3	Piggyback Base	1	1	I74608688 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:51 Page: 1
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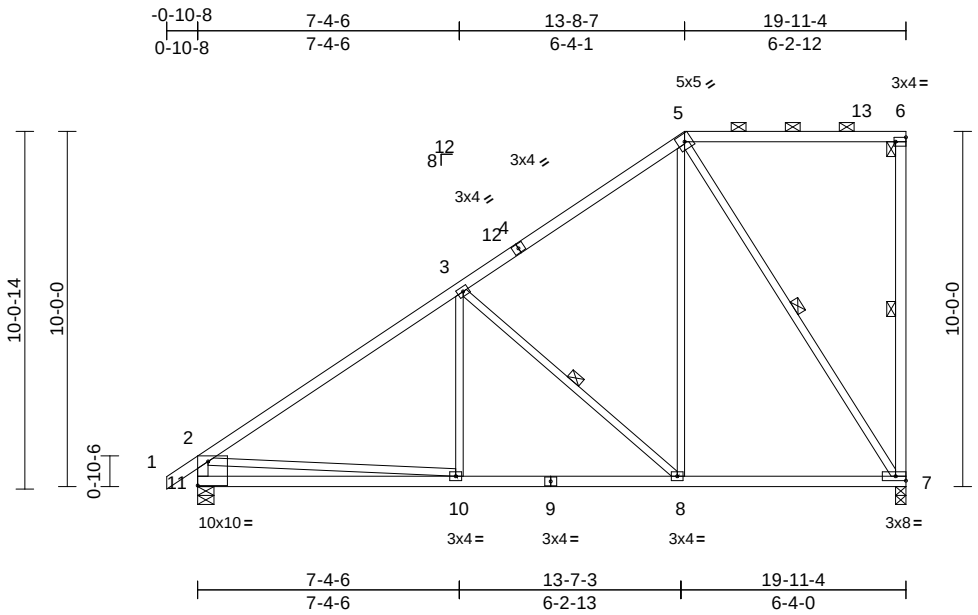

Scale = 1:64.9

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

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	0.80	Vert(LL)	-0.07	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.15	10-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 113 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 6-7,11-2:2x4 SP No.2

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

REACTIONS (size) 7=0-3-8, 11=0-5-8
Max Horiz 11=425 (LC 9)
Max Uplift 7=-207 (LC 9), 11=-148 (LC 12)
Max Grav 7=882 (LC 1), 11=957 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-1106/195, 3-5=-627/242, 5-6=-191/203, 6-7=-200/112, 2-11=-888/209
BOT CHORD 10-11=-686/851, 8-10=-440/864, 7-8=-277/506
WEBS 3-10=0/259, 3-8=-579/271, 5-8=-118/503, 5-7=-739/286, 2-10=-10/372

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) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 13-8-7, Exterior(2R) 13-8-7 to 18-8-7, Interior (1) 18-8-7 to 19-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 207 lb uplift at joint 7 and 148 lb uplift at joint 11.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	C1	Common Supported Gable	1	1	I74608689 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:51 Page: 1
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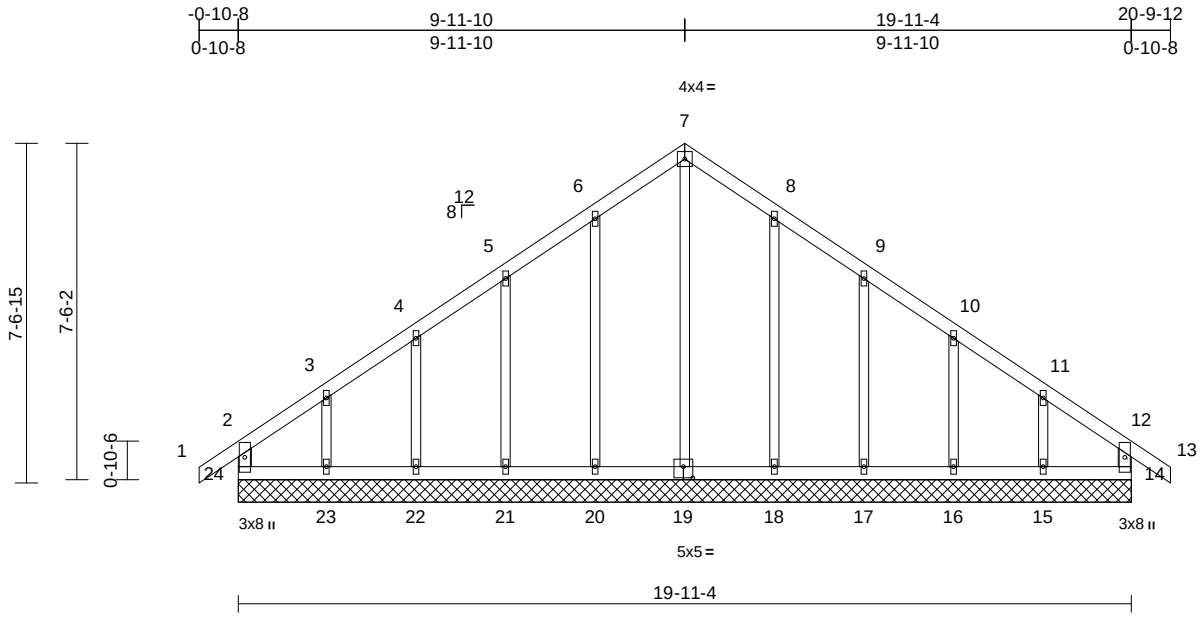

Scale = 1:51.4

Plate Offsets (X, Y): [19:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 99 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP 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 10-0-0 oc bracing.

REACTIONS (size) 14=19-11-4, 15=19-11-4, 16=19-11-4, 17=19-11-4, 18=19-11-4, 19=19-11-4, 20=19-11-4, 21=19-11-4, 22=19-11-4, 23=19-11-4, 24=19-11-4
Max Horiz 24=228 (LC 11)
Max Uplift 14=-49 (LC 9), 15=-127 (LC 13), 16=-66 (LC 13), 17=-85 (LC 13), 18=-71 (LC 13), 20=-73 (LC 12), 21=-85 (LC 12), 22=-64 (LC 12), 23=-135 (LC 12), 24=-83 (LC 8)
Max Grav 14=176 (LC 19), 15=207 (LC 20), 16=185 (LC 20), 17=189 (LC 20), 18=197 (LC 20), 19=211 (LC 22), 20=198 (LC 19), 21=189 (LC 19), 22=185 (LC 1), 23=220 (LC 19), 24=203 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-24=-168/73, 1-2=0/40, 2-3=-151/140, 3-4=-113/109, 4-5=-100/138, 5-6=-114/209, 6-7=-150/277, 7-8=-150/276, 8-9=-114/208, 9-10=-74/131, 10-11=-82/78, 11-12=-110/96, 12-13=0/40, 12-14=-147/71
BOT CHORD 23-24=-98/116, 22-23=-98/116, 21-22=-98/116, 20-21=-98/116, 18-20=-98/117, 17-18=-98/117, 16-17=-98/117, 15-16=-98/117, 14-15=-98/117
WEBS 7-19=-223/66, 6-20=-159/98, 5-21=-148/115, 4-22=-147/118, 3-23=-160/137, 8-18=-157/98, 9-17=-148/116, 10-16=-149/118, 11-15=-152/138

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 3-11-10, Exterior(2N) 3-11-10 to 9-11-10, Corner(3R) 9-11-10 to 14-11-10, Exterior(2N) 14-11-10 to 20-9-12 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) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 24, 49 lb uplift at joint 14, 73 lb uplift at joint 20, 85 lb uplift at joint 21, 64 lb uplift at joint 22, 135 lb uplift at joint 23, 71 lb uplift at joint 18, 85 lb uplift at joint 17, 66 lb uplift at joint 16 and 127 lb uplift at joint 15.
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

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	D1	Common Supported Gable	2	1	I74608690 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:51 Page: 1
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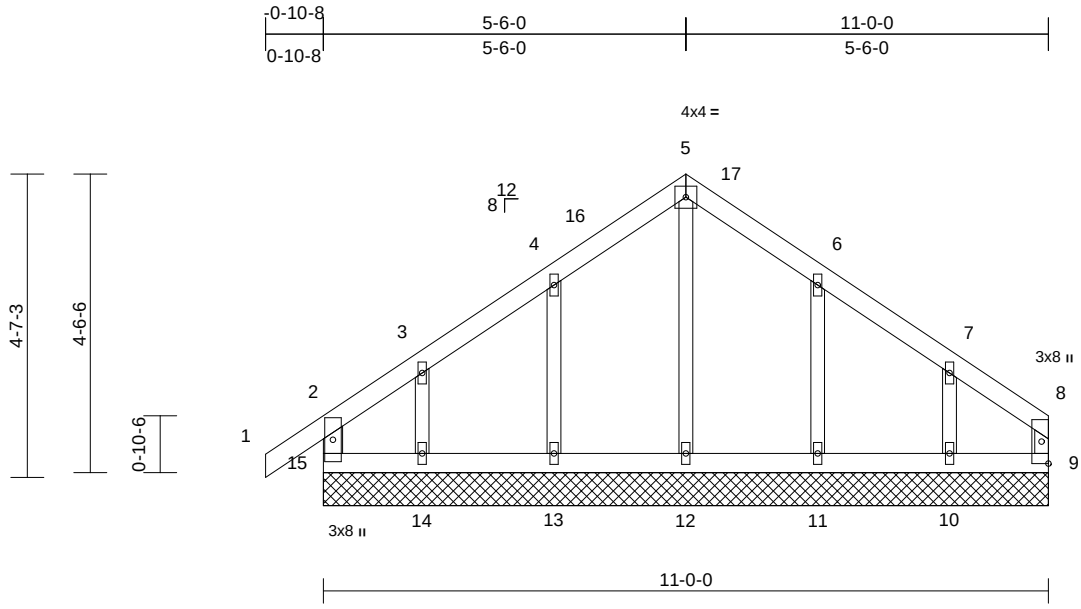


Scale = 1:35

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
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 49 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 8-9:2x3 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) 9=11-0-0, 10=11-0-0, 11=11-0-0, 12=11-0-0, 13=11-0-0, 14=11-0-0, 15=11-0-0
Max Horiz 15=138 (LC 9)
Max Uplift 9=-26 (LC 9), 10=-96 (LC 13), 11=-78 (LC 13), 13=-78 (LC 12), 14=-99 (LC 12), 15=-60 (LC 8)
Max Grav 9=71 (LC 19), 10=193 (LC 20), 11=199 (LC 20), 12=165 (LC 22), 13=203 (LC 19), 14=173 (LC 19), 15=165 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-15=-135/115, 1-2=0/40, 2-3=-96/86, 3-4=-76/116, 4-5=-109/214, 5-6=-109/209, 6-7=-59/110, 7-8=-56/53, 8-9=-52/25
BOT CHORD 14-15=-50/55, 13-14=-50/55, 12-13=-50/55, 11-12=-50/55, 10-11=-50/55, 9-10=-50/55
WEBS 5-12=-130/16, 4-13=-164/182, 3-14=-126/156, 6-11=-160/188, 7-10=-145/183

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-1-8, Exterior(2N) 4-1-8 to 5-6-0, Corner(3R) 5-6-0 to 10-6-0, Exterior(2N) 10-6-0 to 10-10-12 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) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 15, 26 lb uplift at joint 9, 78 lb uplift at joint 13, 99 lb uplift at joint 14, 78 lb uplift at joint 11 and 96 lb uplift at joint 10.
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.

