

RE: P250396-01
Roof - BY Lot 2301/2302

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

Site Information:

Customer: Clayton Properties Project Name: P250396-01
Lot/Block: 2301/2302 Model:
Address: 1216/1218 SE Windbreak Dr Subdivision: Bailey Farms
City: Lee's Summit State: MO

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

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

This package includes 42 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I74608677	A1	7/2/2025	21	I74608697	E3	7/2/2025
2	I74608678	A2	7/2/2025	22	I74608698	J1	7/2/2025
3	I74608679	A3	7/2/2025	23	I74608699	J2	7/2/2025
4	I74608680	A4	7/2/2025	24	I74608700	L1	7/2/2025
5	I74608681	A5	7/2/2025	25	I74608701	L2	7/2/2025
6	I74608682	A6	7/2/2025	26	I74608702	L3	7/2/2025
7	I74608683	A7	7/2/2025	27	I74608703	PB1	7/2/2025
8	I74608684	A8	7/2/2025	28	I74608704	PB2	7/2/2025
9	I74608685	A9	7/2/2025	29	I74608705	PB3	7/2/2025
10	I74608686	B1	7/2/2025	30	I74608706	PB4	7/2/2025
11	I74608687	B2	7/2/2025	31	I74608707	PB5	7/2/2025
12	I74608688	B3	7/2/2025	32	I74608708	PB6	7/2/2025
13	I74608689	C1	7/2/2025	33	I74608709	PB7	7/2/2025
14	I74608690	D1	7/2/2025	34	I74608710	V1	7/2/2025
15	I74608691	D2	7/2/2025	35	I74608711	V2	7/2/2025
16	I74608692	D3	7/2/2025	36	I74608712	V3	7/2/2025
17	I74608693	D4	7/2/2025	37	I74608713	V4	7/2/2025
18	I74608694	D5	7/2/2025	38	I74608714	V5	7/2/2025
19	I74608695	E1	7/2/2025	39	I74608715	V6	7/2/2025
20	I74608696	E2	7/2/2025	40	I74608716	V7	7/2/2025

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

Truss Design Engineer's Name: Lu, Jie

My license renewal date for the state of Missouri is December 31, 2026.

Missouri COA: 001193

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





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Lot/Block: 2301/2302 Subdivision: Bailey Farms
Address: 1216/1218 SE Windbreak Dr
City, County: Lee's Summit State: MO

No.	Seal#	Truss Name	Date
41	I74608717	V8	7/2/2025
42	I74608718	V9	7/2/2025

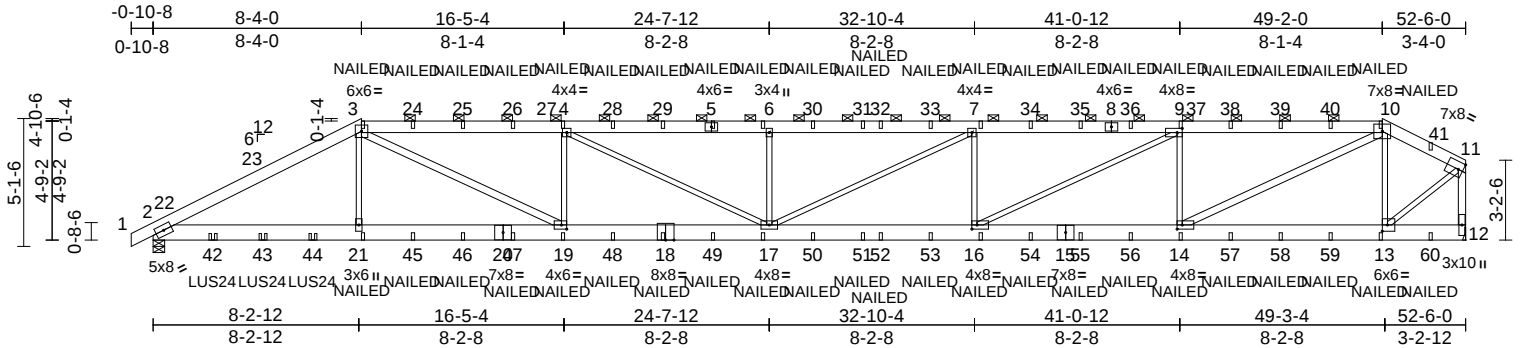
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608677
P250396-01	A1	Hip Girder	2	2	Job Reference (optional)	

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

Page: 1

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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	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

- 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.
- 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-4-8, 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- 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.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 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.
 - Fill all nail holes where hanger is in contact with lumber.
 - "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
- LOAD CASE(S)** Standard
- 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

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

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



Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302
P250396-01	A1	Hip Girder	2	2	Job Reference (optional)

I74608677

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

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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),
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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)

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

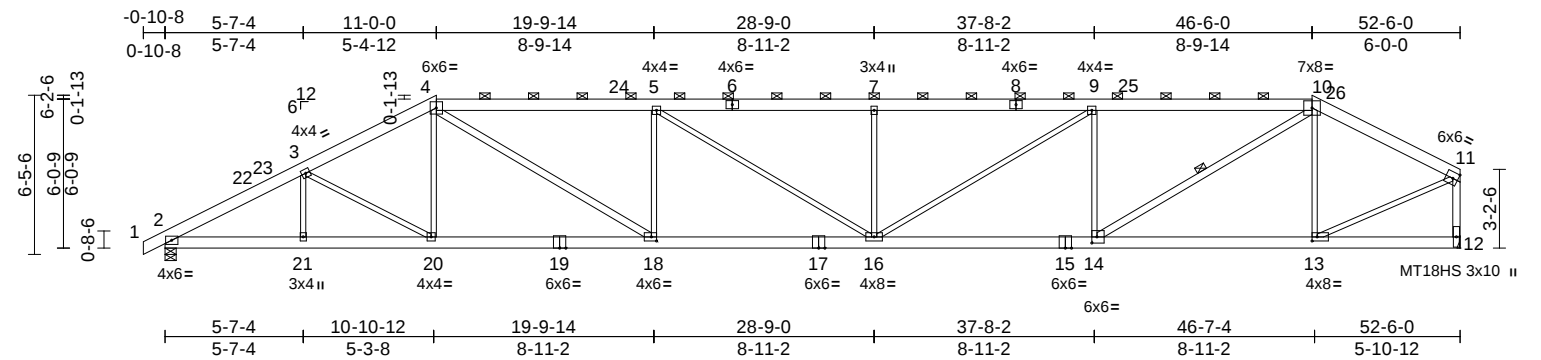
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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DEVELOPMENT SERVICES
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Lee's Summit, MO 64083
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07/15/2025 10:15:49

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608678
P250396-01	A2	Hip	2	1	Job Reference (optional)	

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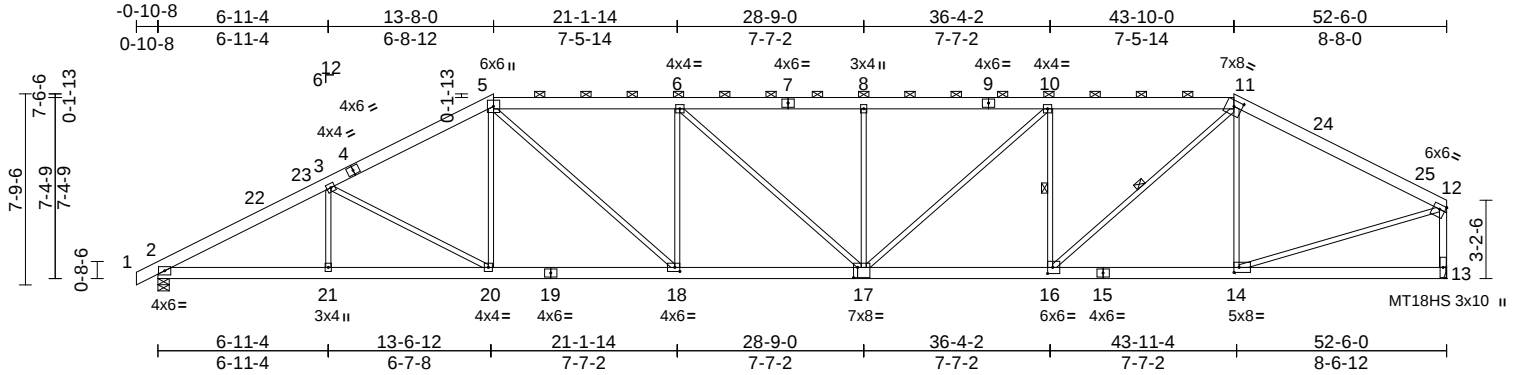


Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	A3	Hip	2	1	Job Reference (optional)	I74608679

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

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Page: 1



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.

- 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
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- 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.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 2,2025

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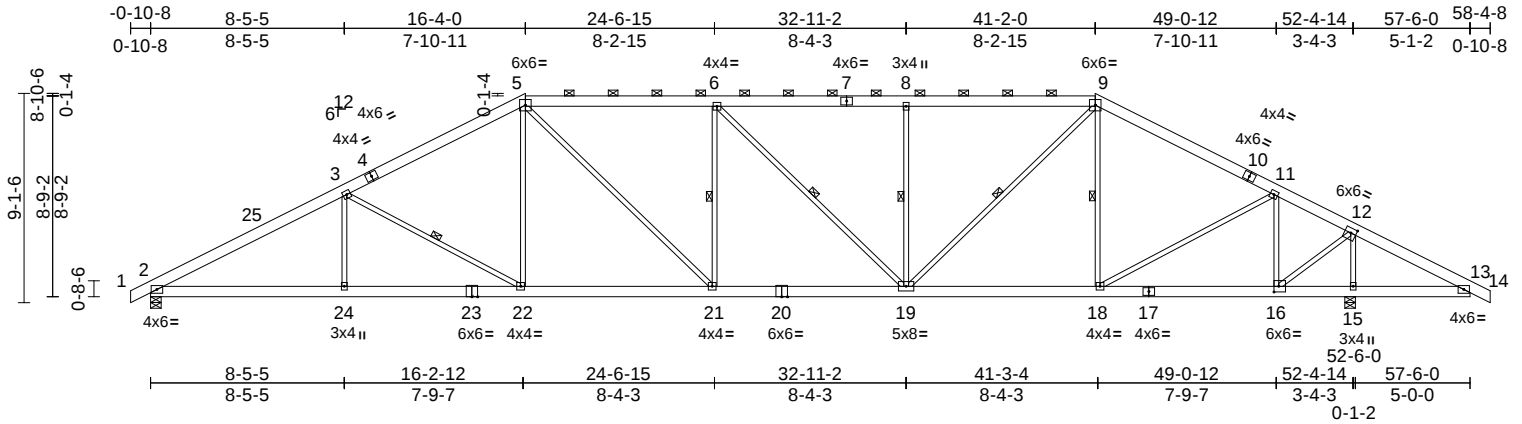
MiTek®
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/15/2025 10:15:50

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	A4	Hip	2	1	Job Reference (optional)	I74608680

