MiTek®

RE: P250562-01 - Roof - BY Lot 350

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

Site Information:

Project Customer: Clayton Properties Project Name: Winfield - Modern Prairie
Lot/Block: 350 Subdivision: Bailey Farms
Model:
Address: 1134 SE Ranchland St
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
Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16
Wind Speed: 115 mph
Floor Load: N/A psf
Roof Load: 45.0 psf
Mean Roof Height (feet): 35
Exposure Category: C

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I75564009	A1	8/12/25	35	I75564043	J4	8/12/25
2	I75564010	A2	8/12/25	36	I75564044	J5	8/12/25
3	I75564011	A3	8/12/25	37	I75564045	J6	8/12/25
4	I75564012	A4	8/12/25	38	I75564046	J7	8/12/25
5	I75564013	A5	8/12/25	39	I75564047	J8	8/12/25
6	I75564014	A6	8/12/25	40	I75564048	J9	8/12/25
7	I75564015	A7	8/12/25	41	I75564049	J10	8/12/25
8	I75564016	A8	8/12/25	42	I75564050	J11	8/12/25
9	I75564017	A9	8/12/25	43	I75564051	LAY01	8/12/25
10	I75564018	A10	8/12/25	44	I75564052	LAY02	8/12/25
11	I75564019	A11	8/12/25	45	I75564053	LAY03	8/12/25
12	I75564020	A12	8/12/25	46	I75564054	LAY04	8/12/25
13	I75564021	A13	8/12/25	47	I75564055	M1	8/12/25
14	I75564022	A14	8/12/25				
15	I75564023	B1	8/12/25				
16	I75564024	B2	8/12/25				
17	I75564025	C1	8/12/25				
18	I75564026	C2	8/12/25				
19	I75564027	C3	8/12/25				
20	I75564028	CG1	8/12/25				
21	I75564029	CG2	8/12/25				
22	I75564030	CG3	8/12/25				
23	I75564031	CG4	8/12/25				
24	I75564032	CG5	8/12/25				
25	I75564033	CG6	8/12/25				
26	I75564034	CG7	8/12/25				
27	I75564035	D1	8/12/25				
28	I75564036	D2	8/12/25				
29	I75564037	D3	8/12/25				
30	I75564038	D4	8/12/25				
31	I75564039	D5	8/12/25				
32	I75564040	J1	8/12/25				
33	I75564041	J2	8/12/25				
34	I75564042	J3	8/12/25				

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

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

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

August 12,2025
Lu, Jie

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A1	Hip Girder	1	2	I75564009 Job Reference (optional)

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

Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:38:56 Page: 1
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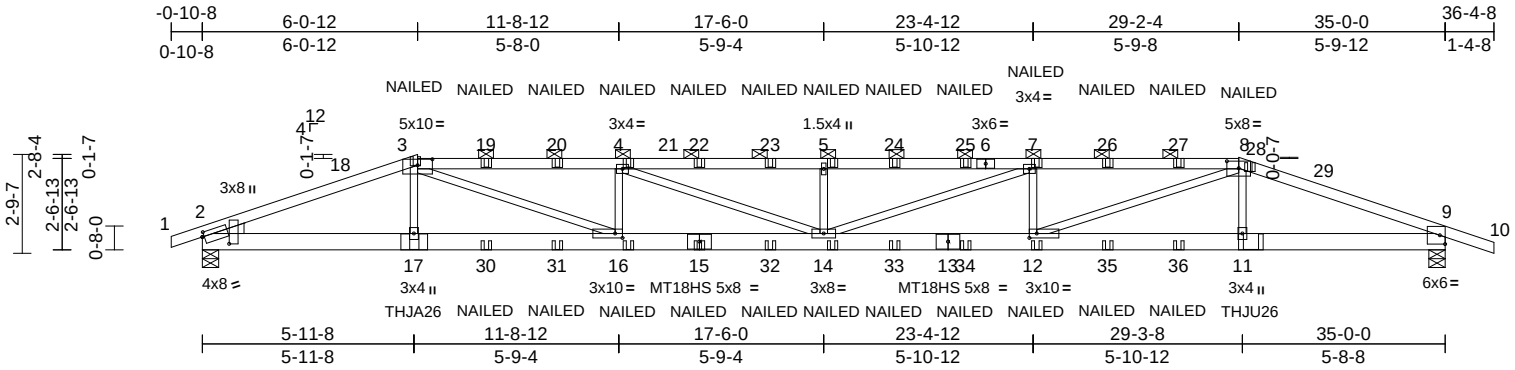