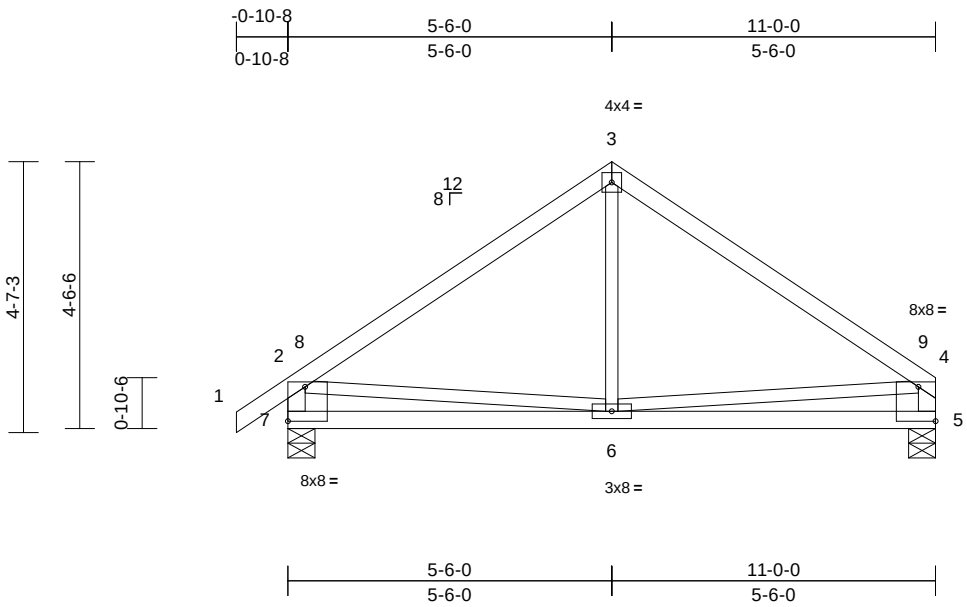
LOAD CASE(S) Standard

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	D2	Common	4	1	I74608691 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:52 Page: 1
ID:NlO1GLi0XVEzNvBnrfn1MszeLGp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:39.1

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

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	0.45	Vert(LL)	-0.02	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.04	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 51 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 7-2,5-4:2x4 SP No.2

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

REACTIONS (size) 5=0-5-8, 7=0-5-8
Max Horiz 7=138 (LC 9)
Max Uplift 5=-65 (LC 13), 7=-92 (LC 12)
Max Grav 5=478 (LC 1), 7=557 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-519/154, 3-4=-512/150, 2-7=-509/221, 4-5=-430/160
BOT CHORD 6-7=-211/361, 5-6=-113/209
WEBS 3-6=0/215, 2-6=-80/199, 4-6=-53/198

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-6-0, Exterior(2R) 5-6-0 to 10-6-0, Interior (1) 10-6-0 to 10-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 7 and 65 lb uplift at joint 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

July 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	D3	Common Girder	2	**3**	I74608692 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:52 Page: 1
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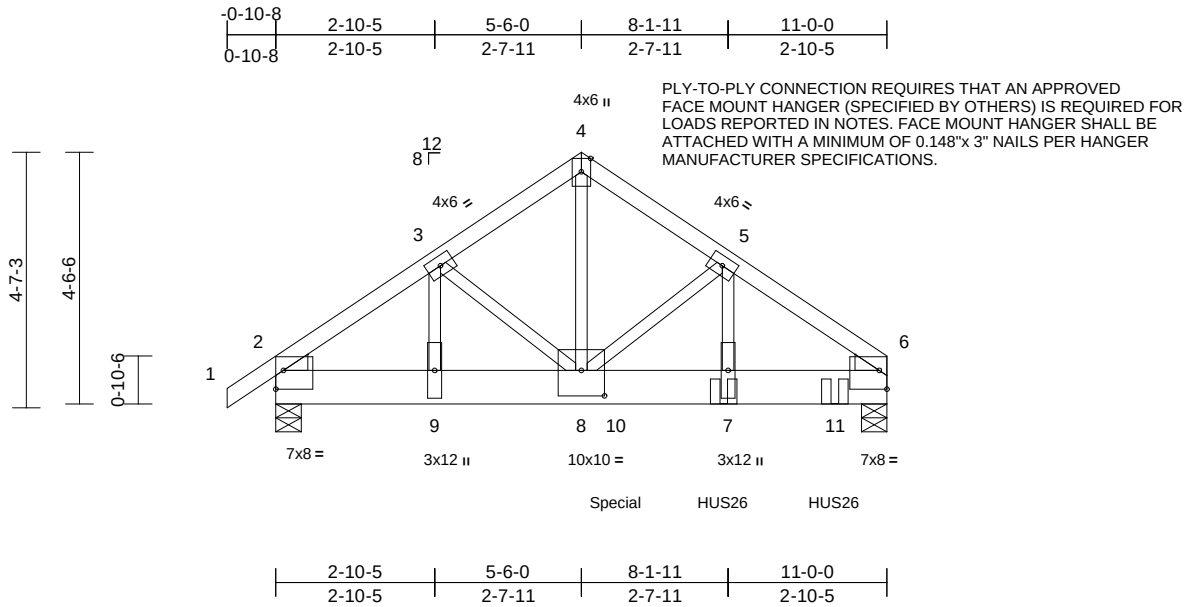

PLY-TO-PLY CONNECTION REQUIRES THAT AN APPROVED FACE MOUNT HANGER (SPECIFIED BY OTHERS) IS REQUIRED FOR LOADS REPORTED IN NOTES. FACE MOUNT HANGER SHALL BE ATTACHED WITH A MINIMUM OF 0.148"x 3" NAILS PER HANGER MANUFACTURER SPECIFICATIONS.

Scale = 1:41.5

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

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	0.53	Vert(LL)	-0.03	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.06	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.58	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 204 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

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

REACTIONS (size) 2=0-5-8, 6=0-5-8
Max Horiz 2=117 (LC 32)
Max Uplift 2=-922 (LC 12), 6=-1567 (LC 13)
Max Grav 2=3283 (LC 1), 6=6918 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/14, 2-3=-4443/1336, 3-4=-4845/1524, 4-5=-4840/1525, 5-6=-7350/1994
BOT CHORD 2-9=-956/3292, 8-9=-956/3292, 7-8=-1441/5502, 6-7=-1441/5502
WEBS 3-9=-559/212, 3-8=-368/1032, 4-8=-1579/5087, 5-8=-1991/439, 5-7=-675/3295

NOTES
1) N/A

2) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 4 rows staggered at 0-4-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.

3) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-6-0, Exterior(2E) 5-6-0 to 10-9-4 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
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 922 lb uplift at joint 2 and 1567 lb uplift at joint 6.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent spaced at 2-0-0 oc max. starting at 8-0-12 from the left end to 10-0-12 to connect truss(es) to front face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 4523 lb down and 1610 lb up at 6-1-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-6=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 7=-2325 (F), 10=-4523 (F), 11=-2328 (F)

July 2,2025

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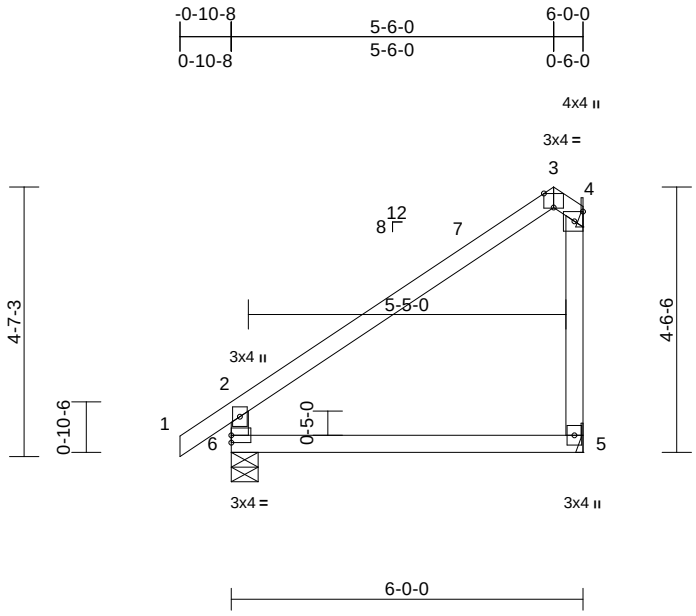
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/21/2025 12:29:21

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	D4	Jack-Closed	1	1	I74608693 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:52 Page: 1
ID:NlO1GLi0XVEzNvBnrfn1MszeLGp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:39.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.04	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.09	5-6	>800	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.08	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 28 lb	FT = 20%

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

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

REACTIONS (size) 4= Mechanical, 5= Mechanical, 6=0-5-8
Max Horiz 6=187 (LC 9)
Max Uplift 4=-98 (LC 12), 6=-51 (LC 12)
Max Grav 4=193 (LC 19), 5=119 (LC 3), 6=335 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-294/210, 1-2=0/40, 2-3=-192/102, 3-4=-151/159, 4-5=0/0
BOT CHORD 5-6=-105/114

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-6-0, Exterior(2E) 5-6-0 to 5-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Bearings are assumed to be: , Joint 6 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 6 and 98 lb uplift at joint 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard

July 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	D5	Jack-Closed	1	1	I74608694 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:52 Page: 1
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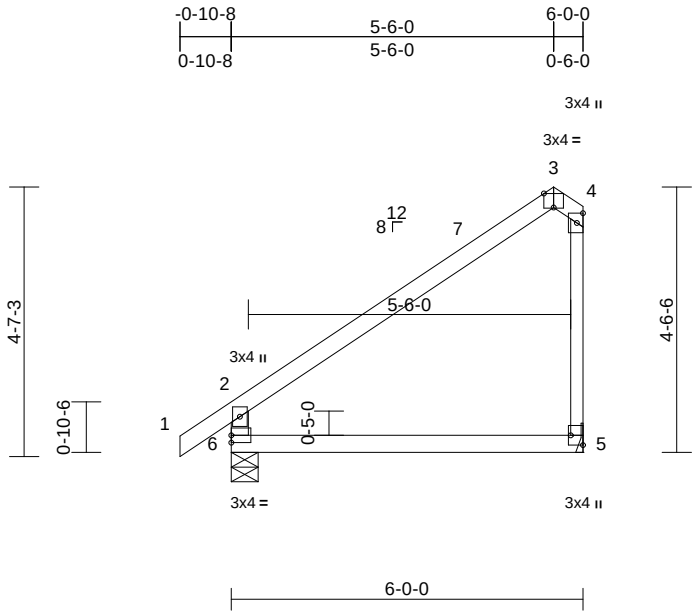

Scale = 1:39.3

Plate Offsets (X, Y): [3:0-2-0,Edge], [5: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	0.52	Vert(LL)	-0.05	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.10	5-6	>701	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 25 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 4-5:2x3 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 10-0-0 oc bracing.

REACTIONS (size) 5= Mechanical, 6=0-5-8
Max Horiz 6=187 (LC 9)
Max Uplift 5=-80 (LC 12), 6=-51 (LC 12)
Max Grav 5=274 (LC 19), 6=337 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-295/210, 1-2=0/40, 2-3=-186/104, 3-4=-146/154, 4-5=-194/215
BOT CHORD 5-6=-93/101

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-6-0, Exterior(2E) 5-6-0 to 5-10-12 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Bearings are assumed to be: Joint 6 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 6 and 80 lb uplift at joint 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	E1	Jack-Open	2	1	I74608695 Job Reference (optional)

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

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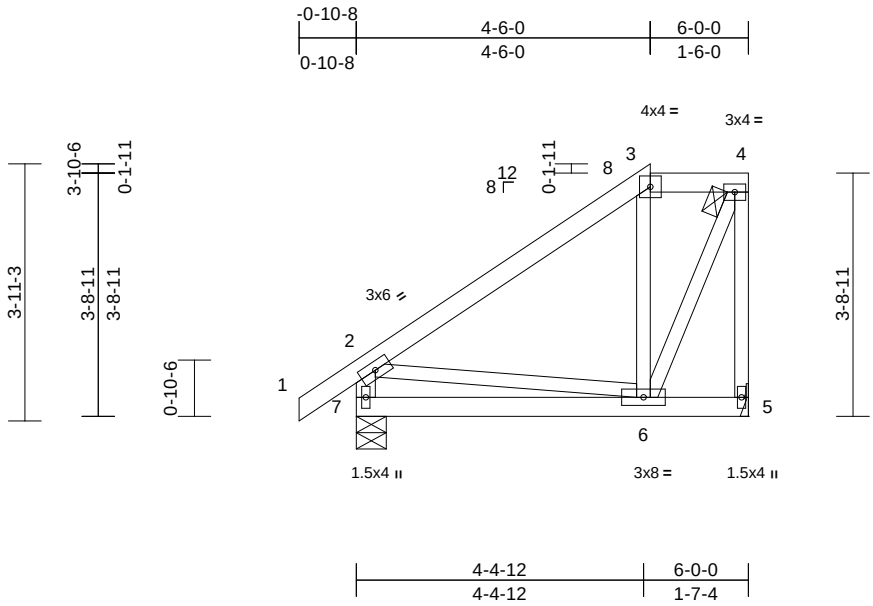

Scale = 1:35.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.01	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 33 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 7-2:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5= Mechanical, 7=0-5-8
Max Horiz 7=157 (LC 9)
Max Uplift 5=-68 (LC 9), 7=-59 (LC 12)
Max Grav 5=252 (LC 1), 7=337 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-189/45, 3-4=-134/105, 4-5=-262/184, 2-7=-301/182
BOT CHORD 6-7=-317/187, 5-6=-71/77
WEBS 2-6=-38/210, 3-6=-137/175, 4-6=-165/247

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 4-6-0, Exterior(2E) 4-6-0 to 5-10-12 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: Joint 7 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 68 lb uplift at joint 5 and 59 lb uplift at joint 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) 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

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	E2	Half Hip	2	1	I74608696 Job Reference (optional)