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

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Page: 1



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

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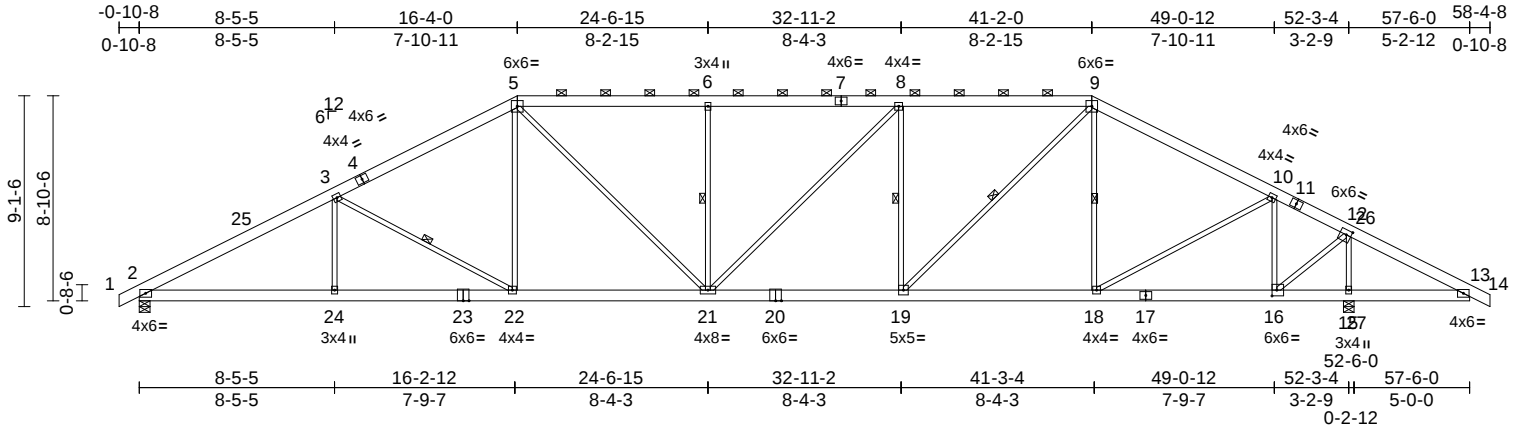
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608681
P250396-01	A5	Piggyback Base	2	1	Job Reference (optional)	

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:50

Page: 1

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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

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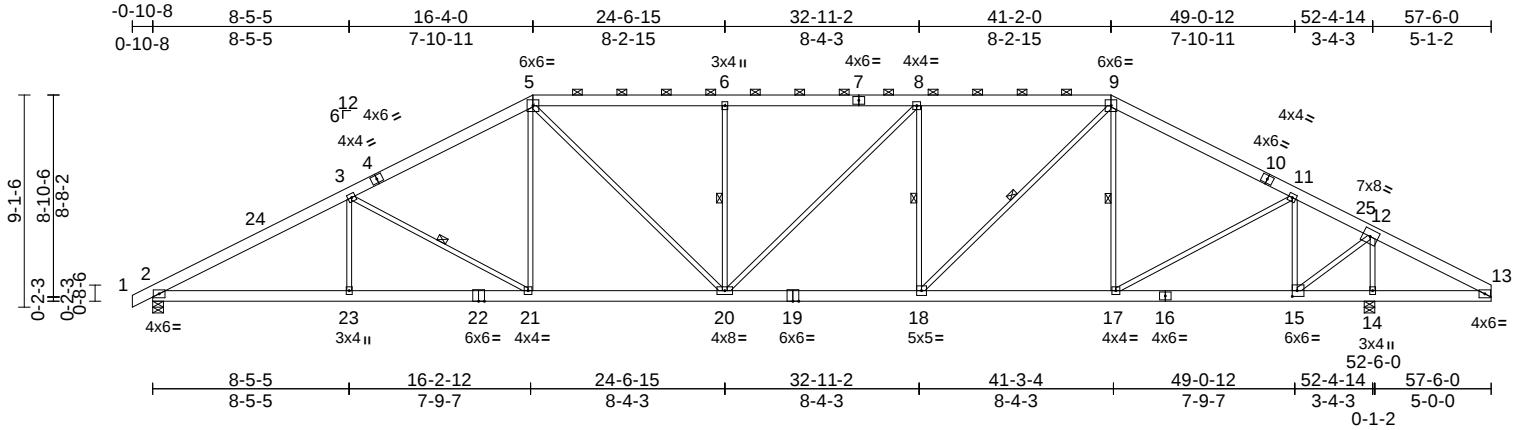
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	A6	Piggyback Base	2	1	Job Reference (optional)	I74608682

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

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Page: 1

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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
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.46	18-20	>999	180	244/190
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

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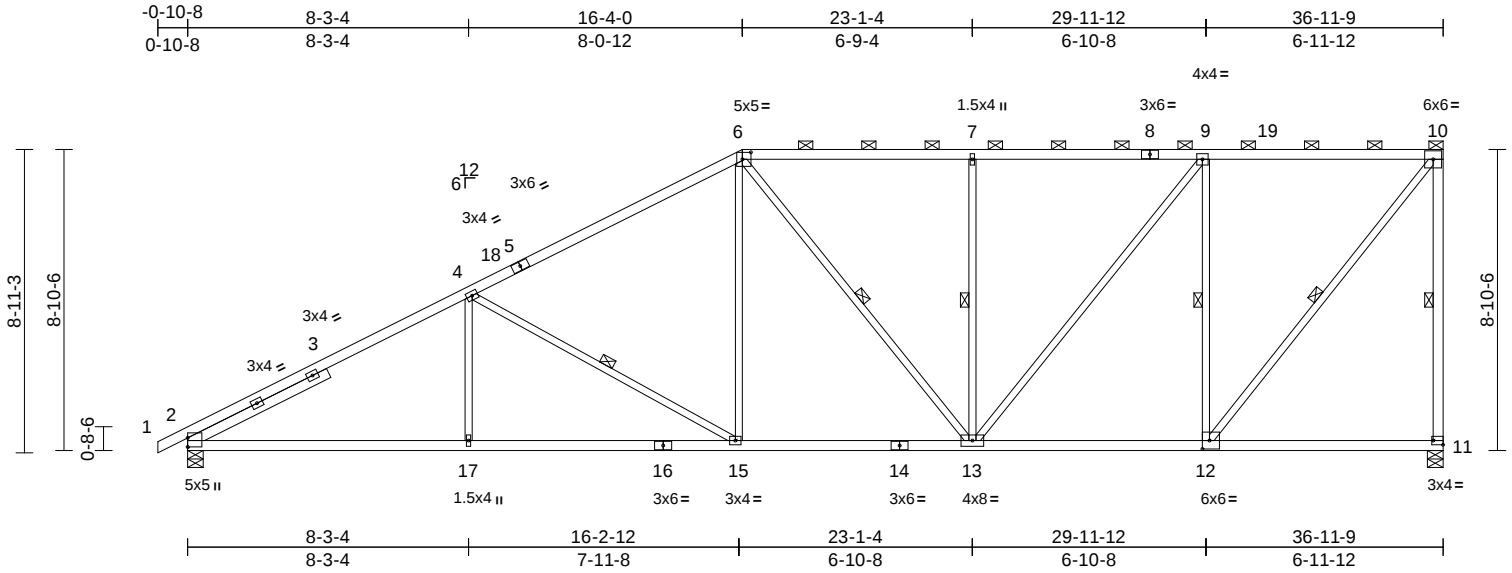
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	A7	Piggyback Base	16	1	Job Reference (optional)	I74608683

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Page: 1

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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	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

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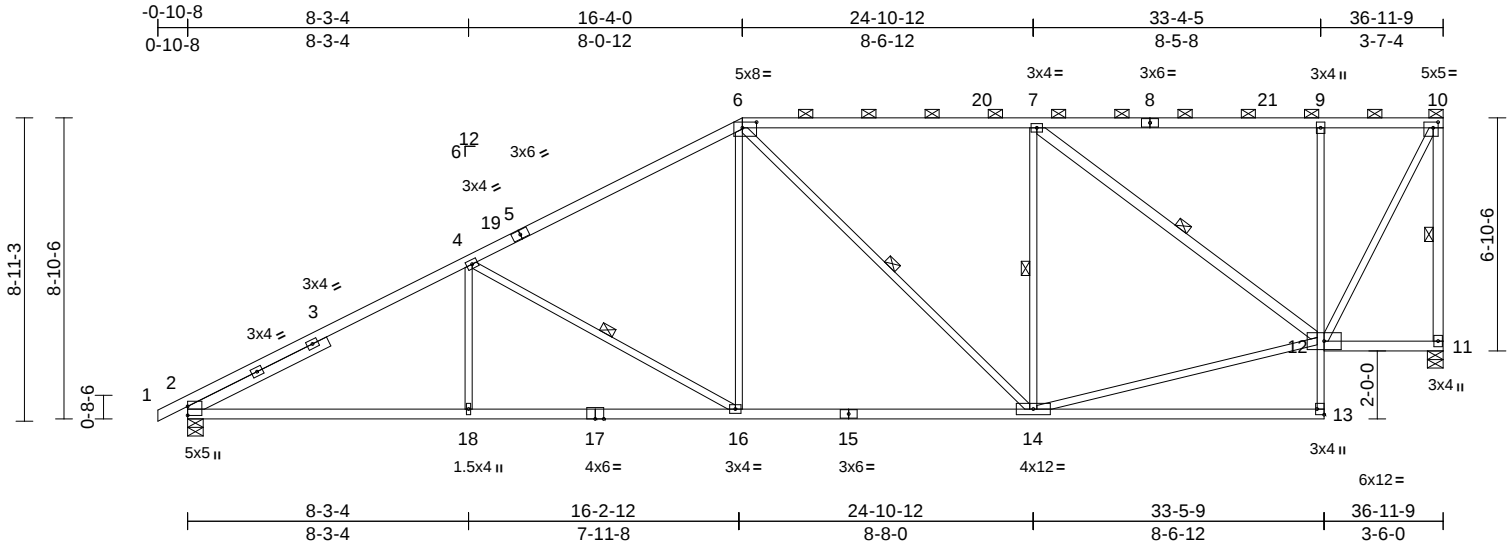
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	A8	Piggyback Base	2	1	Job Reference (optional)	I74608684

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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



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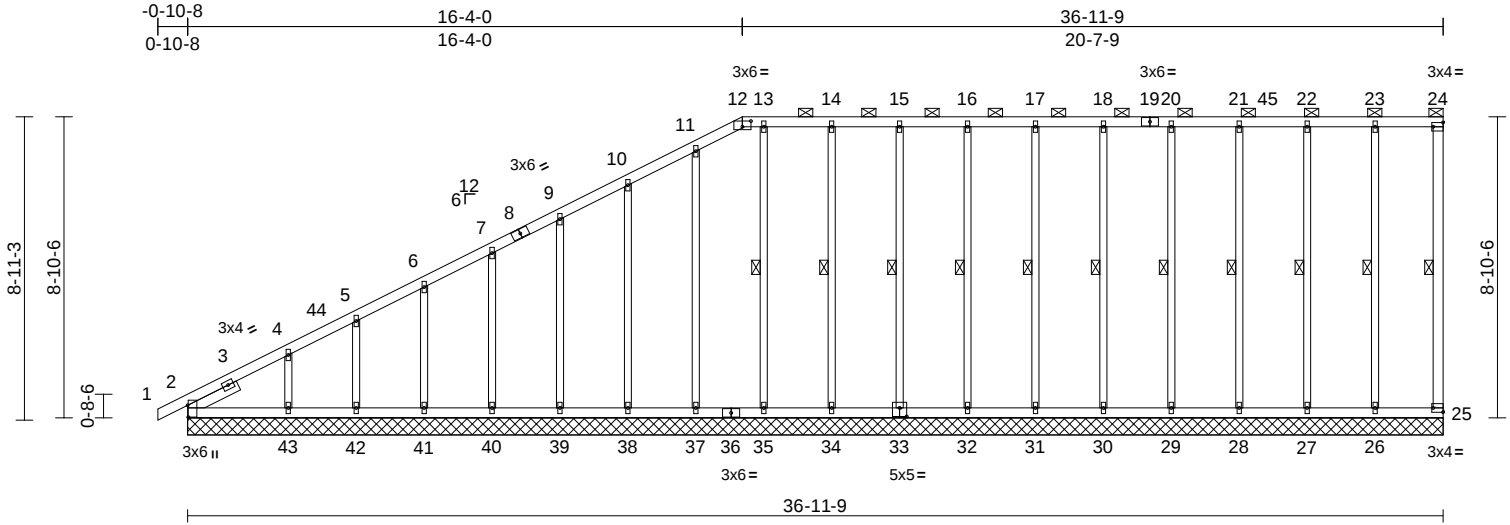
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608685
P250396-01	A9	Piggyback Base Supported Gable	2	1	Job Reference (optional)	