Scale = 1:64.9

Plate Offsets (X, Y): [2:0-0-11,0-1-8], [2:0-2-5,0-9-1], [3:0-5-0,0-2-0], [8:0-4-0,0-2-6], [12:0-2-8,0-1-8], [16:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.53	14	>786	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.95	14	>438	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.11	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 333 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 3-6,6-8:2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-0 oc purlins, except 2-0-0 oc purlins (4-4-12 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 9=0-5-8
Max Horiz 2=-48 (LC 13)
Max Uplift 2=-874 (LC 8), 9=-893 (LC 9)
Max Grav 2=3096 (LC 1), 9=3141 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/1, 2-3=-7770/2225, 3-4=-11271/3264, 4-5=-12531/3573, 5-7=-12531/3573, 7-8=-11193/3206, 8-9=-7638/2155, 9-10=0/12
BOT CHORD 2-17=-1982/7179, 16-17=-1980/7151, 14-16=-3132/11267, 12-14=-3081/11193, 11-12=-1916/7001, 9-11=-1920/7035
WEBS 3-17=-40/637, 8-11=-91/711, 3-16=-1249/4513, 8-12=-1277/4570, 4-16=-1442/605, 4-14=-373/1398, 5-14=-787/418, 7-14=-411/1482, 7-12=-1400/603

NOTES
1) 2-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: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 6-0-12, Exterior(2R) 6-0-12 to 13-1-10, Interior (1) 13-1-10 to 29-2-4, Exterior(2E) 29-2-4 to 36-4-8 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
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
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 2400F 2.0E crushing capacity of 805 psi.
9) Two H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 5-11-10 from the left end to connect truss(es) to front face of bottom chord.
13) Use Simpson Strong-Tie THJU26 (SGL & SGL RC 2-PLY) or equivalent at 29-6-6 from the left end to connect truss(es) to front face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-8=-70, 8-10=-70, 2-9=-20
Concentrated Loads (lb)
Vert: 3=-131 (F), 15=-39 (F), 17=-420 (F), 11=-519 (F), 16=-39 (F), 12=-39 (F), 4=-131 (F), 14=-39 (F), 5=-131 (F), 7=-131 (F), 19=-131 (F), 20=-131 (F), 22=-131 (F), 23=-131 (F), 24=-131 (F), 25=-131 (F), 26=-131 (F), 27=-131 (F), 30=-39 (F), 31=-39 (F), 32=-39 (F), 33=-39 (F), 34=-39 (F), 35=-39 (F), 36=-39 (F)

STATE OF MISSOURI
JIE LU
NUMBER PE-029327
PROFESSIONAL ENGINEER

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A2	Hip	1	1	I75564010 Job Reference (optional)

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

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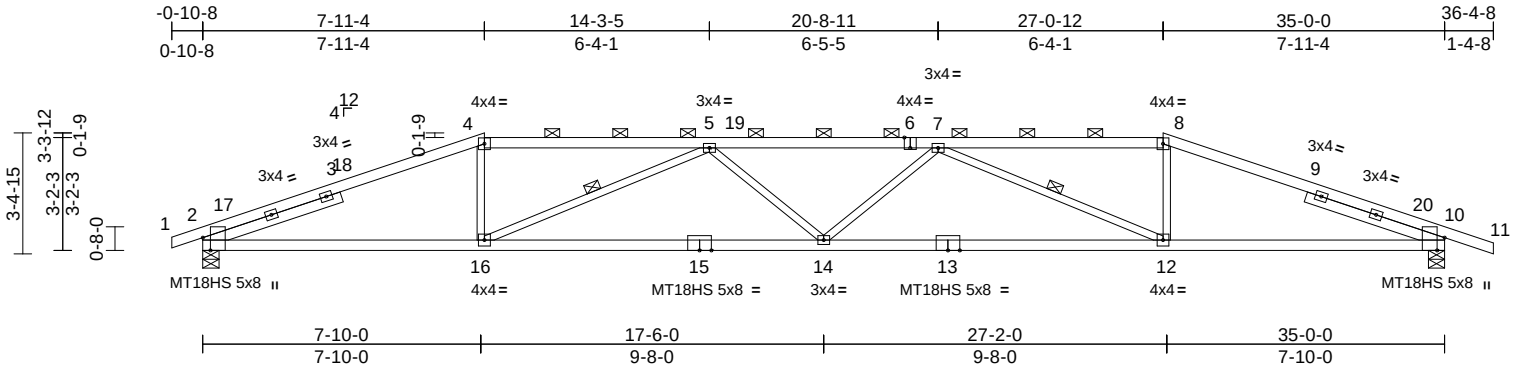