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:52 Page: 1
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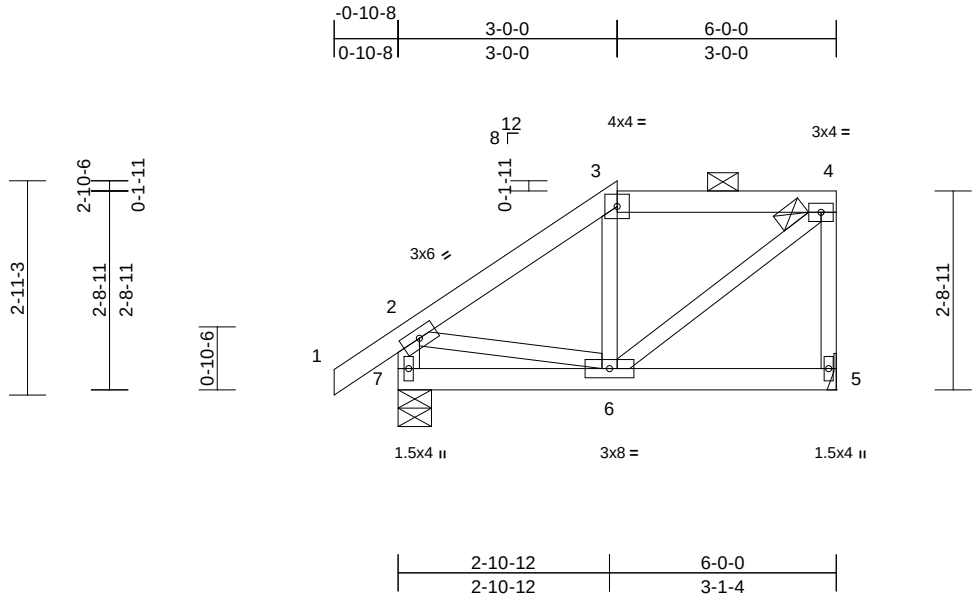

Scale = 1:31.5

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	0.18	Vert(LL)	0.00	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 30 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 7-2:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5= Mechanical, 7=0-5-8
Max Horiz 7=114 (LC 9)
Max Uplift 5=-65 (LC 9), 7=-60 (LC 12)
Max Grav 5=252 (LC 1), 7=337 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-238/82, 3-4=-158/110, 4-5=-227/157, 2-7=-315/180
BOT CHORD 6-7=-228/127, 5-6=-50/54
WEBS 2-6=-5/154, 3-6=-90/112, 4-6=-140/207

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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: Joint 7 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 5 and 60 lb uplift at joint 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) 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

July 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/21/2025 12:29:21

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	E3	Half Hip Girder	2	1	I74608697 Job Reference (optional)

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:52 Page: 1
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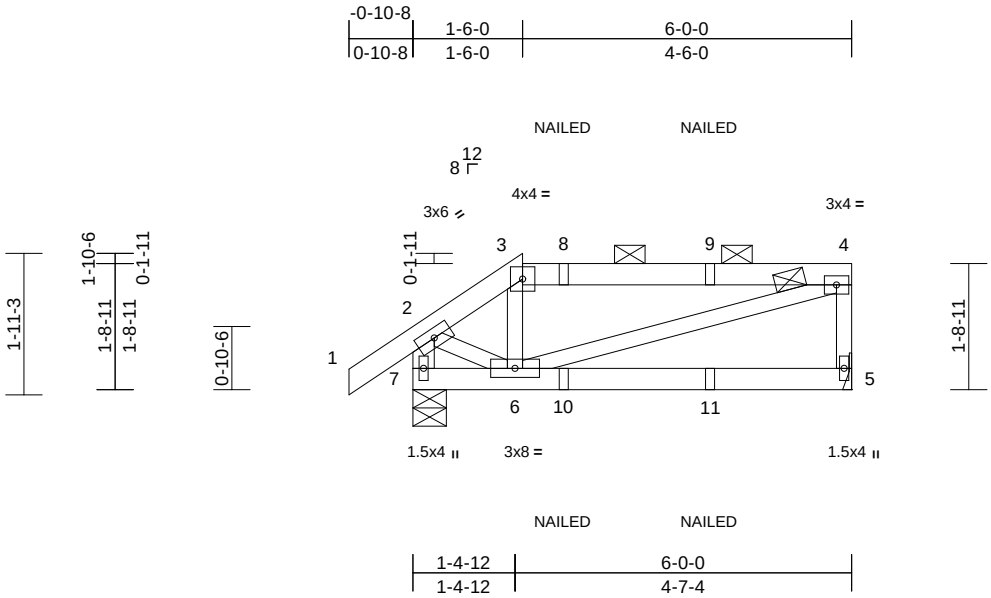

Scale = 1:31.5

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	0.52	Vert(LL)	-0.02	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.03	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 7-2:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5= Mechanical, 7=0-5-8
Max Horiz 7=71 (LC 9)
Max Uplift 5=-83 (LC 9), 7=-85 (LC 12)
Max Grav 5=255 (LC 1), 7=339 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-256/85, 3-4=-189/81, 4-5=-216/140, 2-7=-354/163
BOT CHORD 6-7=-140/67, 5-6=-29/32
WEBS 2-6=-27/206, 3-6=-57/85, 4-6=-105/197

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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: Joint 7 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 5 and 85 lb uplift at joint 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 10=-3 (B), 11=-3 (B)

July 2,2025

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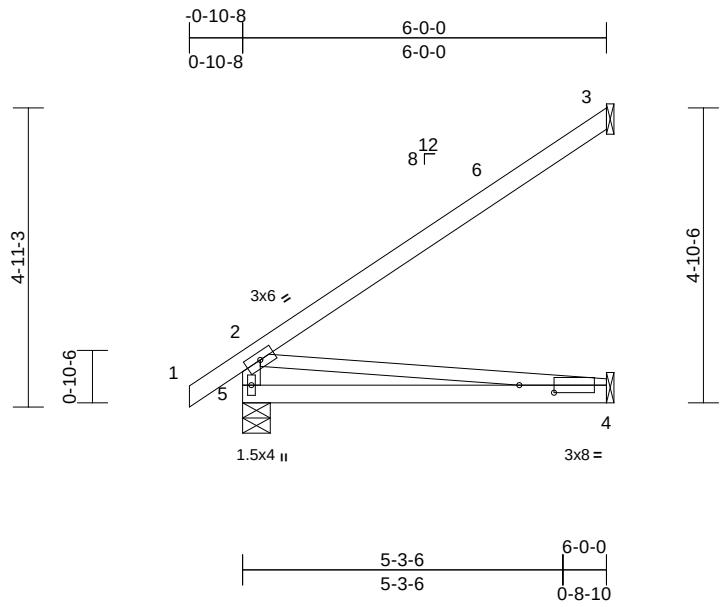
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	J1	Jack-Open	44	1	I74608698 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:52 Page: 1
ID:NlO1GLi0XVEzNvBnrfn1MszeLGp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:38

Plate Offsets (X, Y): [4:0-6-14,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.07	4-5	>997	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.14	4-5	>499	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 4-2:2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-6-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=184 (LC 12)
Max Uplift 3=-144 (LC 12), 5=-9 (LC 12)
Max Grav 3=210 (LC 19), 4=117 (LC 3), 5=339 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-280/113, 1-2=0/40, 2-3=-152/98
BOT CHORD 4-5=-283/113
WEBS 2-4=-114/285

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) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 5 and 144 lb uplift at joint 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

July 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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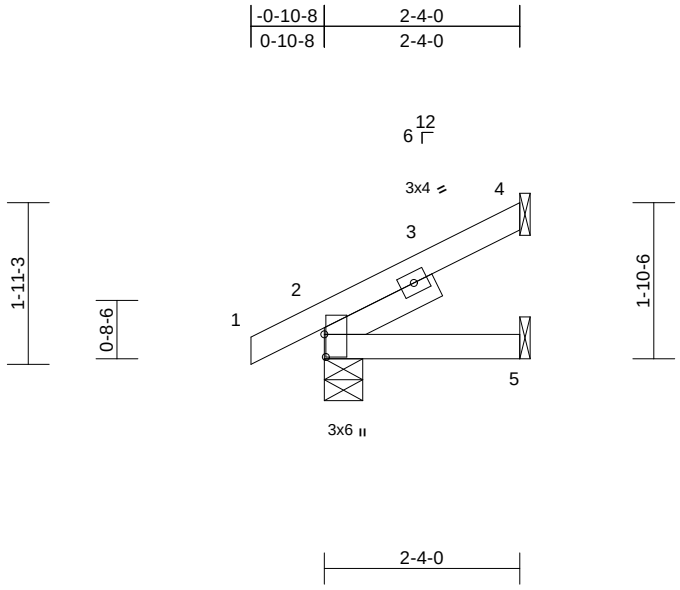
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	J2	Jack-Open	4	1	I74608699 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:52 Page: 1
ID:NlO1GLi0XVEzNvBnrfn1MszeLGp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:27.5

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

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)	0.00	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-5-10

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=68 (LC 12)
Max Uplift 2=-26 (LC 12), 4=-54 (LC 12)
Max Grav 2=175 (LC 1), 4=68 (LC 1), 5=45 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/3, 2-4=-63/31
BOT CHORD 2-5=0/0

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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 4 and 26 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

July 2,2025

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	L1	Lay-In Gable	2	1	I74608700 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:52 Page: 1
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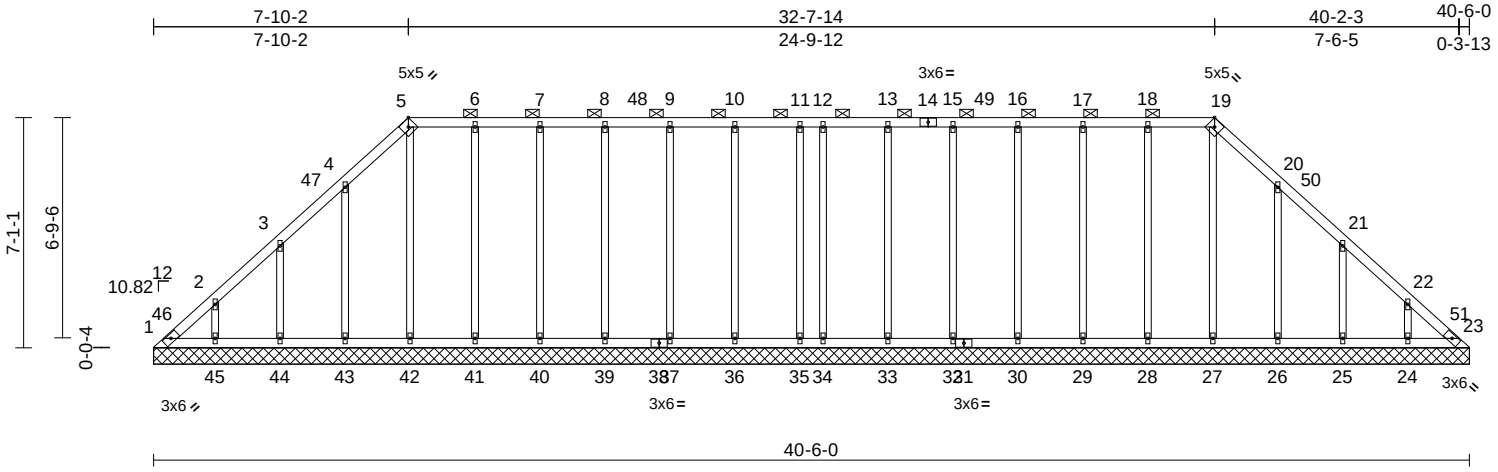


Scale = 1:70.9

Plate Offsets (X, Y): [5:0-0-0,0-0-0], [19:0-0-0,0-0-0]

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.01	23	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 216 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, except 2-0-0 oc purlins (6-0-0 max.): 5-19.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=40-6-0, 23=40-6-0, 24=40-6-0, 25=40-6-0, 26=40-6-0, 27=40-6-0, 28=40-6-0, 29=40-6-0, 30=40-6-0, 32=40-6-0, 33=40-6-0, 34=40-6-0, 35=40-6-0, 36=40-6-0, 37=40-6-0, 39=40-6-0, 40=40-6-0, 41=40-6-0, 42=40-6-0, 43=40-6-0, 44=40-6-0, 45=40-6-0
Max Horiz 1=189 (LC 9)
Max Uplift 1=-80 (LC 10), 23=-21 (LC 11), 24=-108 (LC 13), 25=-112 (LC 13), 26=-113 (LC 13), 28=-45 (LC 9), 29=-40 (LC 8), 30=-39 (LC 9), 32=-40 (LC 8), 33=-39 (LC 9), 34=-26 (LC 9), 35=-26 (LC 8), 36=-39 (LC 9), 37=-40 (LC 8), 39=-39 (LC 9), 40=-40 (LC 8), 41=-43 (LC 9), 42=-27 (LC 9), 43=-115 (LC 12), 44=-112 (LC 12), 45=-108 (LC 12)
Max Grav 1=143 (LC 12), 23=107 (LC 22), 24=194 (LC 20), 25=199 (LC 20), 26=204 (LC 20), 27=153 (LC 26), 28=191 (LC 25), 29=179 (LC 25), 30=180 (LC 26), 32=180 (LC 25), 33=184 (LC 26), 34=118 (LC 25), 35=118 (LC 26), 36=184 (LC 25), 37=180 (LC 26), 39=180 (LC 25), 40=179 (LC 26), 41=191 (LC 26), 42=172 (LC 22), 43=206 (LC 19), 44=198 (LC 19), 45=194 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-232/178, 2-3=-149/142, 3-4=-128/120, 4-5=-107/176, 5-6=-69/147, 6-7=-69/147, 7-8=-69/147, 8-9=-69/147, 9-10=-69/147, 10-11=-69/147, 11-12=-69/147, 12-13=-69/147, 13-15=-69/147, 15-16=-69/147, 16-17=-69/147, 17-18=-69/147, 18-19=-69/147, 19-20=-88/157, 20-21=-73/68, 21-22=-97/55, 22-23=-173/90
BOT CHORD 1-45=-67/149, 44-45=-67/149, 43-44=-67/149, 42-43=-67/149, 41-42=-66/149, 40-41=-66/149, 39-40=-66/149, 37-39=-66/149, 36-37=-66/149, 35-36=-66/149, 34-35=-66/149, 33-34=-66/149, 32-33=-66/149, 30-32=-66/149, 29-30=-66/149, 28-29=-66/149, 27-28=-66/149, 26-27=-66/149, 25-26=-66/149, 24-25=-66/149, 23-24=-66/149
WEBS 2-45=-151/127, 3-44=-158/137, 4-43=-165/138, 5-42=-132/51, 6-41=-151/67, 7-40=-139/64, 8-39=-140/63, 9-37=-140/63, 10-36=-143/64, 11-35=-92/42, 12-34=-92/42, 13-33=-143/64, 15-32=-140/63, 16-30=-140/63, 17-29=-139/64, 18-28=-151/69, 19-27=-113/6, 20-26=-164/137, 21-25=-159/137, 22-24=-151/127