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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

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)

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(3Y) 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

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

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



Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302
P250396-01	A9	Piggyback Base Supported Gable	2	1	Job Reference (optional)

I74608685

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

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Page: 2

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- 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

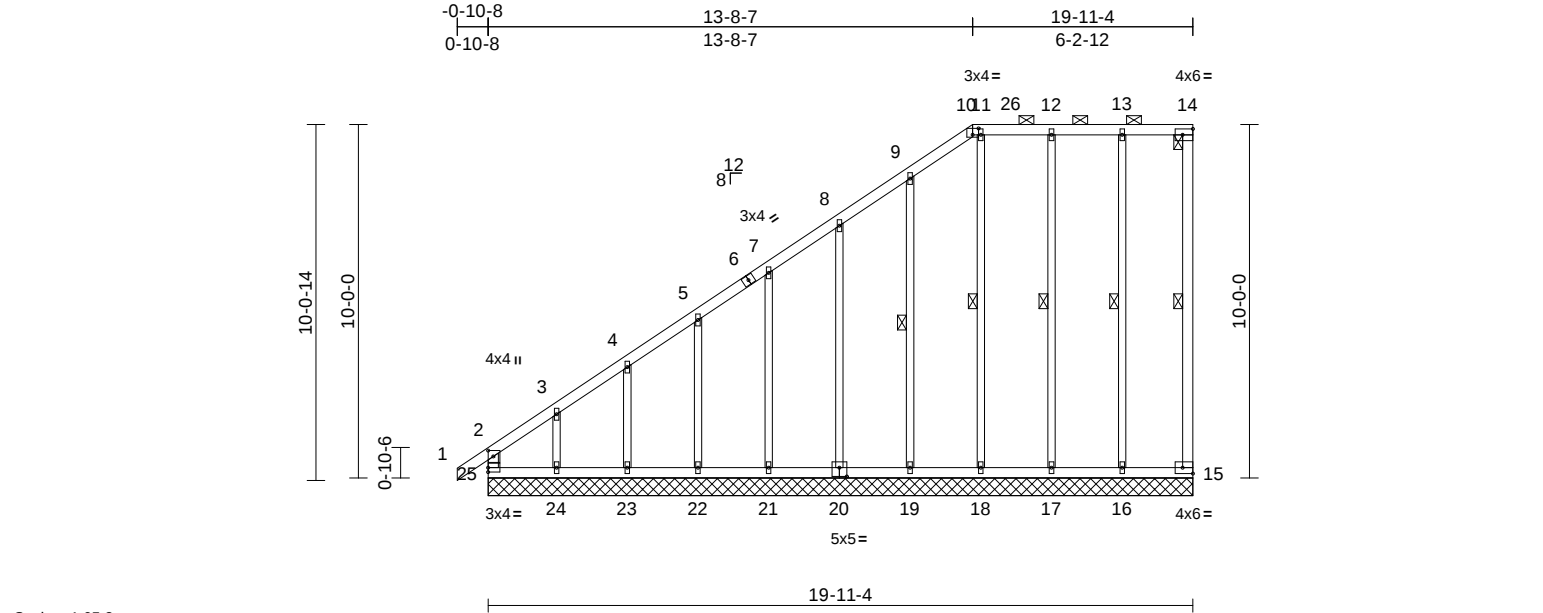
 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608686
P250396-01	B1	Piggyback Base Supported Gable	1	1	Job Reference (optional)	



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
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	15	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R					
					Weight: 127 lb FT = 20%				

LUMBER			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			9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.		
TOP CHORD	2x4 SP No.2		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			10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.		
BOT CHORD	2x4 SP No.2		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			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.		
WEBS	2x4 SP No.2		OTHERS						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.		
OTHERS	2x3 SPF No.2								13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.		
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.			LOAD CASE(S) Standard		
TOP CHORD			BOT CHORD			Rigid ceiling directly applied or 10-0-0 oc bracing.					
BOT CHORD			WEBS			1 Row at midpt 14-15, 13-16, 12-17, 11-18, 9-19					
WEBS											
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								

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.											



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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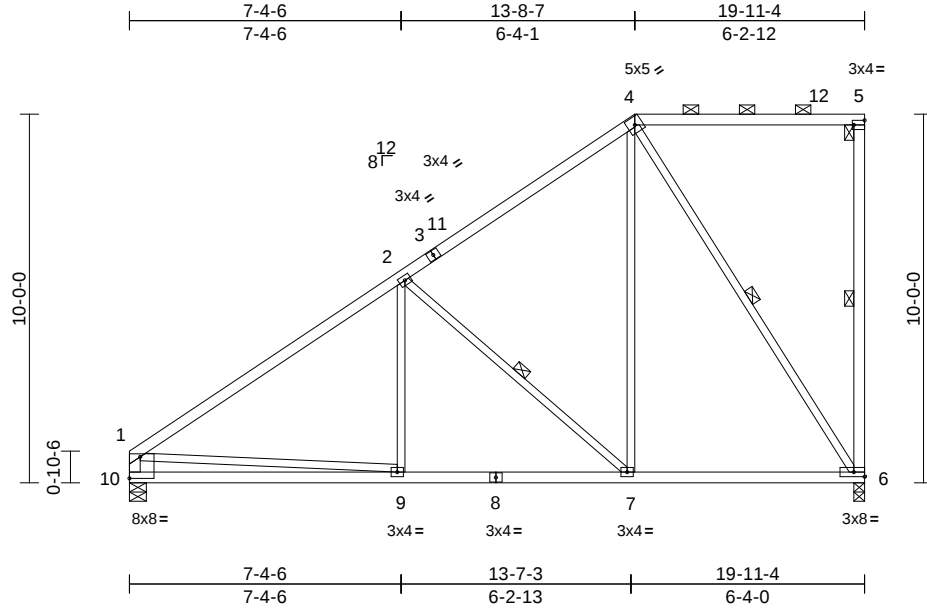
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	B2	Piggyback Base	22	1	Job Reference (optional)	I74608687

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

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Page: 1

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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

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

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

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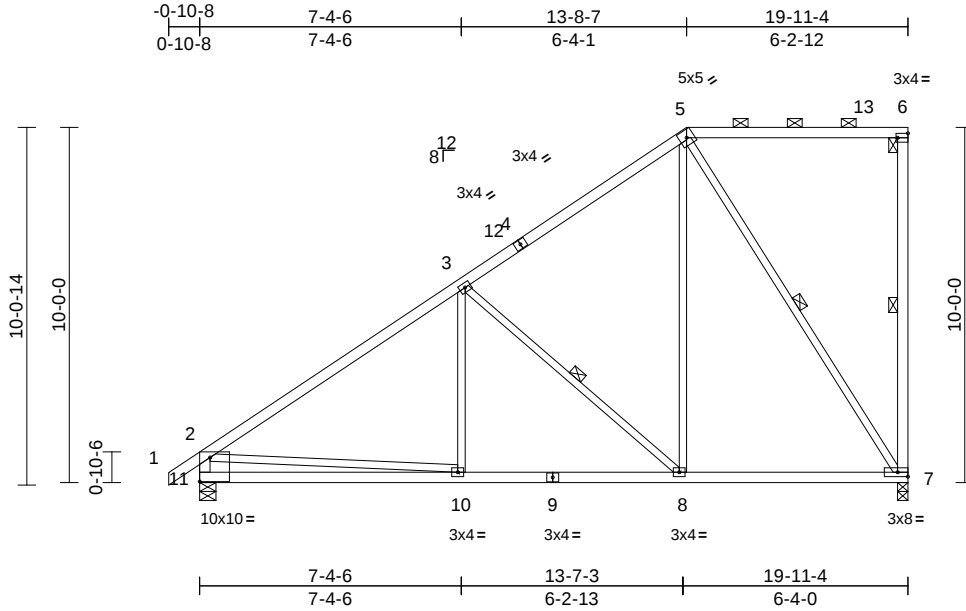
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	B3	Piggyback Base	1	1	Job Reference (optional)	I74608688

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

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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



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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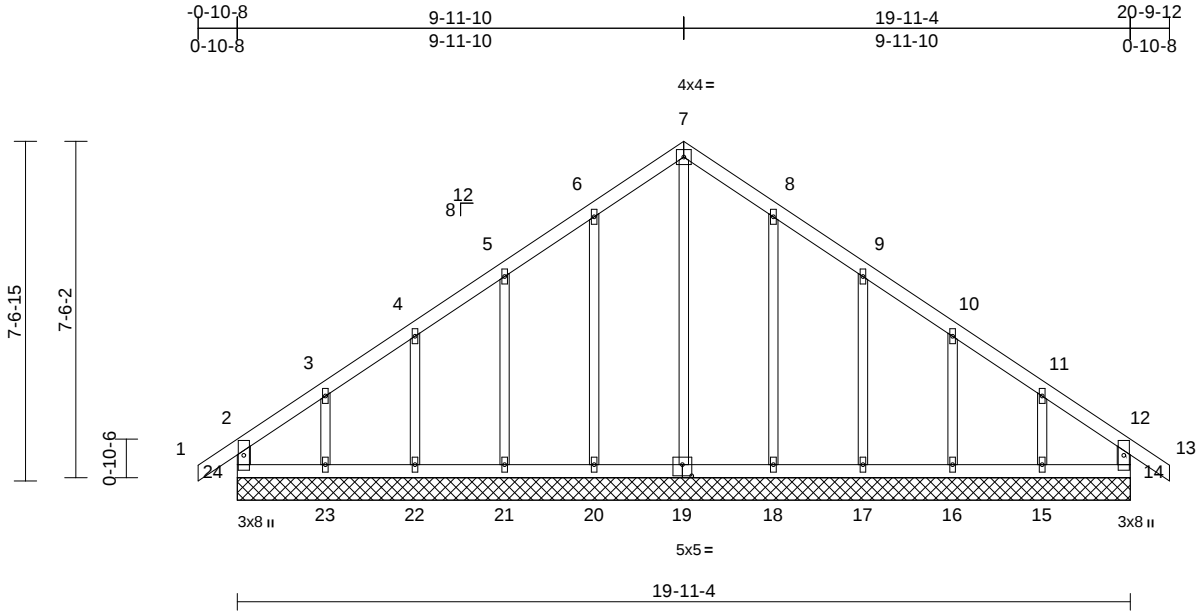
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	C1	Common Supported Gable	1	1	Job Reference (optional)	I74608689

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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	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**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C 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
 - 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.
 - All plates are 1.5x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

- 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



July 2,2025

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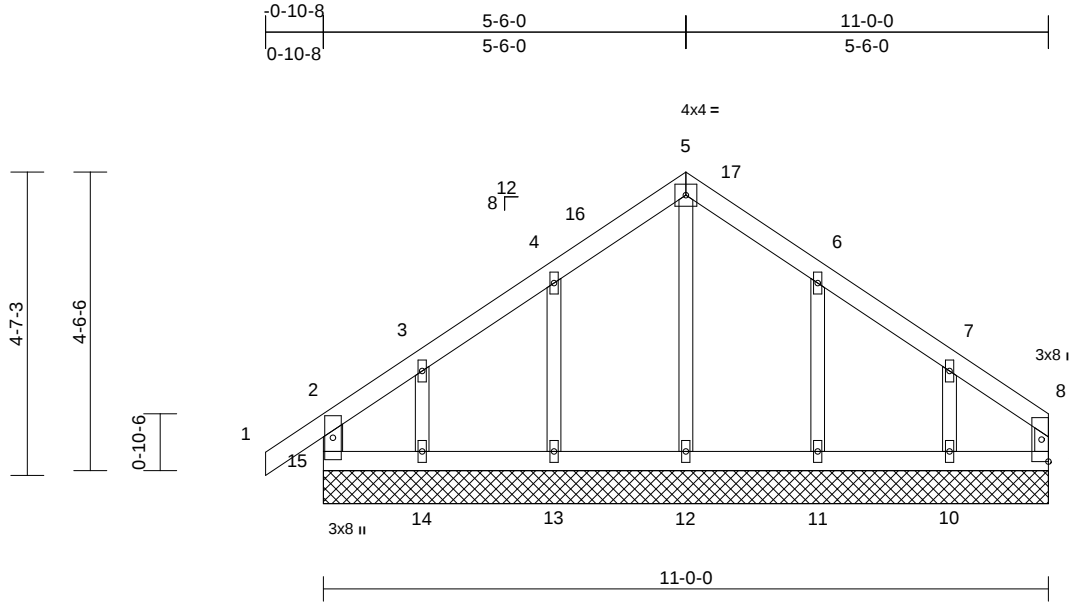
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608690
P250396-01	D1	Common Supported Gable	2	1	Job Reference (optional)	

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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	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	9	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

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C 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
- 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 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.
- 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



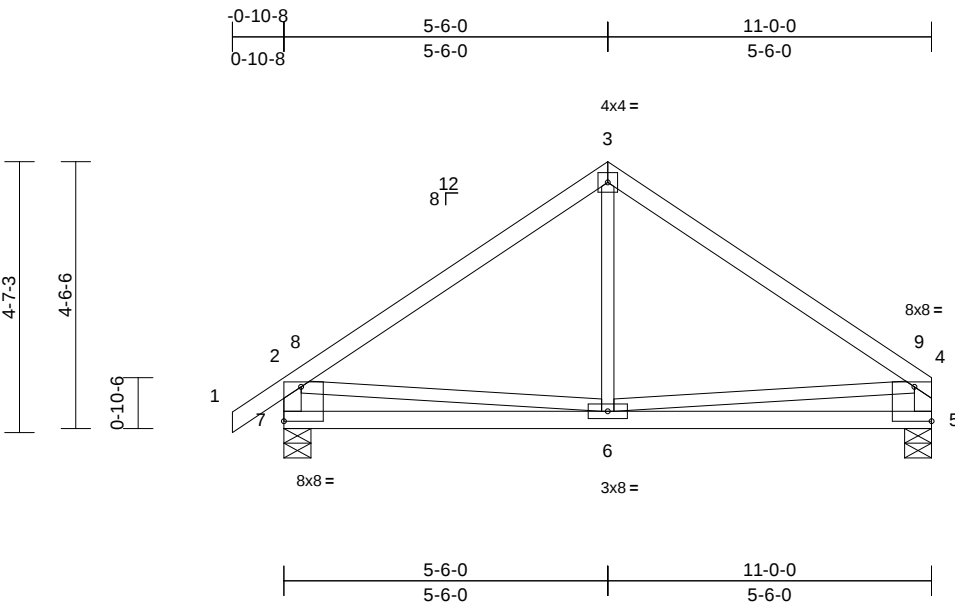
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	D2	Common	4	1	Job Reference (optional)	I74608691



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**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 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
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 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

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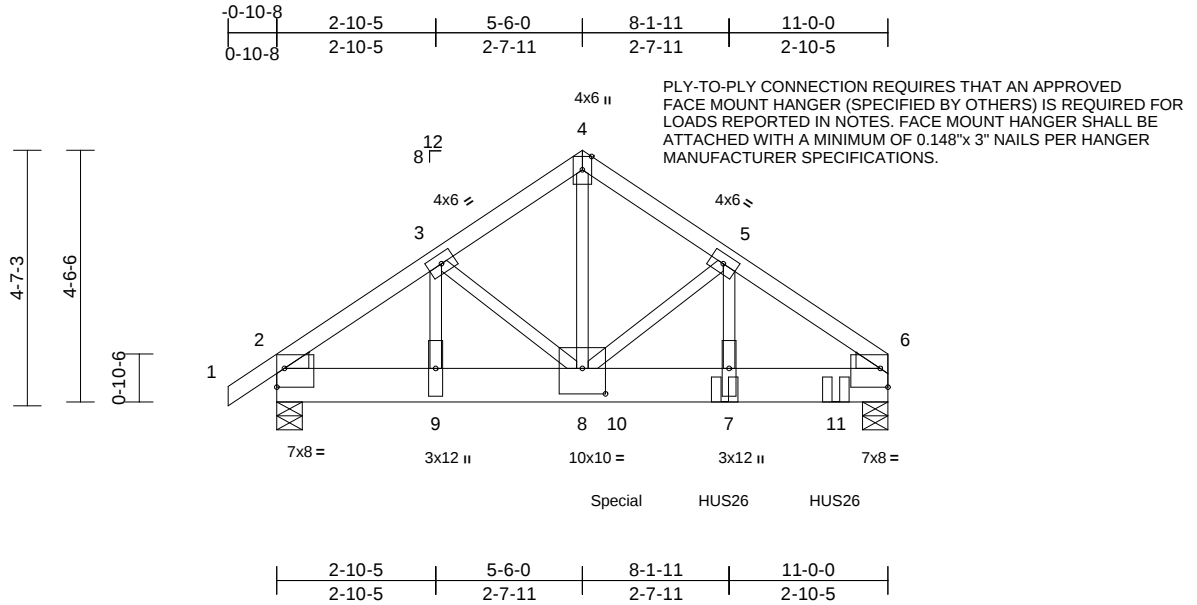
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	D3	Common Girder	2	3	Job Reference (optional)	174608692

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Page: 1

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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

- N/A
- 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.

- 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-10-8 to 4-1-8, Interior (1) 4-1-8 to 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
- 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.
- 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.
- 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.
- Fill all nail holes where hanger is in contact with lumber.
- 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

- 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)



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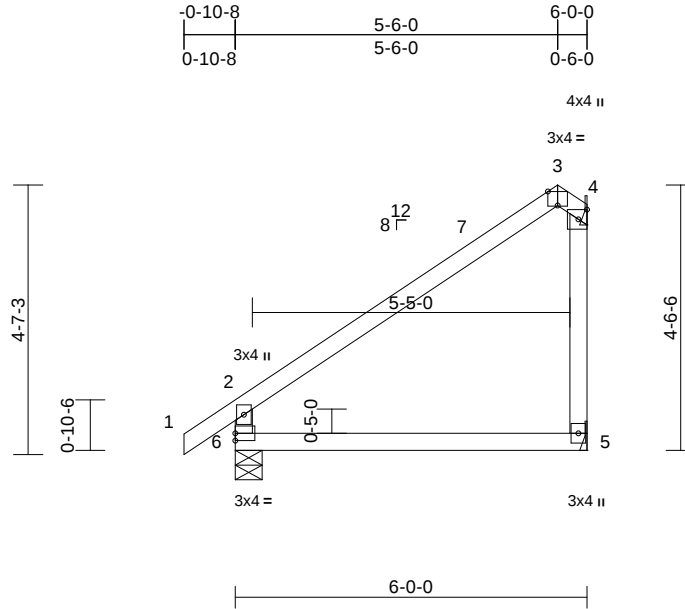
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	D4	Jack-Closed	1	1	Job Reference (optional)	I74608693

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Page: 1

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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



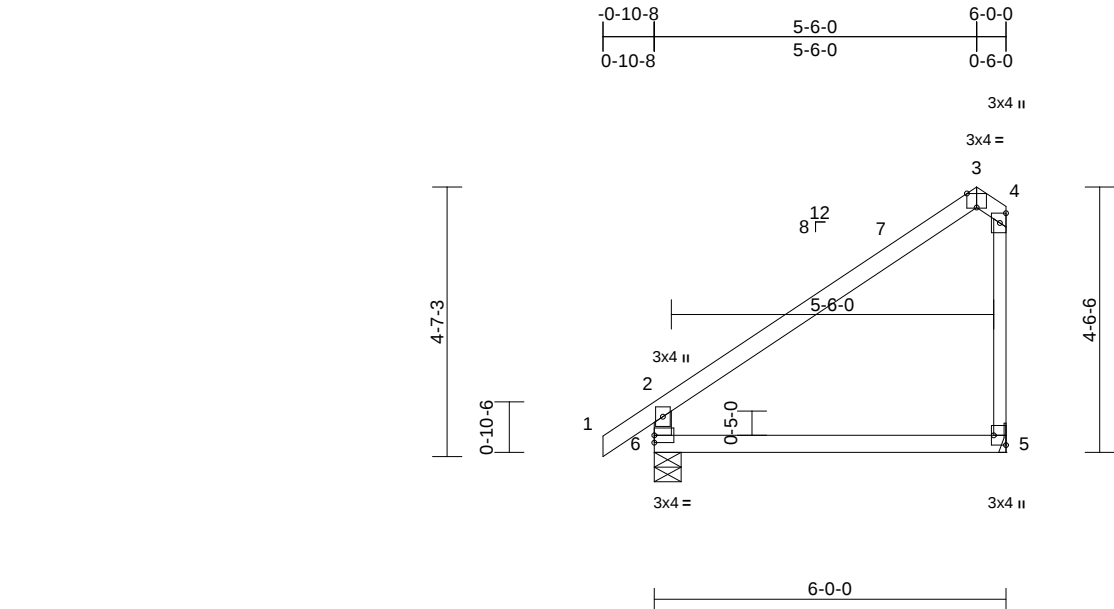
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	D5	Jack-Closed	1	1	Job Reference (optional)	I74608694



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**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 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
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearings are assumed to be: Joint 6 SP No.2 crushing capacity of 565 psi.
 - Refer to girder(s) for truss to truss connections.
 - 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

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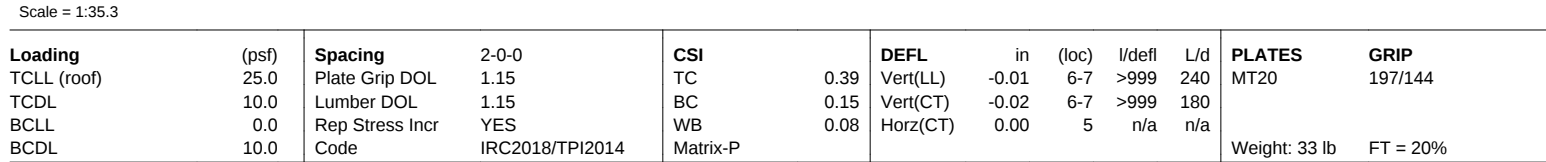
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16023 Swinley Ridge Rd
Missouri, MO 63053
816-434-1200 / MiTek-US.com

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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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- 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

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; BC DL=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.