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) 0-4-9 to 5-4-9, Interior (1) 5-4-9 to 7-10-6, Exterior(2R) 7-10-6 to 14-11-4, Interior (1) 14-11-4 to 32-8-3, Exterior(2R) 32-8-3 to 39-9-0, Interior (1) 39-9-0 to 40-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

July 2,2025

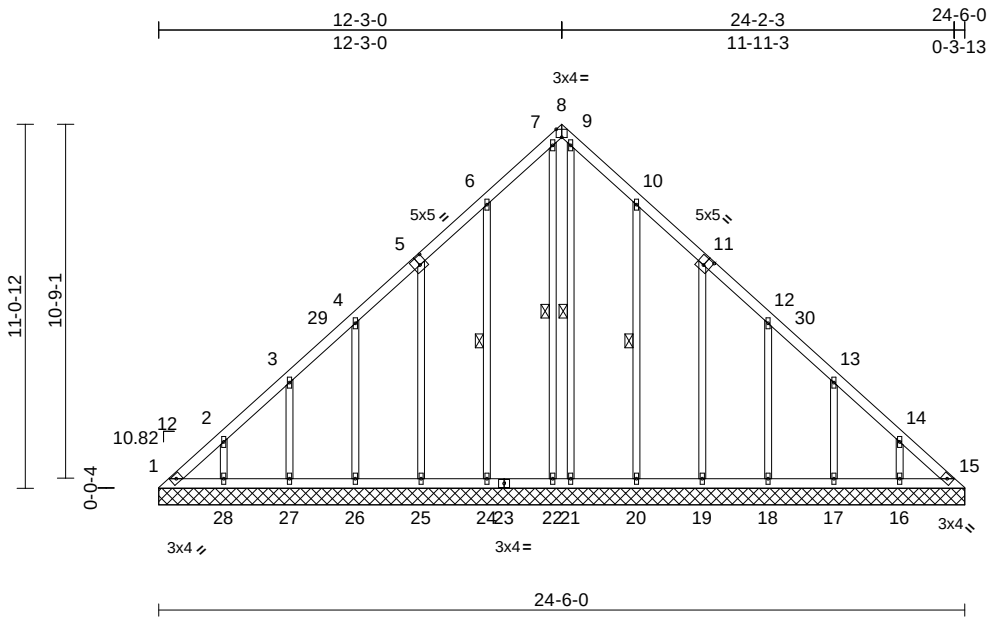
Continued on page 2

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) 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 80 lb uplift at joint 1, 21 lb uplift at joint 23, 108 lb uplift at joint 45, 112 lb uplift at joint 44, 115 lb uplift at joint 43, 27 lb uplift at joint 42, 43 lb uplift at joint 41, 40 lb uplift at joint 40, 39 lb uplift at joint 39, 40 lb uplift at joint 37, 39 lb uplift at joint 36, 26 lb uplift at joint 35, 26 lb uplift at joint 34, 39 lb uplift at joint 33, 40 lb uplift at joint 32, 39 lb uplift at joint 30, 40 lb uplift at joint 29, 45 lb uplift at joint 28, 113 lb uplift at joint 26, 112 lb uplift at joint 25 and 108 lb uplift at joint 24.
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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	L2	Lay-In Gable	2	1	I74608701 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:53 Page: 1
ID:J7Vnh1kG36UhcDL9z4qVRHzeLGn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:70

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horiz(TL)	0.01	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 140 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.
WEBS 1 Row at midpt 6-24, 7-22, 10-20, 9-21

REACTIONS (size) 1=24-6-0, 15=24-6-0, 16=24-6-0, 17=24-6-0, 18=24-6-0, 19=24-6-0, 20=24-6-0, 21=24-6-0, 22=24-6-0, 24=24-6-0, 25=24-6-0, 26=24-6-0, 27=24-6-0, 28=24-6-0
Max Horiz 1=-299 (LC 8)
Max Uplift 1=-125 (LC 10), 15=-65 (LC 11), 16=-110 (LC 13), 17=-112 (LC 13), 18=-102 (LC 13), 19=-113 (LC 13), 20=-115 (LC 13), 22=-12 (LC 11), 24=-117 (LC 12), 25=-112 (LC 12), 26=-102 (LC 12), 27=-112 (LC 12), 28=-110 (LC 12)
Max Grav 1=233 (LC 12), 15=193 (LC 13), 16=199 (LC 20), 17=200 (LC 20), 18=189 (LC 20), 19=196 (LC 20), 20=212 (LC 20), 21=131 (LC 22), 22=159 (LC 13), 24=213 (LC 19), 25=195 (LC 19), 26=189 (LC 19), 27=200 (LC 19), 28=199 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-368/249, 2-3=-269/213, 3-4=-190/173, 4-6=-159/198, 6-7=-166/258, 7-8=-107/173, 8-9=-107/177, 9-10=-168/269, 10-12=-109/168, 12-13=-118/84, 13-14=-209/124, 14-15=-308/160
BOT CHORD 1-28=-121/253, 27-28=-121/253, 26-27=-121/253, 25-26=-121/253, 24-25=-121/254, 22-24=-121/254, 21-22=-121/254, 20-21=-121/254, 19-20=-121/254, 18-19=-119/251, 17-18=-119/251, 16-17=-119/251, 15-16=-119/251
WEBS 2-28=-154/143, 3-27=-161/151, 4-26=-149/126, 5-25=-156/136, 6-24=-171/141, 7-22=-144/48, 14-16=-154/143, 13-17=-161/151, 12-18=-149/125, 11-19=-157/137, 10-20=-170/140, 9-21=-141/50

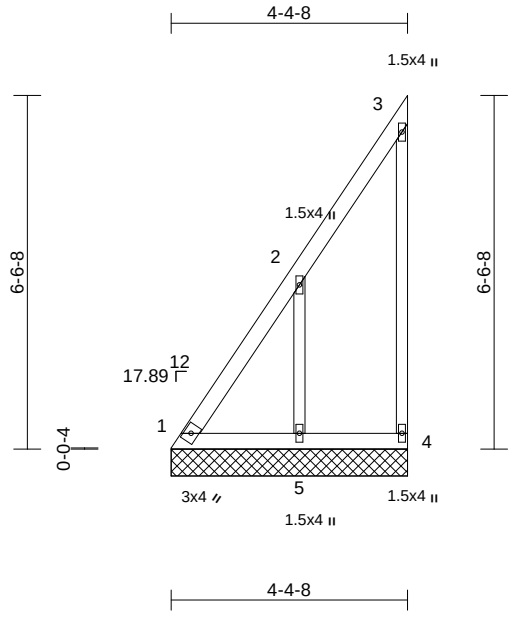
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-4-9 to 5-4-9, Exterior(2N) 5-4-9 to 12-3-4, Corner(3R) 12-3-4 to 17-3-4, Exterior(2N) 17-3-4 to 24-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 125 lb uplift at joint 1, 110 lb uplift at joint 28, 112 lb uplift at joint 27, 102 lb uplift at joint 26, 112 lb uplift at joint 25, 117 lb uplift at joint 24, 12 lb uplift at joint 22, 110 lb uplift at joint 16, 112 lb uplift at joint 17, 102 lb uplift at joint 18, 113 lb uplift at joint 19, 115 lb uplift at joint 20 and 65 lb uplift at joint 15.
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

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	L3	Lay-In Gable	2	1	I74608702 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:53 ID:J7Vnh1kG36UhcDL9z4qVRHzeLGn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:42.6

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	0.78	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 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 4-4-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-4-8, 4=4-4-8, 5=4-4-8
Max Horiz 1=251 (LC 9)
Max Uplift 1=-132 (LC 10), 4=-132 (LC 11), 5=-284 (LC 12)
Max Grav 1=249 (LC 9), 4=132 (LC 8), 5=306 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-532/535, 2-3=-244/252, 3-4=-245/215
BOT CHORD 1-5=-119/130, 4-5=-121/132
WEBS 2-5=-376/403

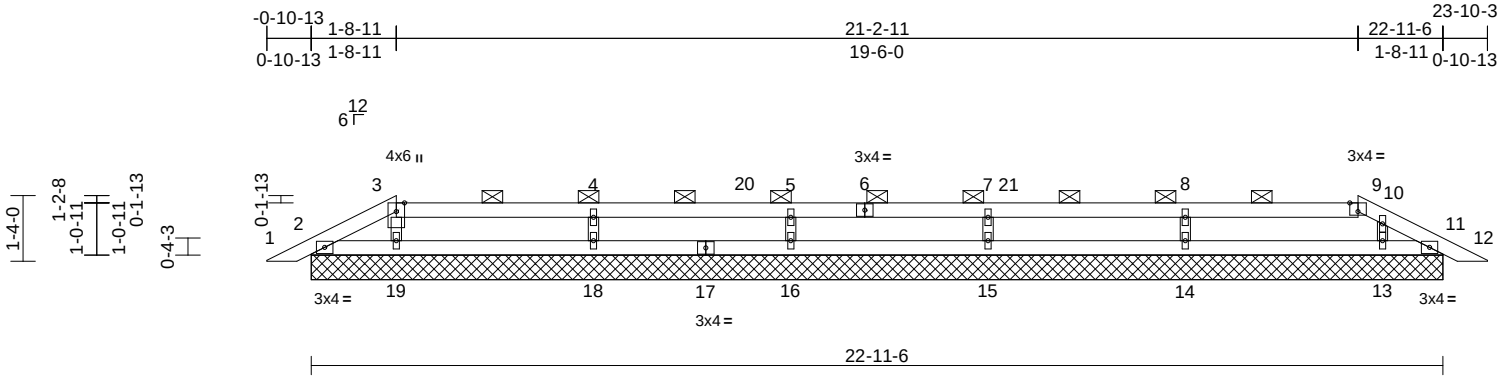
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 132 lb uplift at joint 1, 132 lb uplift at joint 4 and 284 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	PB1	Piggyback	2	1	I74608703 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:53 Page: 1
ID:4g_pMmqHAZUYaSyiRmzNmzzeLGf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:46.7

Plate Offsets (X, Y): [9:0-2-0,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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 74 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, except 2-0-0 oc purlins (6-0-0 max.): 3-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=22-11-6, 11=22-11-6, 13=22-11-6, 14=22-11-6, 15=22-11-6, 16=22-11-6, 18=22-11-6, 19=22-11-6
Max Horiz 2=21 (LC 16)
Max Uplift 2=-38 (LC 12), 11=-36 (LC 13), 13=-32 (LC 8), 14=-82 (LC 9), 15=-78 (LC 8), 16=-76 (LC 9), 18=-88 (LC 8), 19=-31 (LC 9)
Max Grav 2=105 (LC 1), 11=54 (LC 1), 13=267 (LC 26), 14=373 (LC 1), 15=358 (LC 25), 16=354 (LC 1), 18=387 (LC 26), 19=252 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-47/25, 3-4=-27/37, 4-5=-24/35, 5-7=-24/35, 7-8=-24/35, 8-9=-27/37, 9-10=-66/49, 10-11=-21/16, 11-12=0/17
BOT CHORD 2-19=-3/30, 18-19=-3/30, 16-18=-3/30, 15-16=-3/30, 14-15=-3/30, 13-14=-3/30, 11-13=-3/30
WEBS 3-19=-185/76, 4-18=-304/138, 5-16=-275/124, 7-15=-279/126, 8-14=-291/131, 10-13=-209/83