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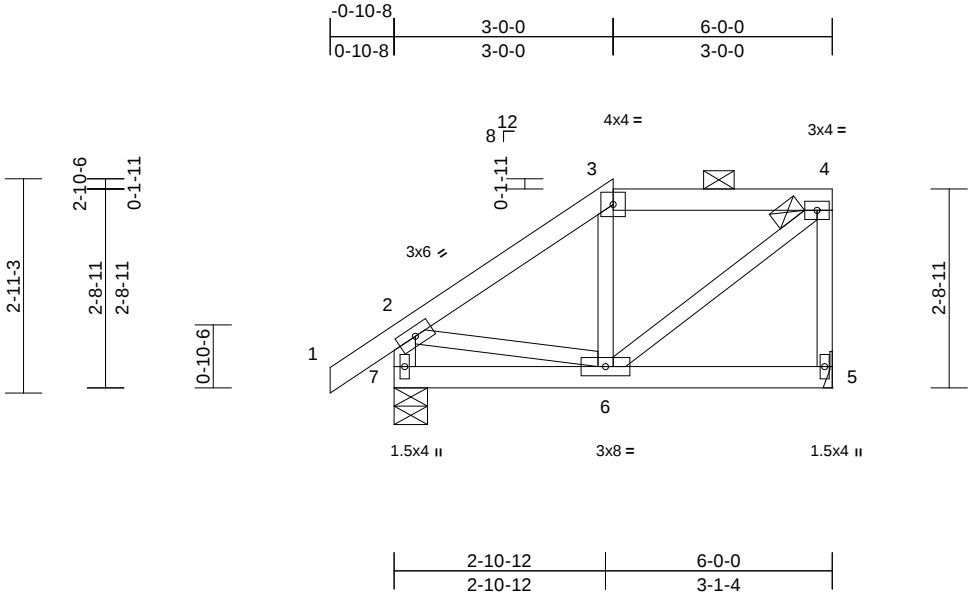
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	E2	Half Hip	2	1	Job Reference (optional)	I74608696

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

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Page: 1



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	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



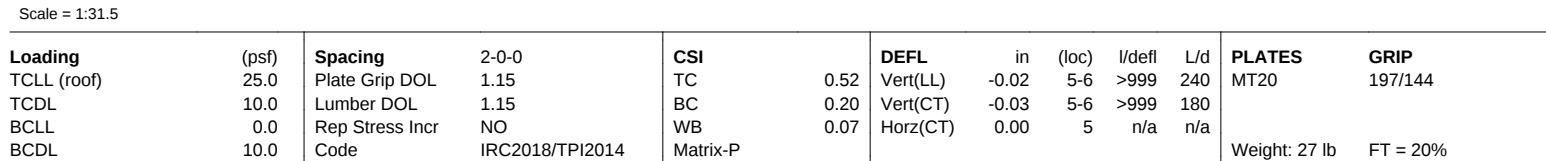
July 2, 2025

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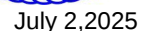


- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 5 and 85 lb uplift at joint 7.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 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)

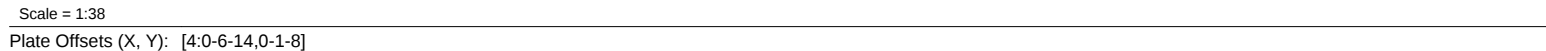
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCdL=6.0psf; BCdL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) zone; cantilever left
and right exposed; end vertical left and right
exposed; C-P 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.



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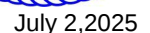
LUMBER		6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
TOP CHORD	2x4 SP No.2	
BOT CHORD	2x4 SP No.2	
WEBS	2x4 SP No.2 *Except* 4-2:2x3 SPF No.2	LOAD CASE(S) Standard

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.

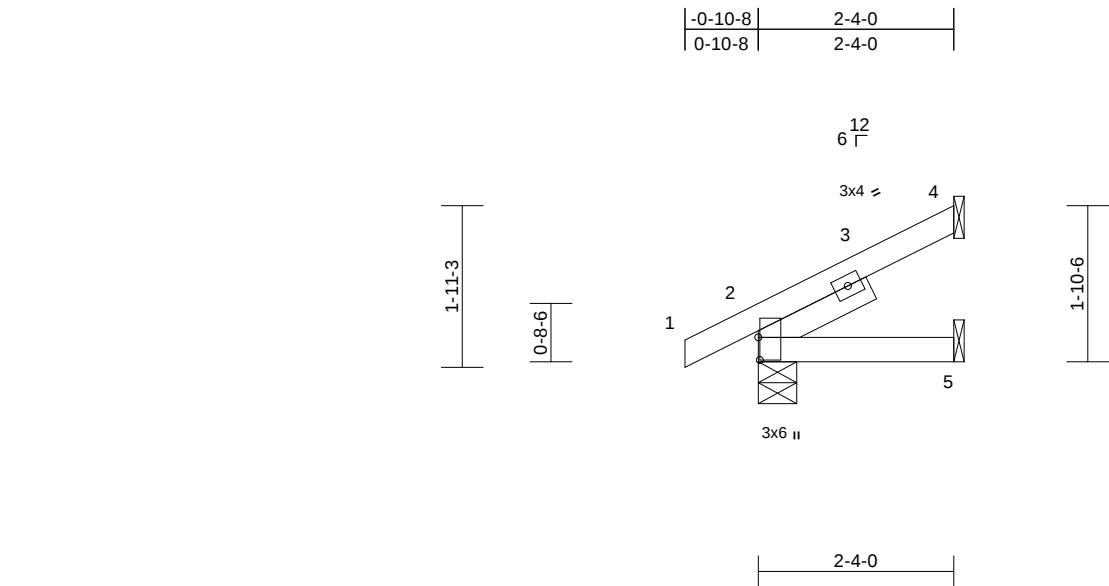


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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	J2	Jack-Open	4	1	Job Reference (optional)	I74608699



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

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
LOAD CASE(S) Standard

BRACING
TOP CHORD Structural wood sheathing directly applied or 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.



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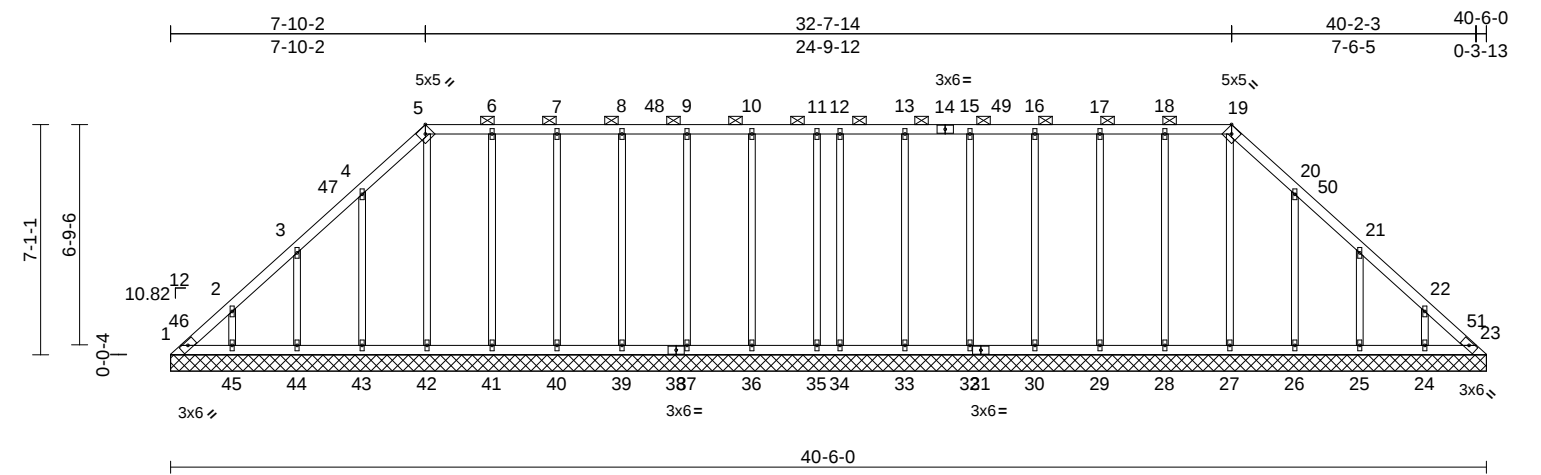
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	L1	Lay-In Gable	2	1	Job Reference (optional)	I74608700

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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
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999	244/190
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		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)	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
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	FORCES (lb) - Maximum Compression/Maximum Tension		
		Max Horiz 1=189 (LC 9)	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		
		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)	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		

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-9 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

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302
P250396-01	L1	Lay-In Gable	2	1	174608700
			Job Reference (optional)		

- 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" 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

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

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



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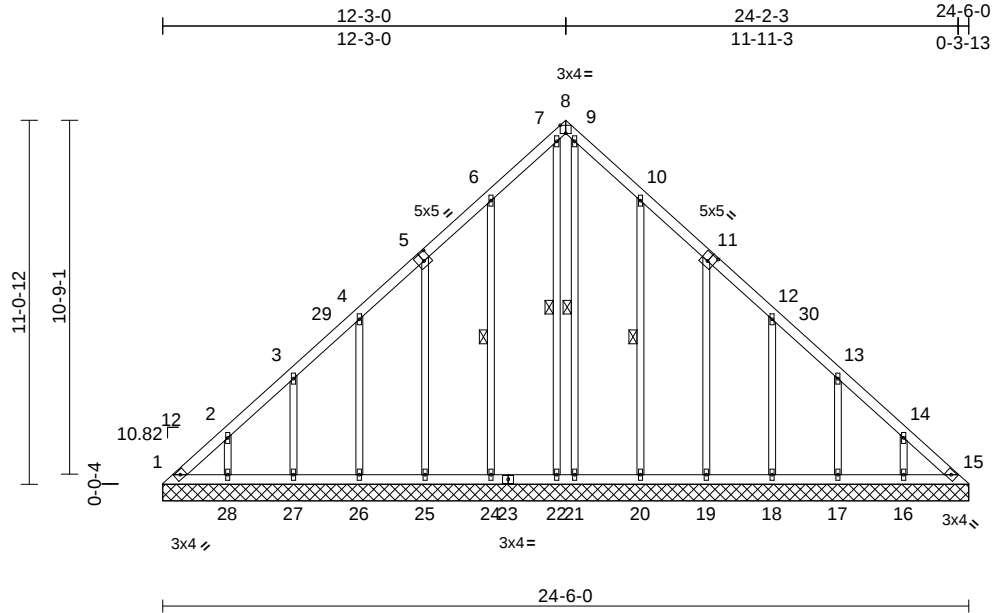
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	L2	Lay-In Gable	2	1	Job Reference (optional)	I74608701

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
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Page: 1



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
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999	244/190
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; TCCL=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



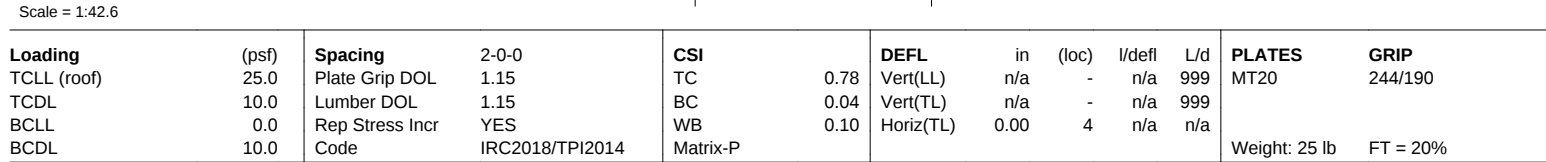
July 2,2025

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

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

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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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- 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

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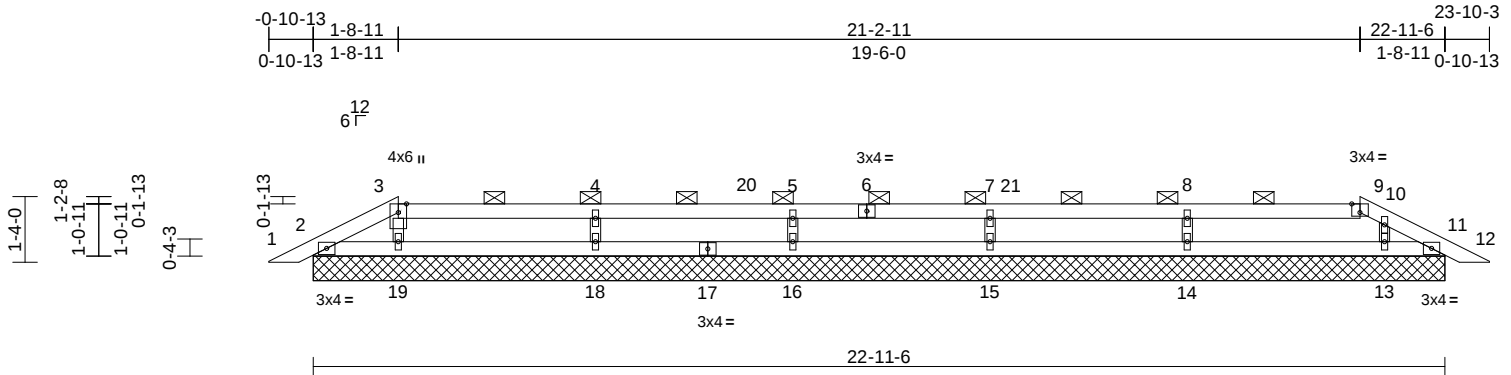
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Chesapeake, MD 20805
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	PB1	Piggyback	2	1	Job Reference (optional)	I74608703

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

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Page: 1



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	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	11	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

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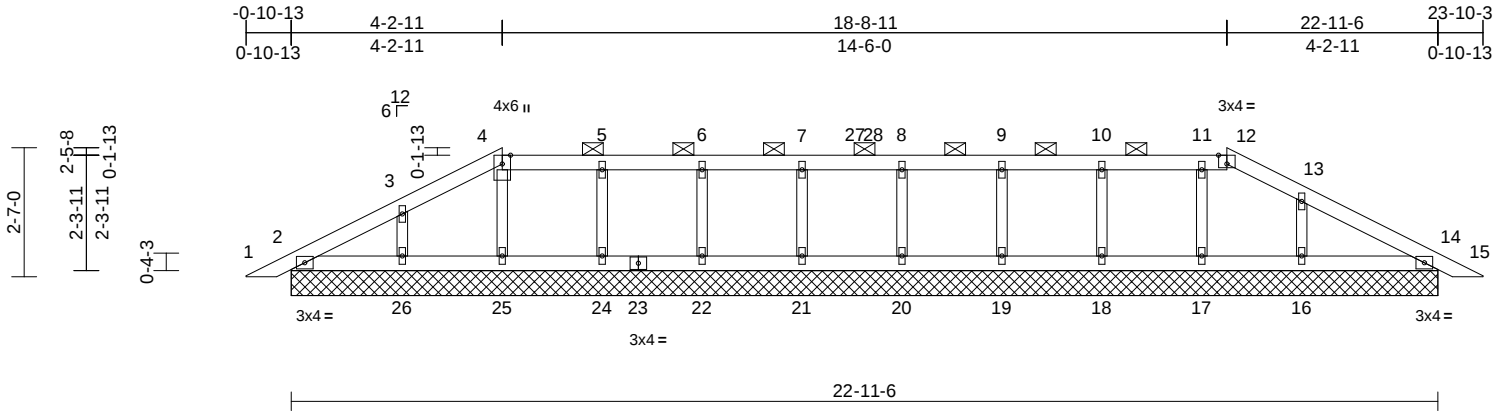
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	PB2	Piggyback	2	1	Job Reference (optional)	I74608704

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

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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
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999	244/190
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

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-3 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
- 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 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.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 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.sbcsccomponents.com)

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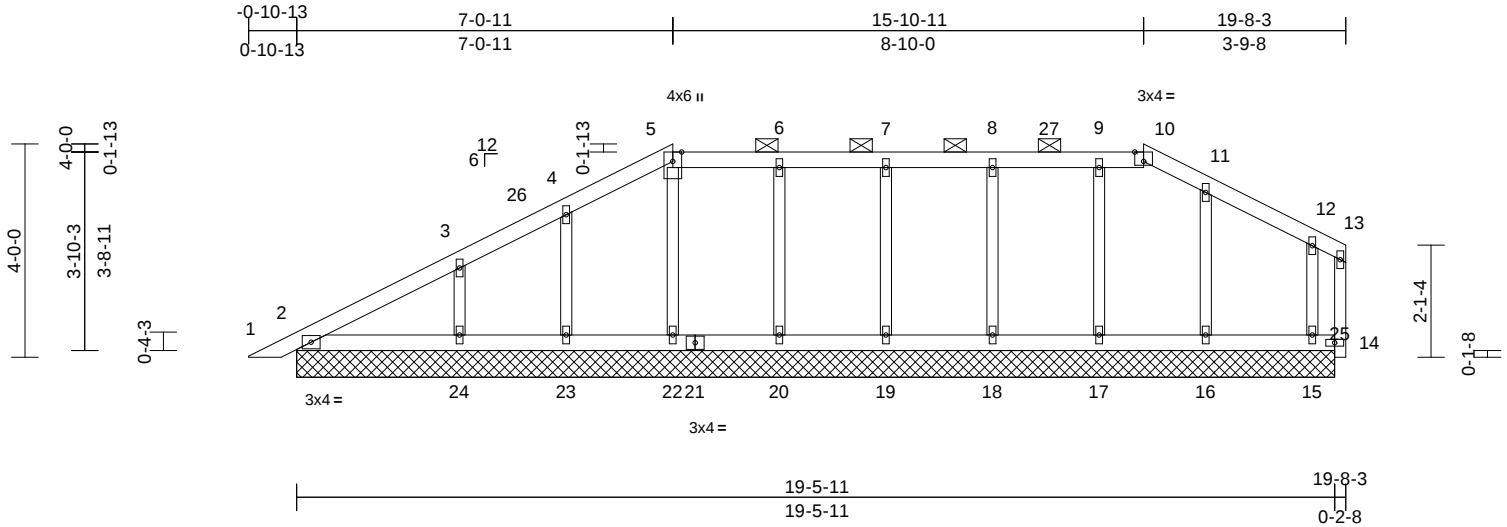
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	PB3	Piggyback	2	1	Job Reference (optional)	I74608705

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 = 1:43.2

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
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999	244/190
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

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-3 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
- 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 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.

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 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 the design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

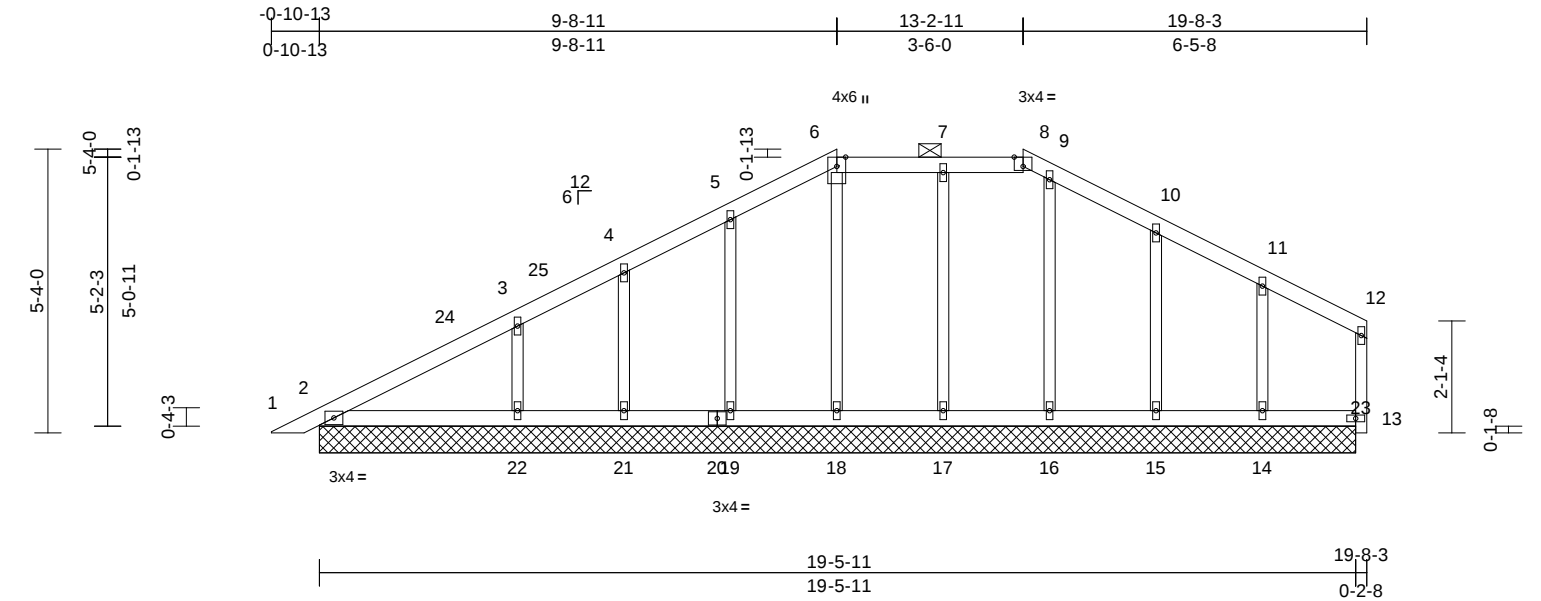
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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/15/2025 10:15:52

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	PB4	Piggyback	2	1	Job Reference (optional)	I74608706

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

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Page: 1



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)	
Max Horiz	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 Uplift	2=133 (LC 11)
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**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-3 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
 - 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.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 1.5x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 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.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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



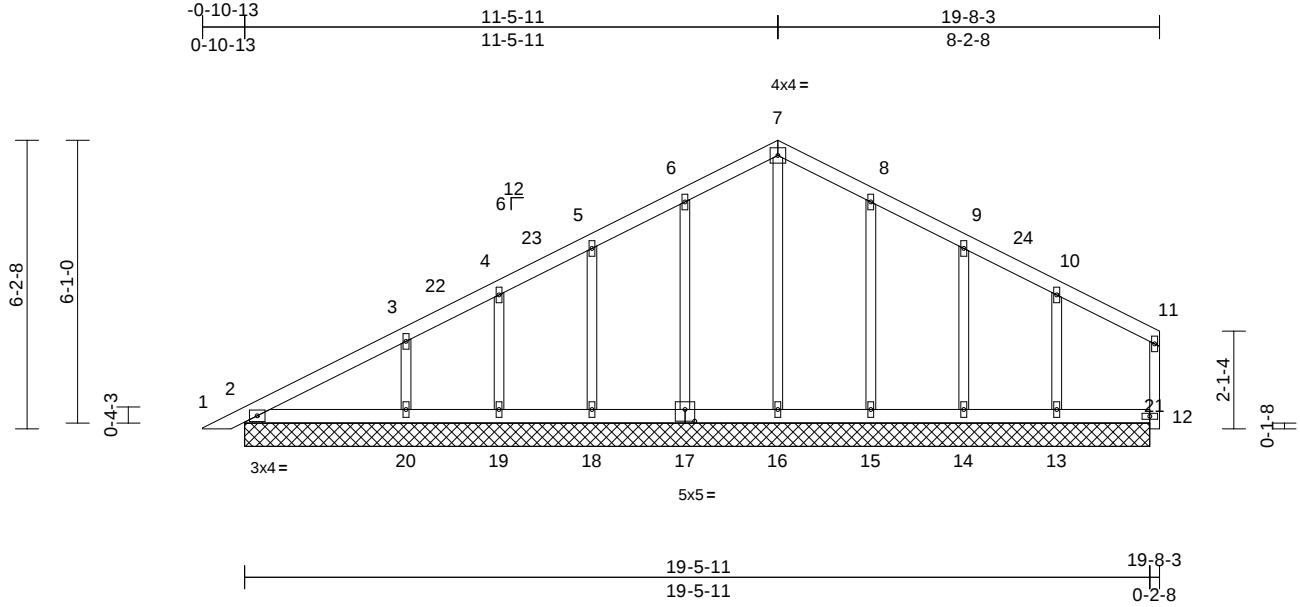
July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608707
P250396-01	PB5	Piggyback	14	1	Job Reference (optional)	

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Jul 01 14:04:53
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Page: 1



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	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
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

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-3 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
- 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 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.
- 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