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) 0-4-3 to 2-8-0, Exterior(2R) 2-8-0 to 9-8-14, Interior (1) 9-8-14 to 22-2-0, Exterior(2E) 22-2-0 to 24-5-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
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) 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 38 lb uplift at joint 2, 31 lb uplift at joint 19, 88 lb uplift at joint 18, 76 lb uplift at joint 16, 78 lb uplift at joint 15, 82 lb uplift at joint 14, 32 lb uplift at joint 13 and 36 lb uplift at joint 11.
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.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
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

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	PB2	Piggyback	2	1	I74608704 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:53 Page: 1
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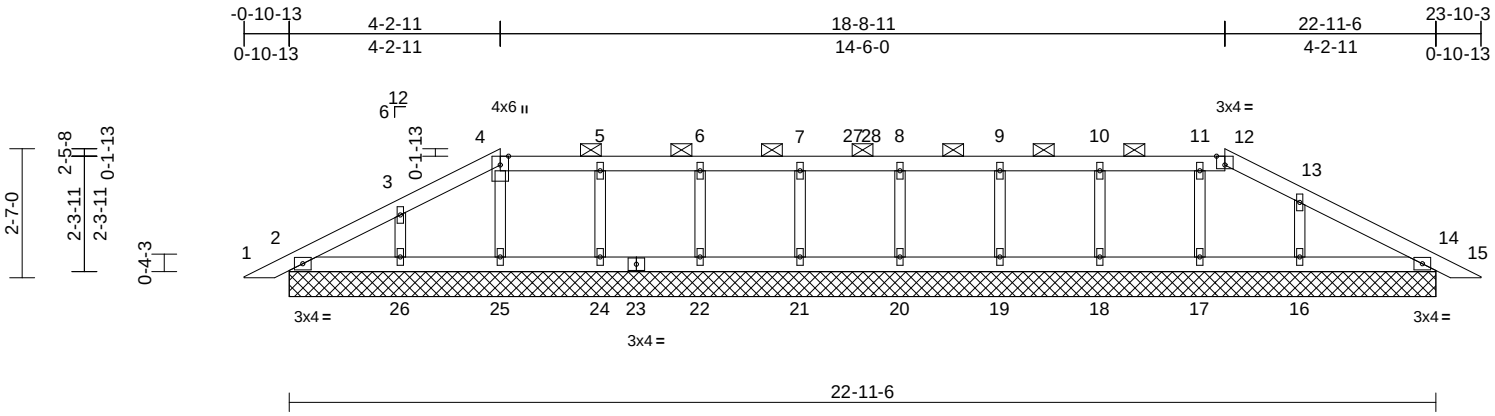


Scale = 1:46.1

Plate Offsets (X, Y): [12:0-2-0,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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 86 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, except 2-0-0 oc purlins (6-0-0 max.): 4-12.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=22-11-6, 14=22-11-6, 16=22-11-6, 17=22-11-6, 18=22-11-6, 19=22-11-6, 20=22-11-6, 21=22-11-6, 22=22-11-6, 24=22-11-6, 25=22-11-6, 26=22-11-6
Max Horiz 2=44 (LC 16)
Max Uplift 2=-17 (LC 12), 14=-34 (LC 13), 16=-75 (LC 13), 17=-18 (LC 9), 18=-44 (LC 8), 19=-38 (LC 9), 20=-39 (LC 8), 21=-39 (LC 9), 22=-38 (LC 9), 24=-45 (LC 8), 25=-12 (LC 9), 26=-75 (LC 12)
Max Grav 2=131 (LC 1), 14=151 (LC 1), 16=246 (LC 26), 17=156 (LC 26), 18=188 (LC 25), 19=179 (LC 26), 20=180 (LC 25), 21=181 (LC 26), 22=178 (LC 1), 24=193 (LC 26), 25=157 (LC 25), 26=216 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-56/44, 3-4=-41/53, 4-5=-24/59, 5-6=-23/57, 6-7=-23/57, 7-8=-23/57, 8-9=-23/57, 9-10=-23/57, 10-11=-23/57, 11-12=-25/58, 12-13=-40/57, 13-14=-48/41, 14-15=0/17
BOT CHORD 2-26=-15/48, 25-26=-15/48, 24-25=-15/48, 22-24=-15/48, 21-22=-15/48, 20-21=-15/48, 19-20=-15/48, 18-19=-15/48, 17-18=-15/48, 16-17=-15/48, 14-16=-15/48
WEBS 4-25=-121/36, 3-26=-165/100, 5-24=-152/69, 6-22=-138/62, 7-21=-141/63, 8-20=-140/63, 9-19=-139/62, 10-18=-147/68, 11-17=-124/40, 13-16=-183/101

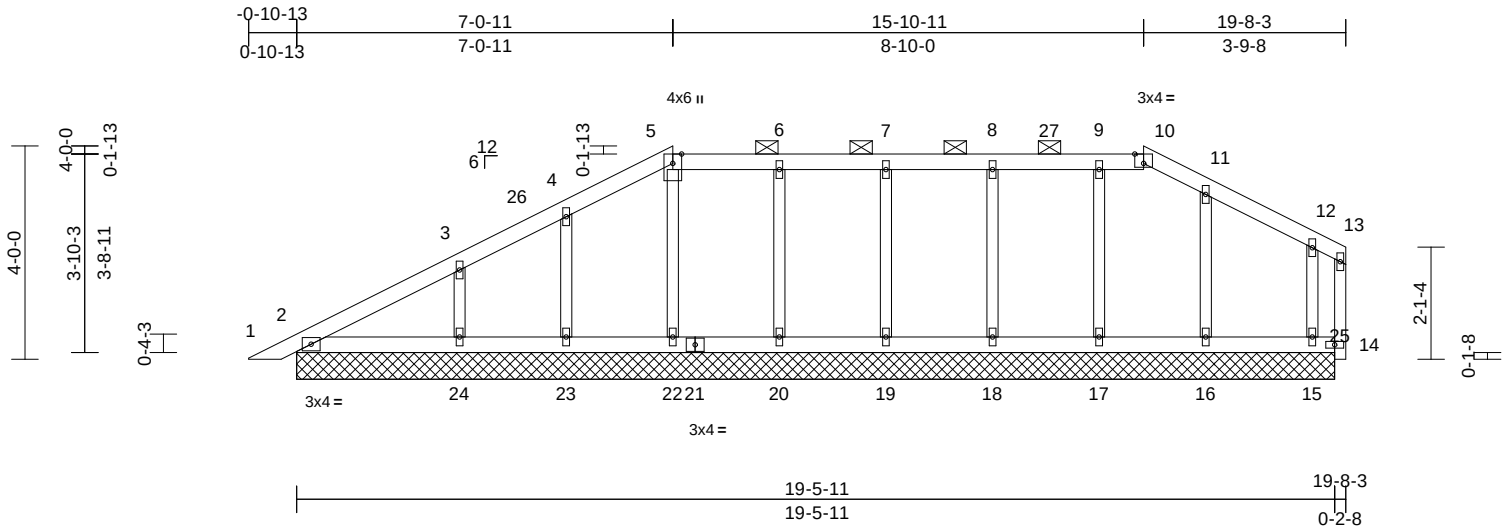
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-3 to 5-2-0, Exterior(2R) 5-2-0 to 12-2-14, Interior (1) 12-2-14 to 19-8-0, Exterior(2E) 19-8-0 to 24-5-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) 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 17 lb uplift at joint 2, 12 lb uplift at joint 25, 75 lb uplift at joint 26, 45 lb uplift at joint 24, 38 lb uplift at joint 22, 39 lb uplift at joint 21, 39 lb uplift at joint 20, 38 lb uplift at joint 19, 44 lb uplift at joint 18, 18 lb uplift at joint 17, 75 lb uplift at joint 16 and 34 lb uplift at joint 14.
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.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
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

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	PB3	Piggyback	2	1	I74608705 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:53 ID:YsYBa6rvxtcPBcXu_TUcJBzeLGe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:43.2

Plate Offsets (X, Y): [10:0-2-0,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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 83 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, and 2-0-0 oc purlins (6-0-0 max.): 5-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=19-5-11, 14=19-5-11, 15=19-5-11, 16=19-5-11, 17=19-5-11, 18=19-5-11, 19=19-5-11, 20=19-5-11, 22=19-5-11, 23=19-5-11, 24=19-5-11, 25=19-5-11
Max Horiz 2=114 (LC 11)
Max Uplift 2=-11 (LC 8), 14=-10 (LC 3), 15=-58 (LC 13), 16=-41 (LC 13), 17=-28 (LC 9), 18=-45 (LC 8), 19=-38 (LC 9), 20=-46 (LC 8), 22=-19 (LC 9), 23=-54 (LC 12), 24=-93 (LC 12)
Max Grav 2=161 (LC 1), 14=18 (LC 13), 15=135 (LC 26), 16=187 (LC 26), 17=179 (LC 26), 18=183 (LC 25), 19=179 (LC 1), 20=190 (LC 26), 22=173 (LC 25), 23=155 (LC 25), 24=273 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-109/67, 3-4=-68/81, 4-5=-68/115, 5-6=-62/114, 6-7=-61/112, 7-8=-61/112, 8-9=-61/112, 9-10=-62/112, 10-11=-69/112, 11-12=-59/82, 12-13=-35/36, 14-25=0/0, 13-14=-24/22
BOT CHORD 2-24=-50/57, 23-24=-50/57, 22-23=-50/57, 20-22=-50/57, 19-20=-50/57, 18-19=-50/57, 17-18=-50/57, 16-17=-50/57, 15-16=-50/57, 14-15=-50/57
WEBS 5-22=-130/44, 4-23=-127/83, 3-24=-201/131, 6-20=-151/75, 7-19=-139/69, 8-18=-143/74, 9-17=-139/55, 11-16=-145/66, 12-15=-106/80

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) 0-4-3 to 5-4-3, Interior (1) 5-4-3 to 8-0-0, Exterior(2R) 8-0-0 to 15-0-14, Interior (1) 15-0-14 to 16-10-0, Exterior(2E) 16-10-0 to 20-6-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 2, 19 lb uplift at joint 22, 54 lb uplift at joint 23, 93 lb uplift at joint 24, 46 lb uplift at joint 20, 38 lb uplift at joint 19, 45 lb uplift at joint 18, 28 lb uplift at joint 17, 41 lb uplift at joint 16, 58 lb uplift at joint 15 and 10 lb uplift at joint 14.
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.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
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

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	PB4	Piggyback	2	1	I74608706 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:53 Page: 1
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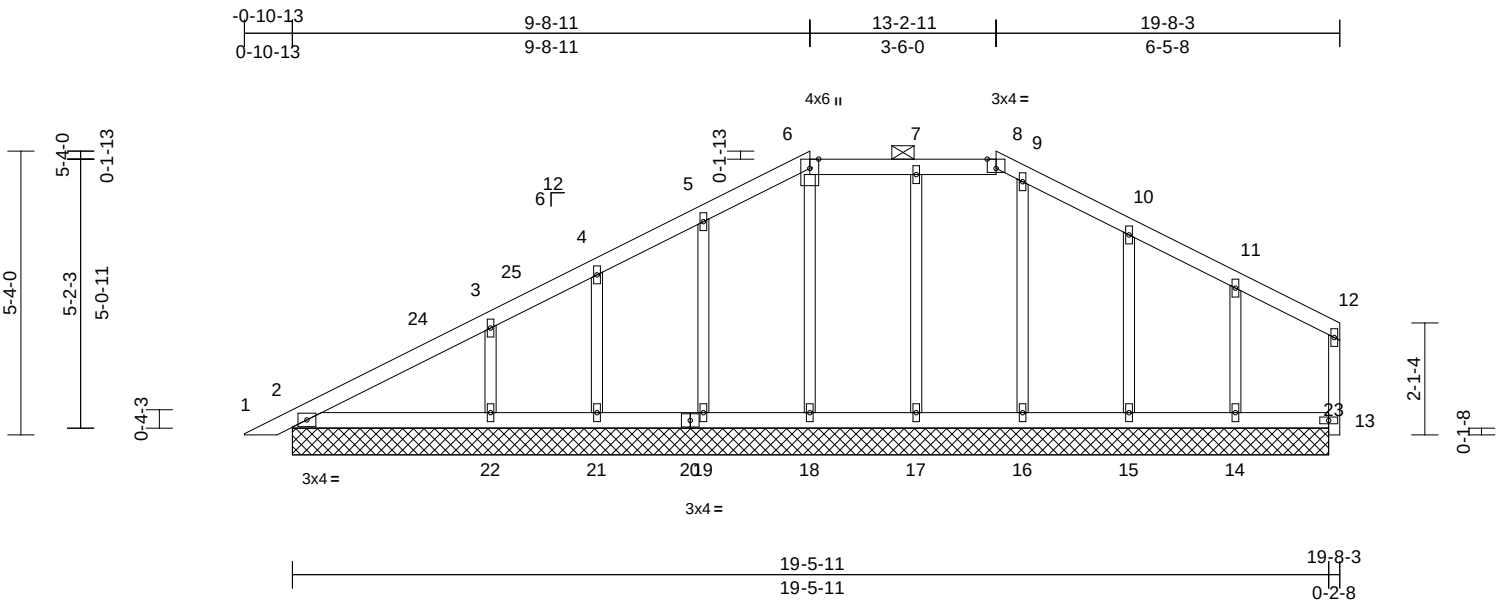