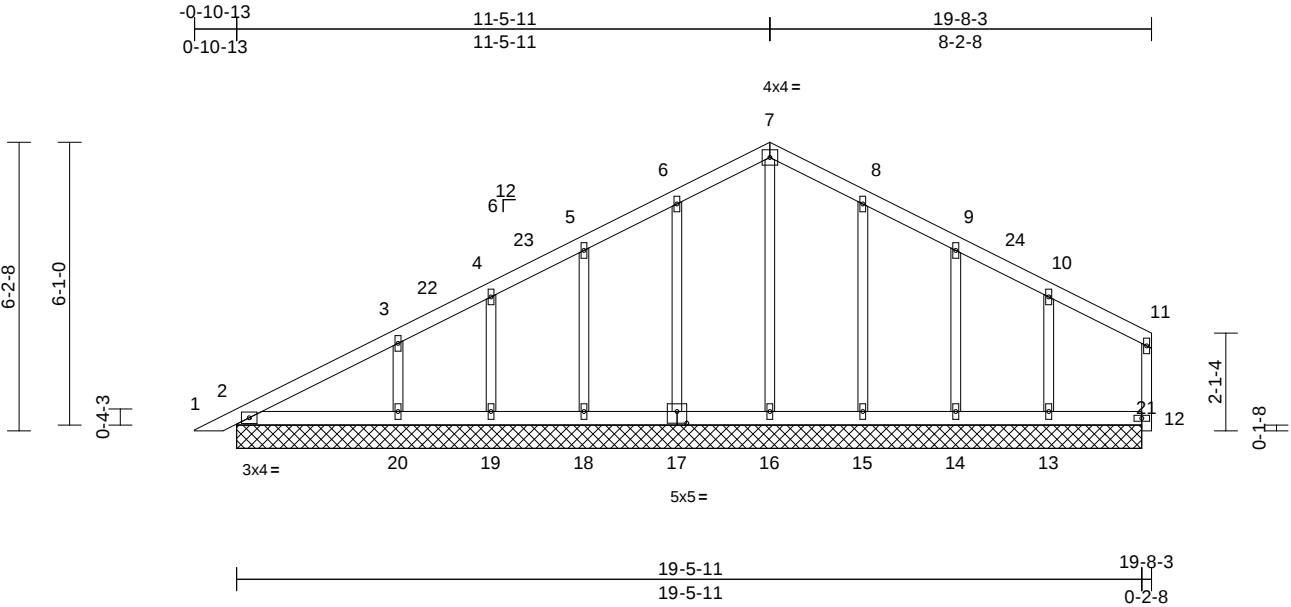
July 2, 2025

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608708
P250396-01	PB6	Piggyback	2	1	Job Reference (optional)	



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	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, 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
BOT CHORD	

- 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**
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-3 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
 - 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.
 - All plates are 1.5x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 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.
 - 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



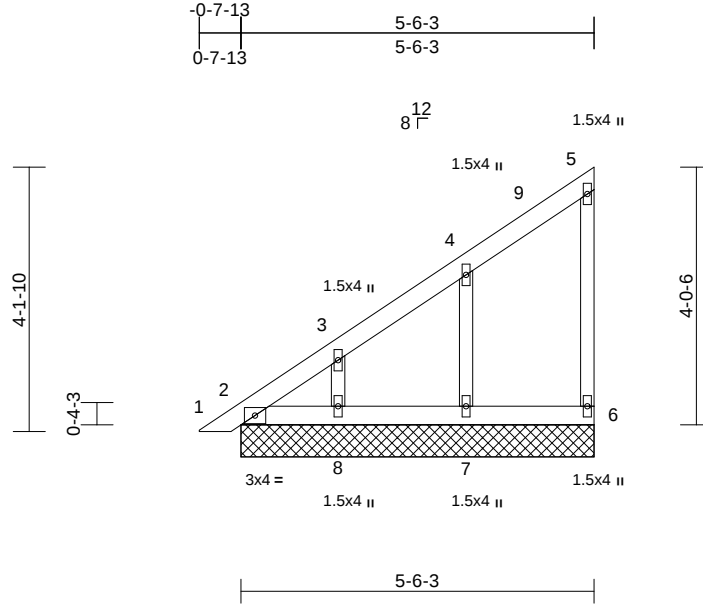
July 2,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	PB7	Piggyback	24	1	Job Reference (optional)	174608709

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

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Page: 1



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	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	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

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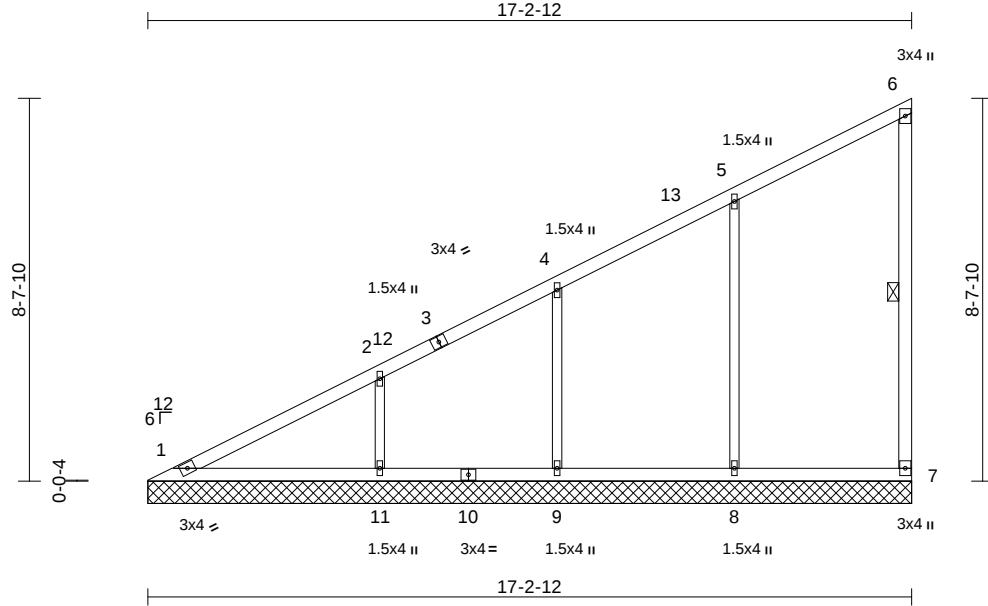
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07/15/2025 10:15:52

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608710
P250396-01	V1	Valley	2	1	Job Reference (optional)	

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

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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	0.57	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	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

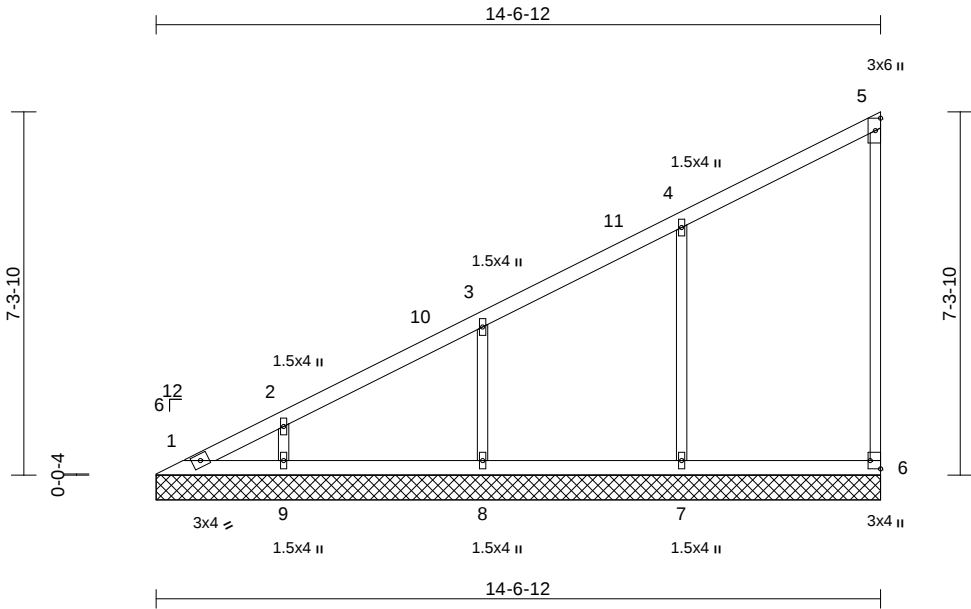
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	V2	Valley	2	1	Job Reference (optional)	I74608711

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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
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999	244/190
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.

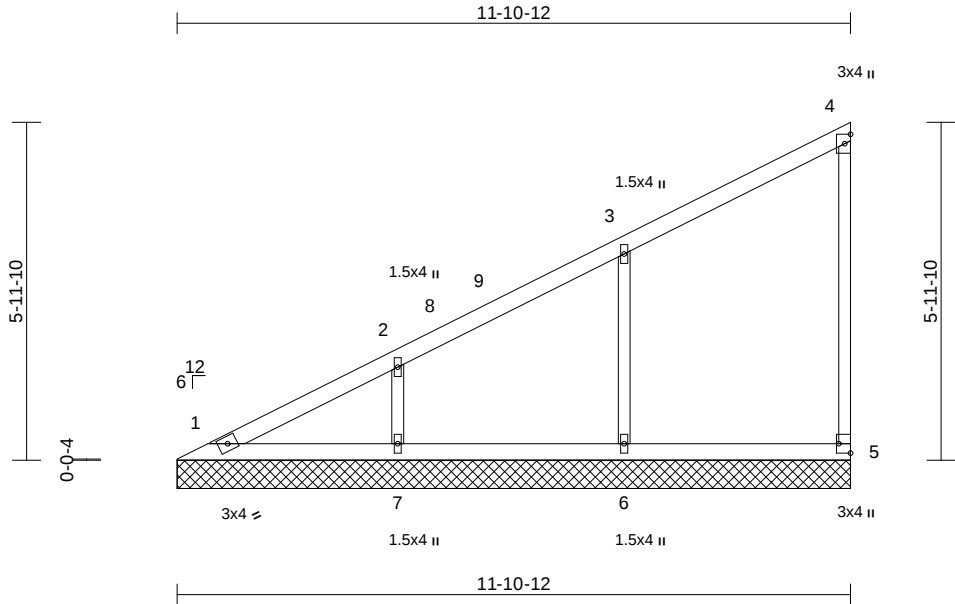
- 4) Gable studs spaced at 4-0-0 oc.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable 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 2301/2302	
P250396-01	V3	Valley	2	1	Job Reference (optional)	I74608712

ID:nK3AuNluqQcXENwMWoLk_VzeLGm-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:40.7											
Plate Offsets (X, Y): [5:Edge,0-2-8]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	n/a	-	n/a	999	GRIP
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999	MT20
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a	244/190
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



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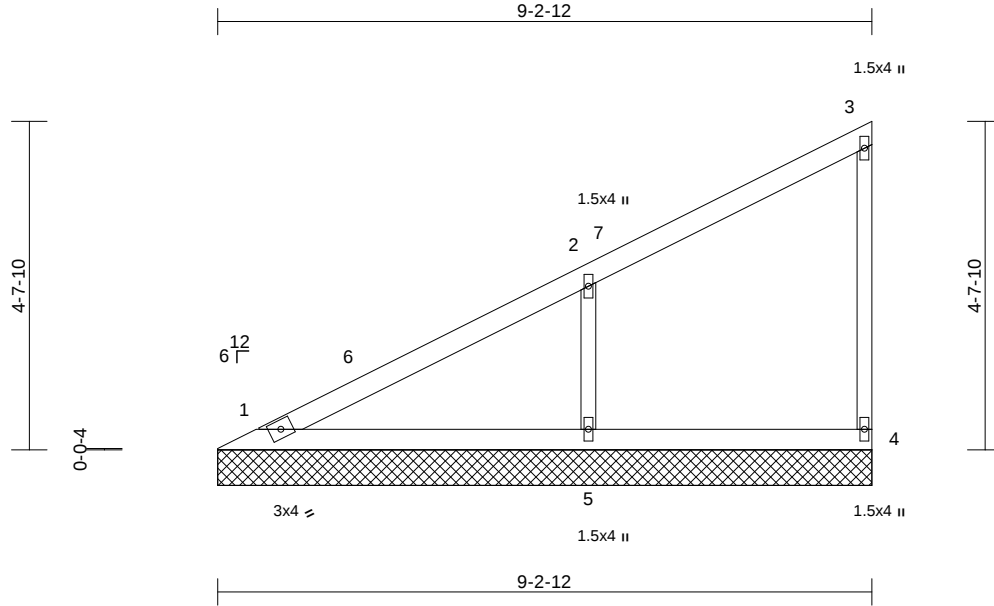
16023 Swinley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608713
P250396-01	V4	Valley	2	1	Job Reference (optional)	