Scale = 1:43.3

Plate Offsets (X, Y): [8:0-2-0,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	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 86 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, and 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=19-5-11, 13=19-5-11, 14=19-5-11, 15=19-5-11, 16=19-5-11, 17=19-5-11, 18=19-5-11, 19=19-5-11, 21=19-5-11, 22=19-5-11, 23=19-5-11
Max Horiz 2=133 (LC 11)
Max Uplift 2=-18 (LC 8), 13=-12 (LC 12), 14=-68 (LC 13), 15=-67 (LC 13), 17=-42 (LC 9), 18=-12 (LC 9), 19=-66 (LC 12), 21=-41 (LC 12), 22=-114 (LC 12)
Max Grav 2=186 (LC 1), 13=74 (LC 1), 14=187 (LC 26), 15=179 (LC 1), 16=176 (LC 26), 17=190 (LC 26), 18=163 (LC 25), 19=202 (LC 25), 21=116 (LC 1), 22=334 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-114/91, 3-4=-87/119, 4-5=-77/147, 5-6=-97/183, 6-7=-87/176, 7-8=-87/175, 8-9=-93/176, 9-10=-94/170, 10-11=-74/116, 11-12=-54/63, 13-23=0/0, 12-13=-57/53
BOT CHORD 2-22=-48/56, 21-22=-48/56, 19-21=-48/56, 18-19=-48/56, 17-18=-48/56, 16-17=-48/56, 15-16=-48/56, 14-15=-48/56, 13-14=-48/56
WEBS 6-18=-124/35, 5-19=-157/96, 4-21=-98/75, 3-22=-245/148, 7-17=-150/66, 9-16=-136/23, 10-15=-139/99, 11-14=-147/95

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) 0-4-3 to 5-4-3, Interior (1) 5-4-3 to 10-8-0, Exterior(2E) 10-8-0 to 20-6-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 2, 12 lb uplift at joint 18, 66 lb uplift at joint 19, 41 lb uplift at joint 21, 114 lb uplift at joint 22, 42 lb uplift at joint 17, 67 lb uplift at joint 15, 68 lb uplift at joint 14 and 12 lb uplift at joint 13.
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.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
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

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	PB5	Piggyback	14	1	I74608707 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:53 Page: 1
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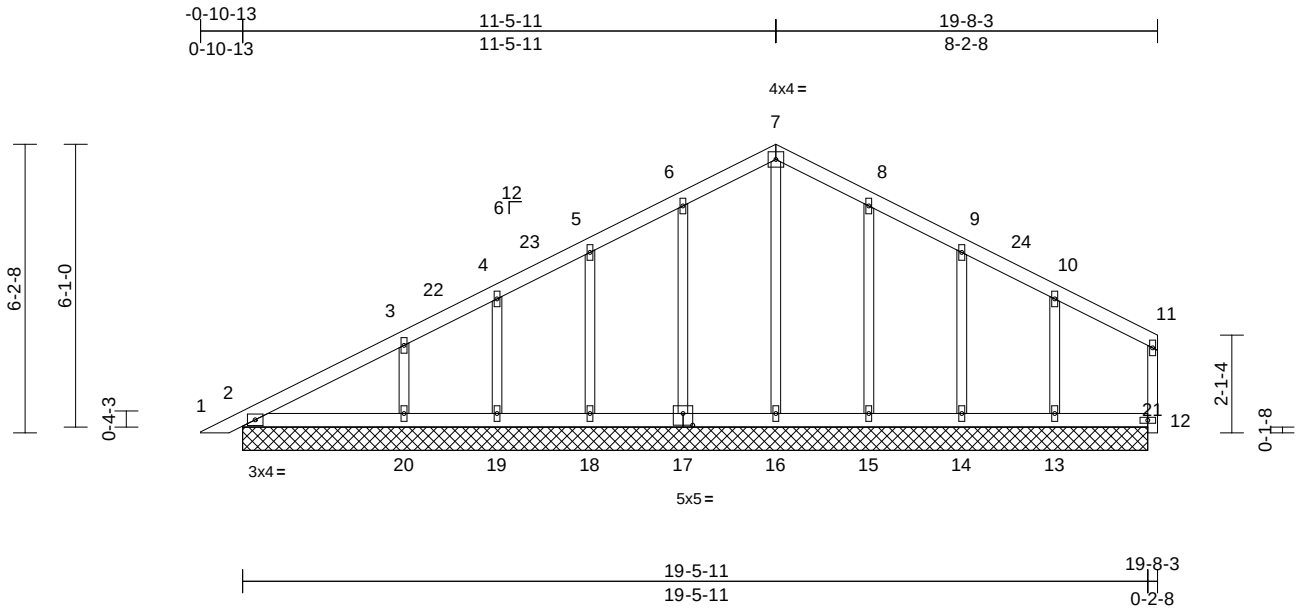

Scale = 1:49.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 88 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 10-0-0 oc bracing.

REACTIONS (size) 2=19-5-11, 12=19-5-11, 13=19-5-11, 14=19-5-11, 15=19-5-11, 16=19-5-11, 17=19-5-11, 18=19-5-11, 19=19-5-11, 20=19-5-11, 21=19-5-11
Max Horiz 2=146 (LC 11)
Max Uplift 2=-24 (LC 8), 12=-13 (LC 13), 13=-76 (LC 13), 14=-60 (LC 13), 15=-61 (LC 13), 17=-61 (LC 12), 18=-66 (LC 12), 19=-44 (LC 12), 20=-106 (LC 12)
Max Grav 2=178 (LC 1), 12=86 (LC 1), 13=203 (LC 26), 14=173 (LC 1), 15=191 (LC 26), 16=174 (LC 22), 17=187 (LC 25), 18=191 (LC 1), 19=130 (LC 25), 20=311 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-128/96, 3-4=-99/98, 4-5=-78/136, 5-6=-96/186, 6-7=-115/230, 7-8=-115/226, 8-9=-96/171, 9-10=-78/115, 10-11=-56/63, 12-21=0/0, 11-12=-66/52
BOT CHORD 2-20=-47/57, 19-20=-47/57, 18-19=-47/57, 16-18=-47/57, 15-16=-47/57, 14-15=-47/57, 13-14=-47/57, 12-13=-47/57
WEBS 7-16=-134/23, 6-17=-149/102, 5-18=-146/106, 4-19=-107/67, 3-20=-229/142, 8-15=-151/100, 9-14=-134/101, 10-13=-159/101

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) 0-4-3 to 5-4-3, Interior (1) 5-4-3 to 12-5-0, Exterior(2R) 12-5-0 to 17-5-0, Interior (1) 17-5-0 to 20-6-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 2, 61 lb uplift at joint 17, 66 lb uplift at joint 18, 44 lb uplift at joint 19, 106 lb uplift at joint 20, 61 lb uplift at joint 15, 60 lb uplift at joint 14, 76 lb uplift at joint 13 and 13 lb uplift at joint 12.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	PB6	Piggyback	2	1	I74608708 Job Reference (optional)

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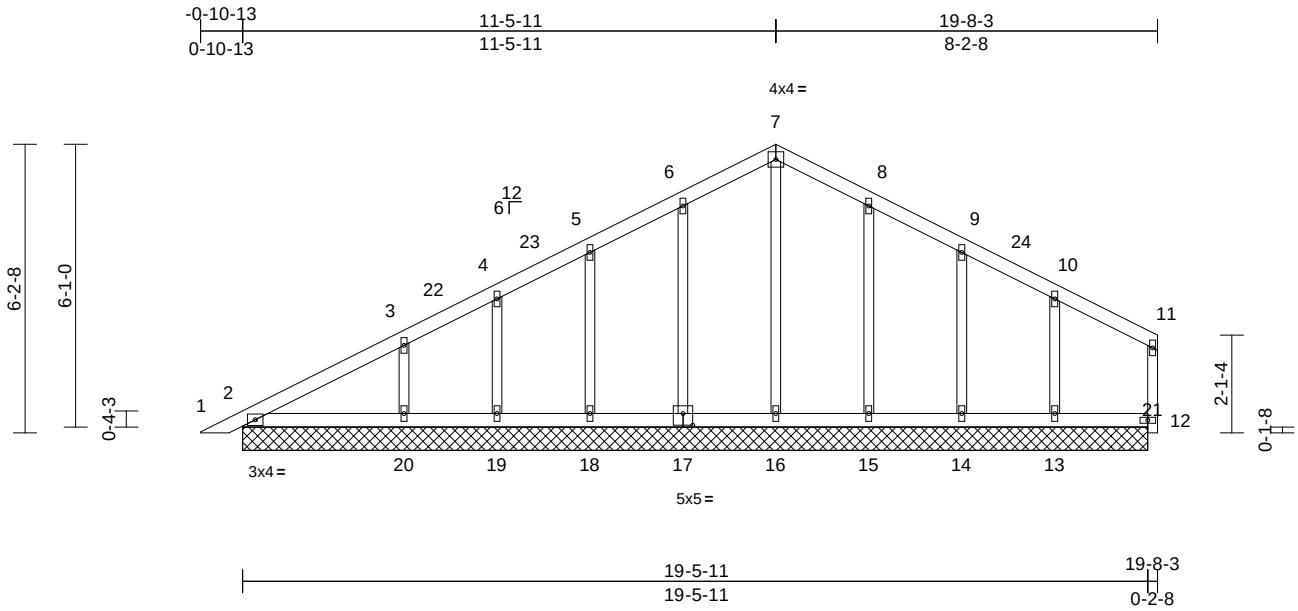

Scale = 1:49.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 88 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 10-0-0 oc bracing.

REACTIONS (size) 2=19-5-11, 12=19-5-11, 13=19-5-11, 14=19-5-11, 15=19-5-11, 16=19-5-11, 17=19-5-11, 18=19-5-11, 19=19-5-11, 20=19-5-11, 21=19-5-11
Max Horiz 2=146 (LC 11)
Max Uplift 2=-24 (LC 8), 12=-13 (LC 13), 13=-76 (LC 13), 14=-60 (LC 13), 15=-61 (LC 13), 17=-61 (LC 12), 18=-66 (LC 12), 19=-44 (LC 12), 20=-106 (LC 12)
Max Grav 2=178 (LC 1), 12=86 (LC 1), 13=203 (LC 26), 14=173 (LC 1), 15=191 (LC 26), 16=174 (LC 22), 17=187 (LC 25), 18=191 (LC 1), 19=130 (LC 25), 20=311 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-128/96, 3-4=-99/98, 4-5=-78/136, 5-6=-96/186, 6-7=-115/230, 7-8=-115/226, 8-9=-96/171, 9-10=-78/115, 10-11=-56/63, 12-21=0/0, 11-12=-66/52
BOT CHORD 2-20=-47/57, 19-20=-47/57, 18-19=-47/57, 16-18=-47/57, 15-16=-47/57, 14-15=-47/57, 13-14=-47/57, 12-13=-47/57
WEBS 7-16=-134/23, 6-17=-149/102, 5-18=-146/106, 4-19=-107/67, 3-20=-229/142, 8-15=-151/100, 9-14=-134/101, 10-13=-159/101

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) 0-4-3 to 5-4-3, Interior (1) 5-4-3 to 12-5-0, Exterior(2R) 12-5-0 to 17-5-0, Interior (1) 17-5-0 to 20-6-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 2, 61 lb uplift at joint 17, 66 lb uplift at joint 18, 44 lb uplift at joint 19, 106 lb uplift at joint 20, 61 lb uplift at joint 15, 60 lb uplift at joint 14, 76 lb uplift at joint 13 and 13 lb uplift at joint 12.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	PB7	Piggyback	24	1	I74608709 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:54 Page: 1
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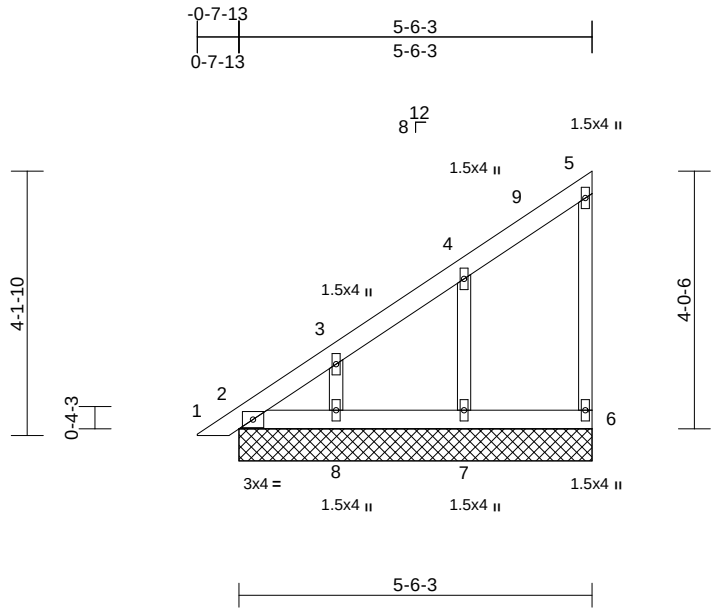

Scale = 1:36

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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 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 10-0-0 oc bracing.