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

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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
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999	244/190
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



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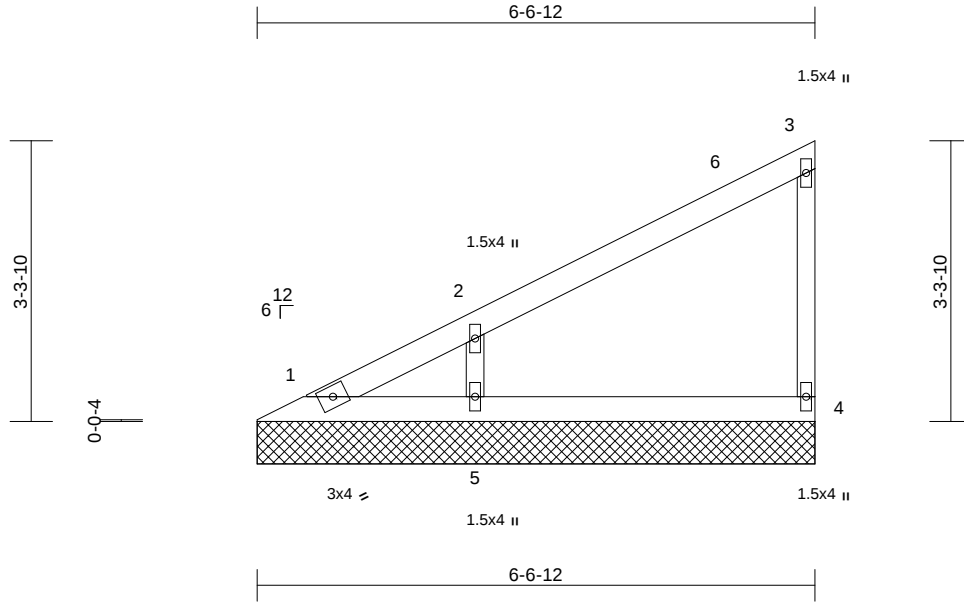
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608714
P250396-01	V5	Valley	2	1	Job Reference (optional)	

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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
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999	244/190
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



July 2, 2025

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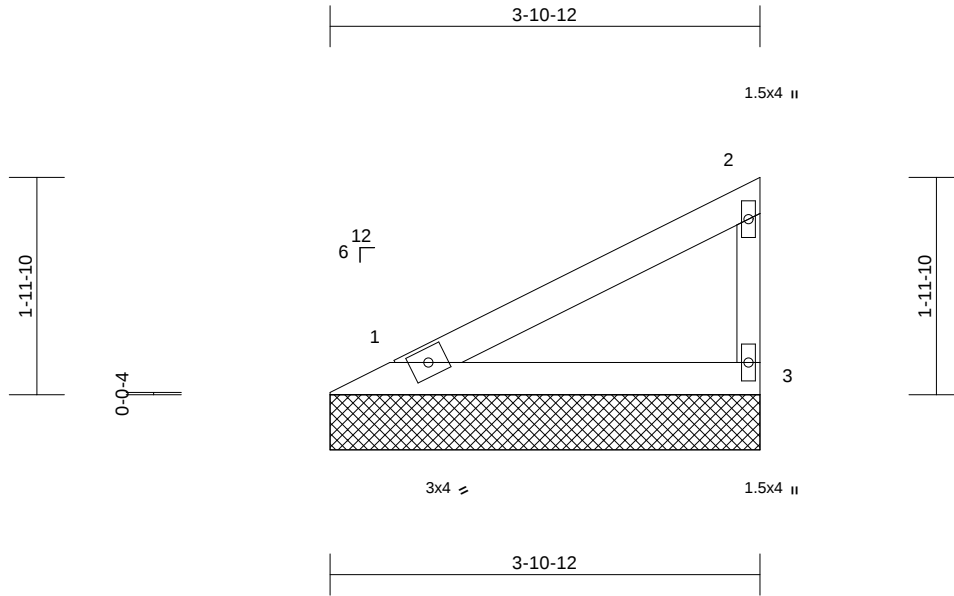
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608715
P250396-01	V6	Valley	2	1	Job Reference (optional)	

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

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Page: 1



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
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999	244/190
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

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

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-11-4 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.



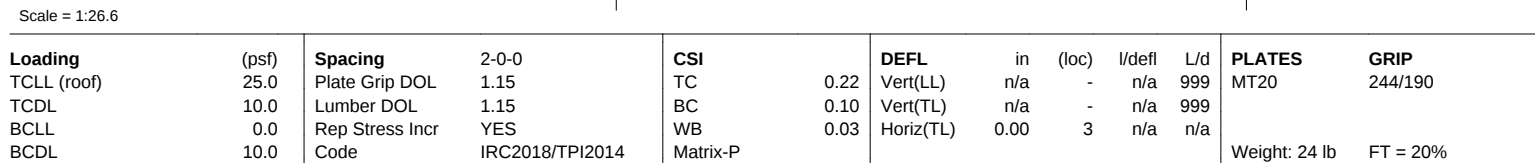
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TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x3 SPF No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS	
(size)	1=7-3-5, 3=7-3-5, 4=7-3-5
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)

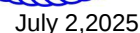
FORCES	(lb) - Maximum Compression Tension
TOP CHORD	1-2=-101/63, 2-3=-96/63
BOT CHORD	1-4=-12/48, 3-4=-12/48
WEBS	2-4=-171/95

- 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/ITP 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

LOAD CASE(S) Standard

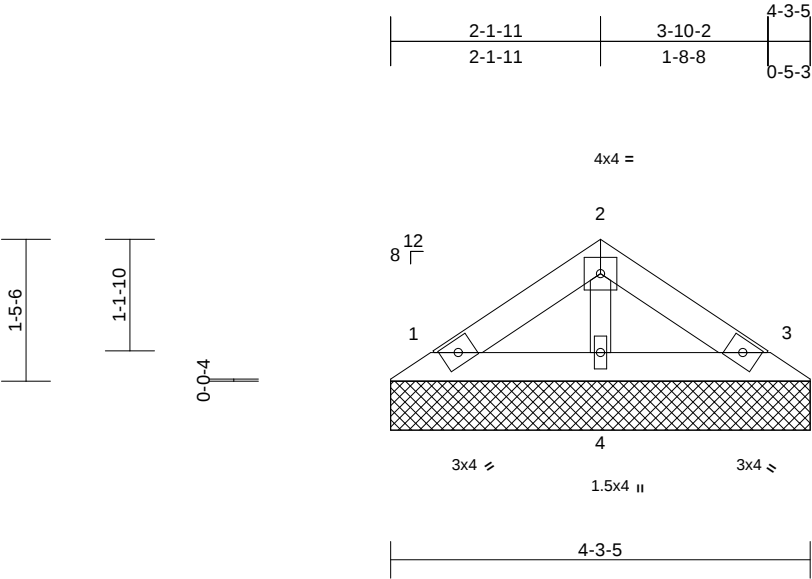


 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	
P250396-01	V8	Valley	1	1	Job Reference (optional)	I74608717



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		7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
TOP CHORD	2x4 SP No.2	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.
BOT CHORD	2x4 SP No.2	9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
OTHERS	2x3 SPF No.2	LOAD CASE(S) Standard
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.



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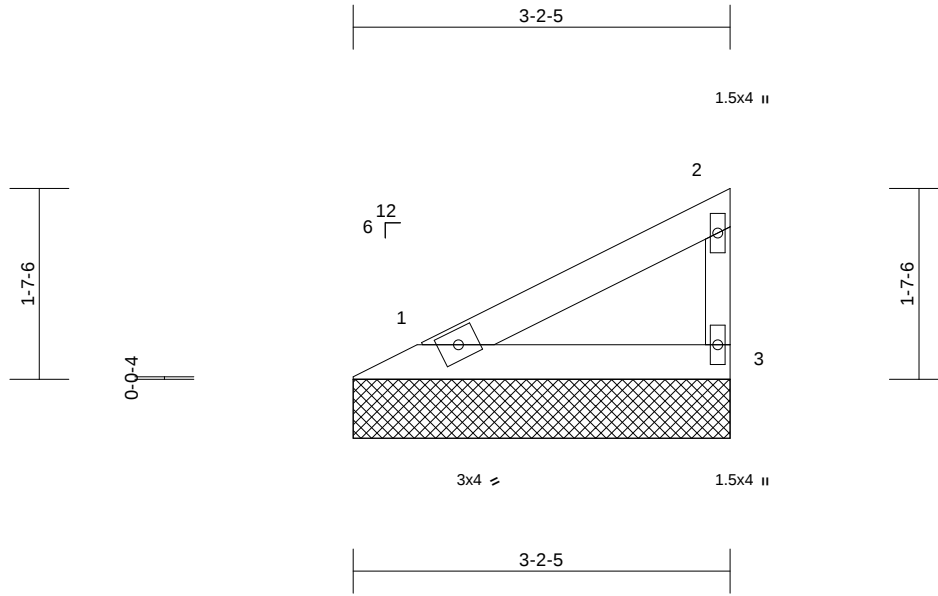
16023 Swingley Ridge Rd
Missouri City, MO 63053
816-424-1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2301/2302	174608718
P250396-01	V9	Valley	2	1	Job Reference (optional)	

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Page: 1



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
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999	244/190
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

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

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-2-13 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

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



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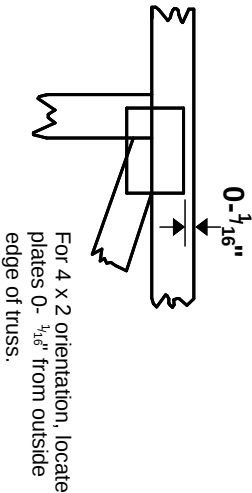
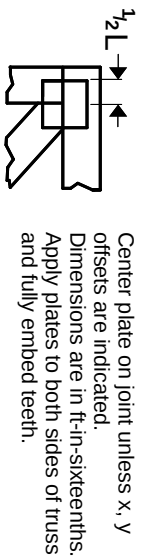
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Symbols

PLATE LOCATION AND ORIENTATION



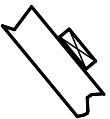
For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

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

PLATE SIZE

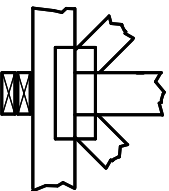
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

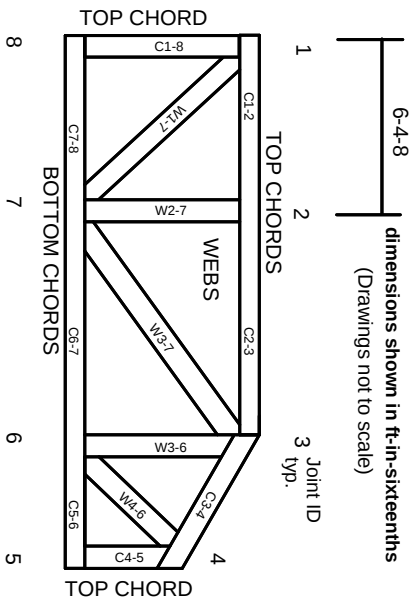
BEARING



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

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:
ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.
Lumber design values are in accordance with ANSI/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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