REACTIONS (size) 2=5-6-3, 6=5-6-3, 7=5-6-3, 8=5-6-3
Max Horiz 2=159 (LC 9)
Max Uplift 2=-20 (LC 8), 6=-30 (LC 9), 7=-85 (LC 12), 8=-75 (LC 12)
Max Grav 2=107 (LC 20), 6=80 (LC 19), 7=208 (LC 19), 8=177 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/14, 2-3=-305/195, 3-4=-213/149, 4-5=-107/93, 5-6=-85/91
BOT CHORD 2-8=-75/81, 7-8=-75/81, 6-7=-75/81
WEBS 4-7=-164/167, 3-8=-139/146

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) 0-3-11 to 5-3-11, Interior (1) 5-3-11 to 6-1-8 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
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 6, 20 lb uplift at joint 2, 85 lb uplift at joint 7 and 75 lb uplift at joint 8.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	V1	Valley	2	1	I74608710 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:54 Page: 1
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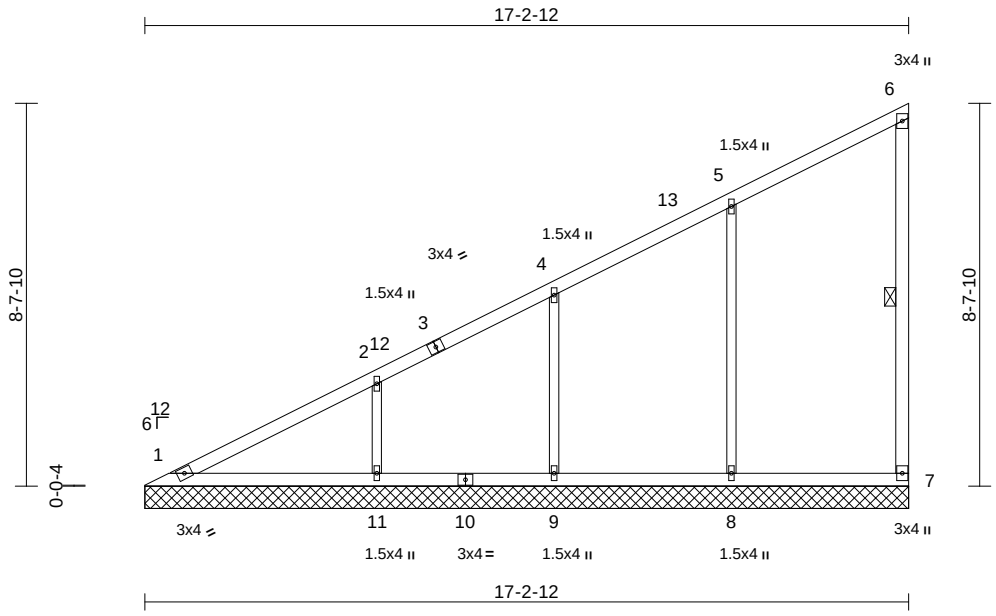

Scale = 1:52

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	0.57	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 75 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP 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 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-7

REACTIONS (size) 1=17-2-12, 7=17-2-12, 8=17-2-12, 9=17-2-12, 11=17-2-12
Max Horiz 1=367 (LC 9)
Max Uplift 7=-53 (LC 9), 8=-134 (LC 12), 9=-111 (LC 12), 11=-154 (LC 12)
Max Grav 1=212 (LC 20), 7=142 (LC 1), 8=395 (LC 1), 9=326 (LC 1), 11=453 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-503/296, 2-4=-384/241, 4-5=-295/213, 5-6=-171/149, 6-7=-109/110
BOT CHORD 1-11=-159/175, 9-11=-159/175, 8-9=-159/175, 7-8=-159/175
WEBS 5-8=-307/241, 4-9=-257/168, 2-11=-342/226

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) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 17-1-8 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
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 7, 134 lb uplift at joint 8, 111 lb uplift at joint 9 and 154 lb uplift at joint 11.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	V2	Valley	2	1	I74608711 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:54 Page: 1
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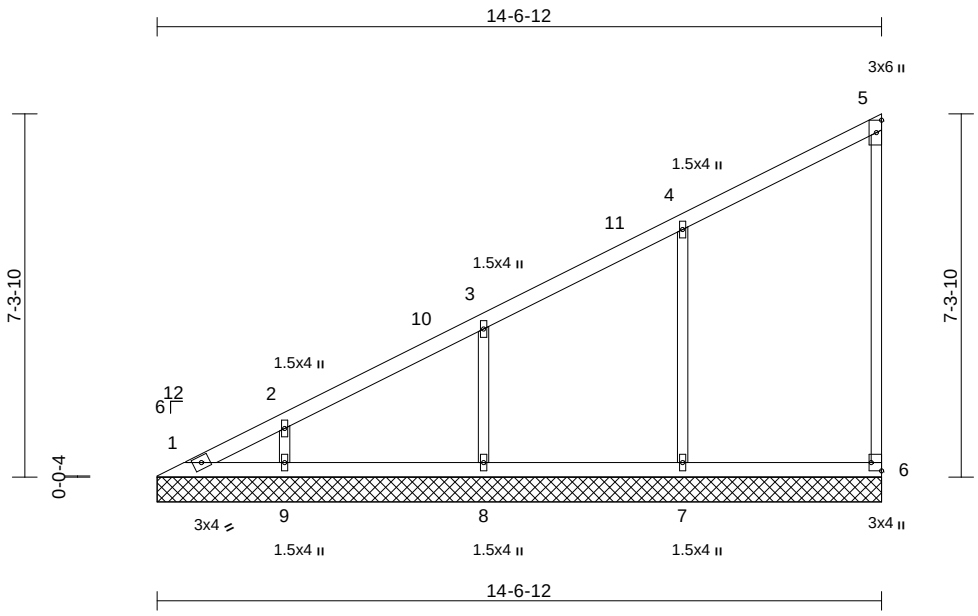

Scale = 1:46.3

Plate Offsets (X, Y): [6: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	0.64	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 57 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 10-0-0 oc bracing.

REACTIONS (size) 1=14-6-12, 6=14-6-12, 7=14-6-12, 8=14-6-12, 9=14-6-12
Max Horiz 1=309 (LC 9)
Max Uplift 6=-46 (LC 9), 7=-133 (LC 12), 8=-123 (LC 12), 9=-106 (LC 12)
Max Grav 1=120 (LC 9), 6=142 (LC 1), 7=392 (LC 1), 8=362 (LC 1), 9=310 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-478/274, 2-3=-394/241, 3-4=-292/201, 4-5=-155/135, 5-6=-110/114
BOT CHORD 1-9=-137/150, 8-9=-137/150, 7-8=-137/150, 6-7=-137/150
WEBS 4-7=-305/257, 3-8=-282/209, 2-9=-241/186

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) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 14-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 6, 133 lb uplift at joint 7, 123 lb uplift at joint 8 and 106 lb uplift at joint 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	V3	Valley	2	1	I74608712 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:54 Page: 1
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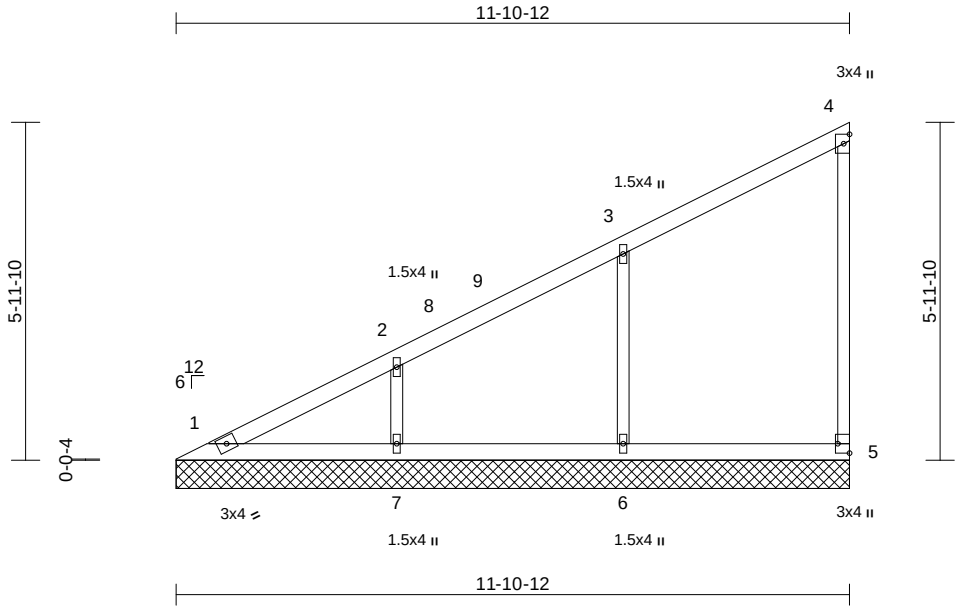

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Plate Offsets (X, Y): [5:Edge,0-2-8]

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	0.41	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 45 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 10-0-0 oc bracing.

REACTIONS (size) 1=11-10-12, 5=11-10-12, 6=11-10-12, 7=11-10-12
Max Horiz 1=250 (LC 9)
Max Uplift 5=-40 (LC 9), 6=-133 (LC 12), 7=-122 (LC 12)
Max Grav 1=144 (LC 20), 5=142 (LC 1), 6=394 (LC 1), 7=358 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-388/232, 2-3=-294/189, 3-4=-144/120, 4-5=-109/120
BOT CHORD 1-7=-113/124, 6-7=-113/124, 5-6=-113/124
WEBS 3-6=-308/287, 2-7=-272/231

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) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 11-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 5, 133 lb uplift at joint 6 and 122 lb uplift at joint 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	V4	Valley	2	1	I74608713 Job Reference (optional)

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

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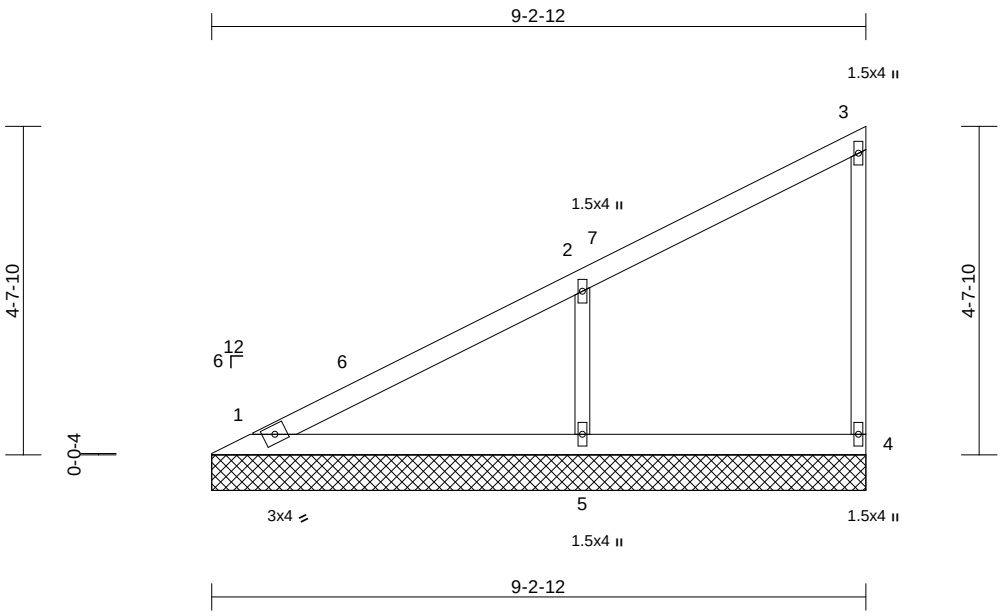

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 33 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 10-0-0 oc bracing.

REACTIONS (size) 1=9-2-12, 4=9-2-12, 5=9-2-12
Max Horiz 1=190 (LC 9)
Max Uplift 4=-32 (LC 9), 5=-162 (LC 12)
Max Grav 1=166 (LC 1), 4=124 (LC 1), 5=478 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-309/189, 2-3=-127/99, 3-4=-98/121
BOT CHORD 1-5=-86/95, 4-5=-86/95
WEBS 2-5=-363/350

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) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 9-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 4 and 162 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

July 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/21/2025 12:29:22

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	V5	Valley	2	1	I74608714 Job Reference (optional)

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:54 Page: 1
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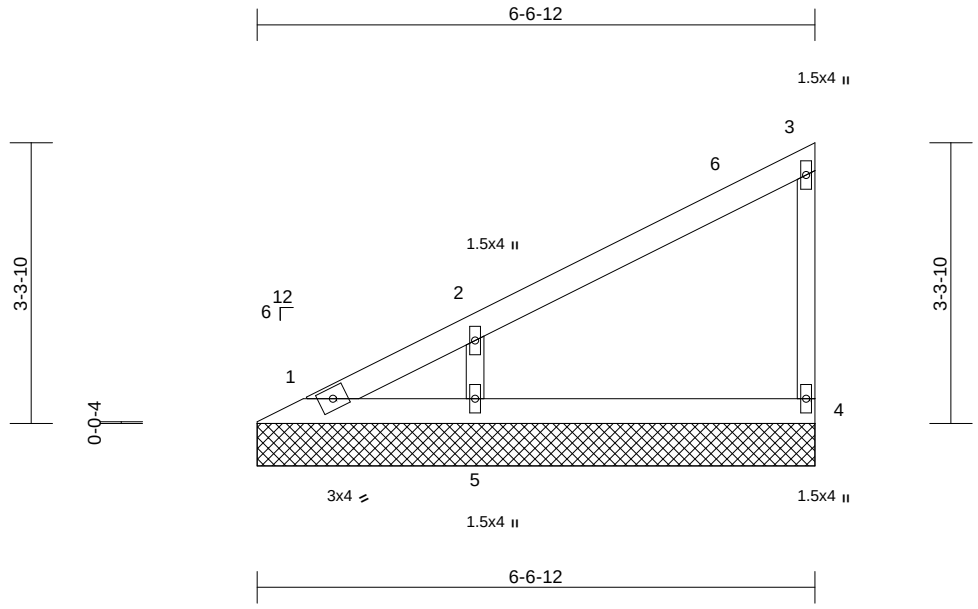

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 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 10-0-0 oc bracing.

REACTIONS (size) 1=6-6-12, 4=6-6-12, 5=6-6-12
Max Horiz 1=131 (LC 9)
Max Uplift 4=-33 (LC 12), 5=-123 (LC 12)
Max Grav 1=50 (LC 9), 4=143 (LC 1), 5=361 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-273/158, 2-3=-123/89, 3-4=-112/144
BOT CHORD 1-5=-61/66, 4-5=-61/66
WEBS 2-5=-281/313

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) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 6-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 4 and 123 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

July 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/21/2025 12:29:22

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	V6	Valley	2	1	I74608715 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:54 Page: 1
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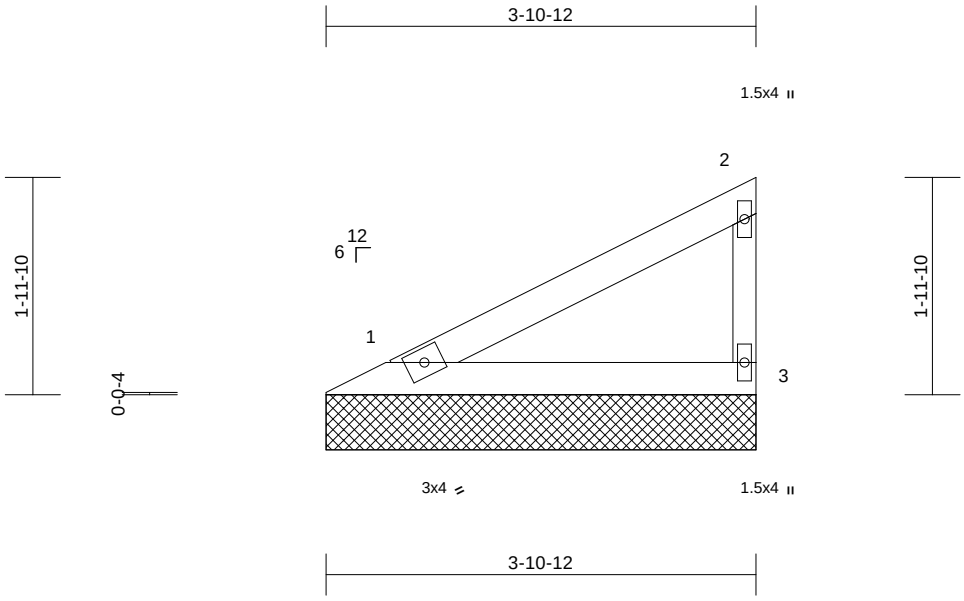

Scale = 1:20.9

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	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 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 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-10-12, 3=3-10-12
Max Horiz 1=72 (LC 9)
Max Uplift 1=-22 (LC 12), 3=-41 (LC 12)
Max Grav 1=144 (LC 1), 3=144 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-101/68, 2-3=-112/145
BOT CHORD 1-3=-33/36

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1 and 41 lb uplift at joint 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	V7	Valley	1	1	I74608716 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:54 Page: 1
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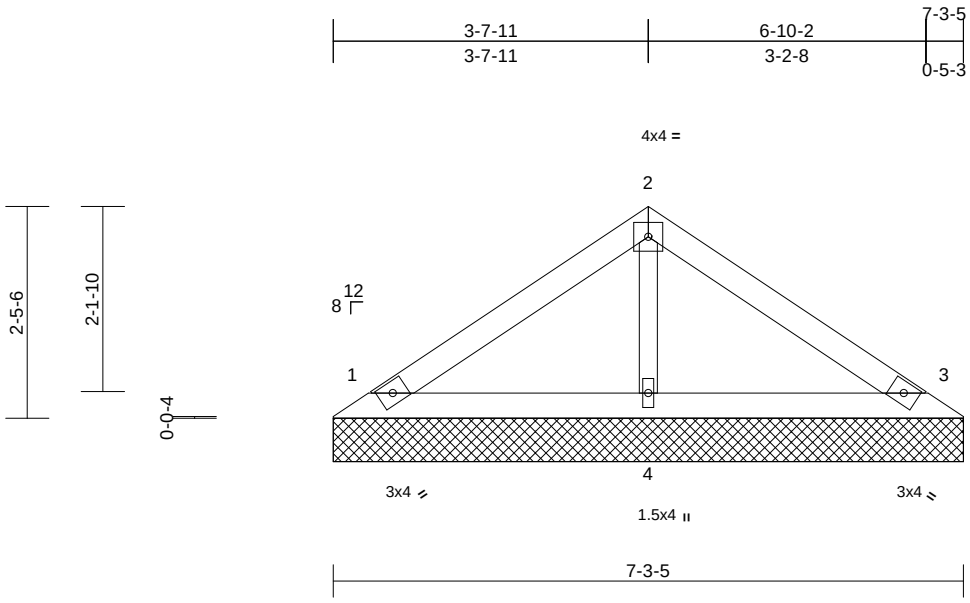

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 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=7-3-5, 3=7-3-5, 4=7-3-5
Max Horiz 1=-59 (LC 10)
Max Uplift 1=-41 (LC 12), 3=-48 (LC 13)
Max Grav 1=161 (LC 1), 3=161 (LC 1), 4=251 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-101/63, 2-3=-96/63
BOT CHORD 1-4=-12/48, 3-4=-12/48
WEBS 2-4=-171/95

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 1 and 48 lb uplift at joint 3.
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

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	V8	Valley	1	1	I74608717 Job Reference (optional)

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:54 Page: 1
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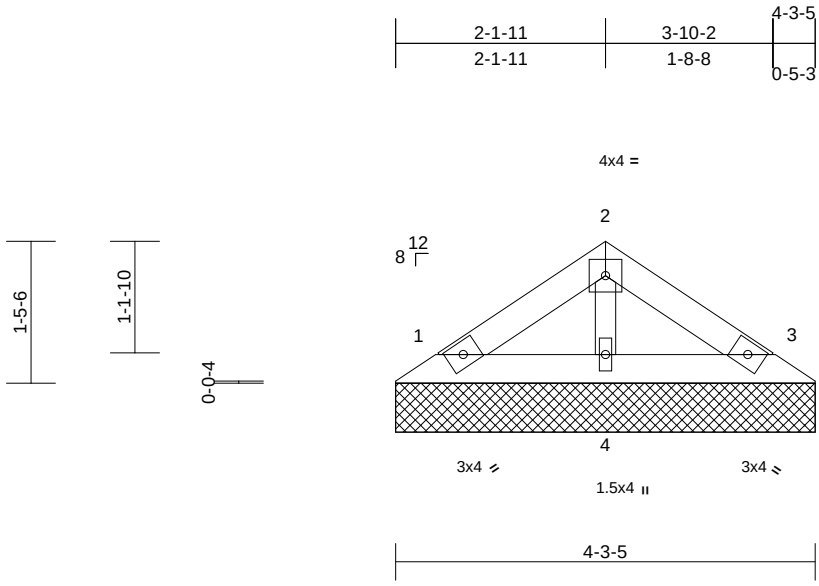

Scale = 1:23.5

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 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 4-4-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-3-5, 3=4-3-5, 4=4-3-5
Max Horiz 1=-31 (LC 8)
Max Uplift 1=-22 (LC 12), 3=-26 (LC 13)
Max Grav 1=85 (LC 1), 3=85 (LC 1), 4=133 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-54/38, 2-3=-51/38
BOT CHORD 1-4=-7/25, 3-4=-7/25
WEBS 2-4=-91/59

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1 and 26 lb uplift at joint 3.
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

July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2321/2322
P250394-01	V9	Valley	2	1	I74608718 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:55 Page: 1
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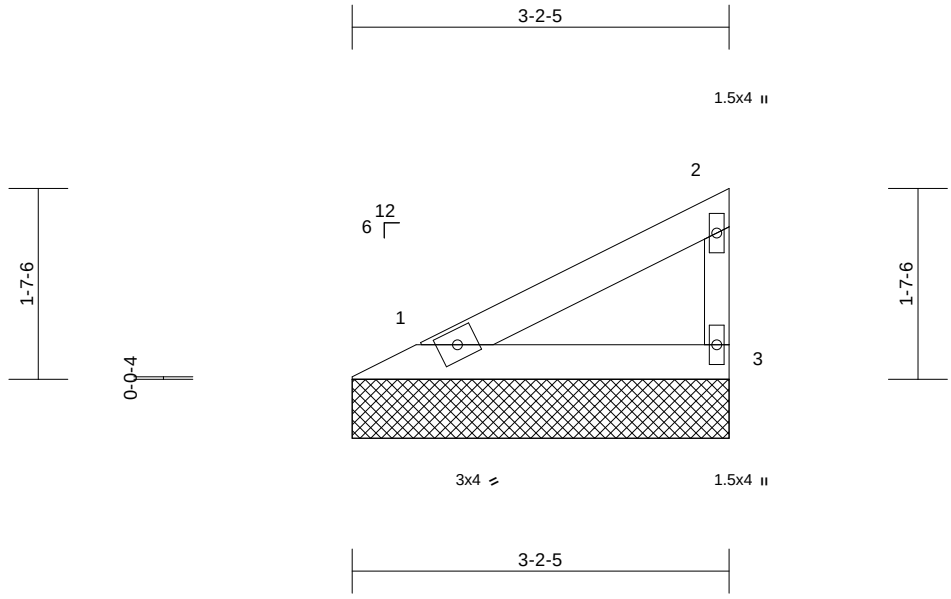


Scale = 1:19.5

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 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 3-2-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-2-5, 3=3-2-5
Max Horiz 1=56 (LC 9)
Max Uplift 1=-17 (LC 12), 3=-32 (LC 12)
Max Grav 1=112 (LC 1), 3=112 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-79/53, 2-3=-87/113
BOT CHORD 1-3=-26/28

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1 and 32 lb uplift at joint 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

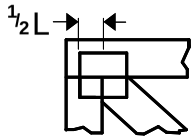
July 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

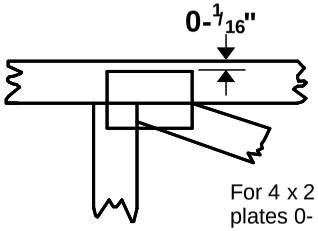
MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

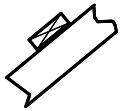
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

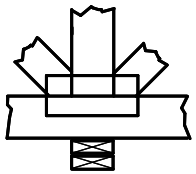
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

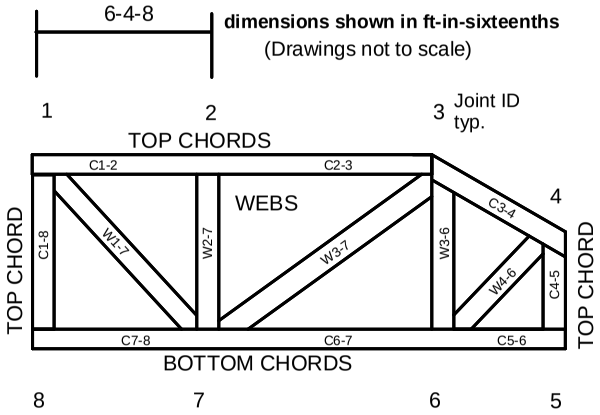


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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