Scale = 1:64.9

Plate Offsets (X, Y): [2:0-4-5,Edge], [6:0-2-0,Edge], [10:0-4-5,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	0.97	Vert(LL)	-0.45	14	>935	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.88	12-14	>477	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.22	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 144 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E *Except* 4-6,6-8:2x4 SP 1650F 1.5E
BOT CHORD	2x4 SP 1650F 1.5E
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 4-1-2, Right 2x4 SP No.2 -- 4-1-2

BRACING

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-10-1 max.): 4-8.
BOT CHORD	Rigid ceiling directly applied or 6-9-15 oc bracing.
WEBS	1 Row at midpt 5-16, 7-12

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=-60 (LC 13)
Max Uplift 2=-370 (LC 8), 10=-394 (LC 9)
Max Grav 2=1635 (LC 1), 10=1672 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5/0, 2-4=-3628/884, 4-5=-3302/870, 5-7=-4757/1143, 7-8=-3293/854, 8-10=-3620/869, 10-11=0/6
BOT CHORD	2-16=-721/3327, 14-16=-1087/4648, 12-14=-1079/4646, 10-12=-705/3318
WEBS	4-16=-63/831, 8-12=-64/832, 5-14=0/298, 5-16=-1616/422, 7-14=0/298, 7-12=-1620/425

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 7-11-4, Exterior(2R) 7-11-4 to 15-0-2, Interior (1) 15-0-2 to 27-0-12, Exterior(2R) 27-0-12 to 34-1-10, Interior (1) 34-1-10 to 36-4-8 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) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP 1650F 1.5E crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A3	Hip	1	1	I75564011 Job Reference (optional)

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

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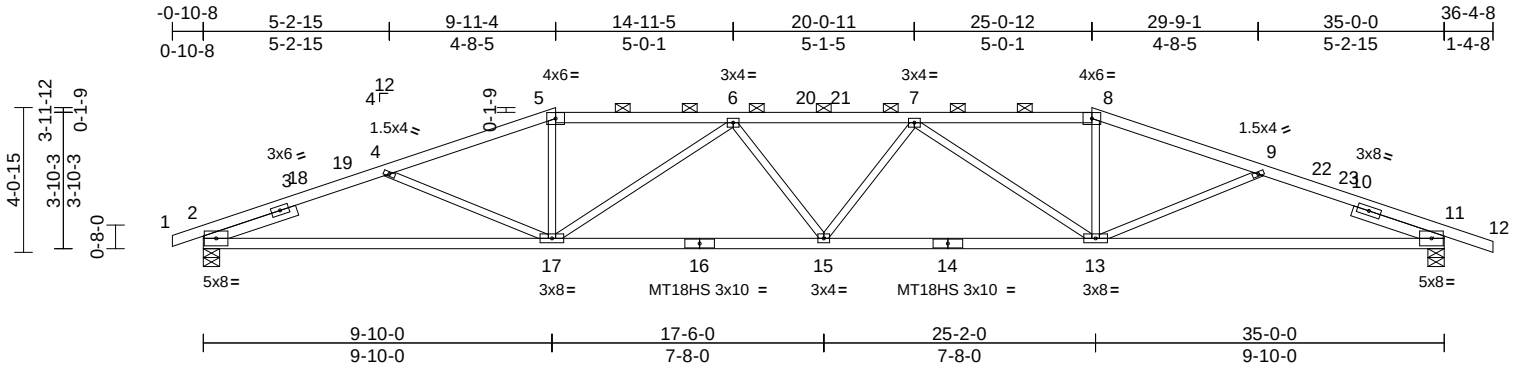

Scale = 1:65

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

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	0.77	Vert(LL)	-0.36	15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.65	13-15	>645	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.19	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 148 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 1650F 1.5E *Except* 5-8:2x4 SP No.2
BOT CHORD	2x4 SP 1650F 1.5E *Except* 16-14:2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 2-9-2, Right 2x4 SP No.2 -- 2-8-8

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-4-4 oc purlins, except 2-0-0 oc purlins (2-7-10 max.): 5-8.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 2=0-5-8, 11=0-5-8
Max Horiz 2=-73 (LC 13)
Max Uplift 2=-362 (LC 8), 11=-386 (LC 9)
Max Grav 2=1635 (LC 1), 11=1672 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5/0, 2-4=-3543/973, 4-5=-3346/855, 5-6=-3139/835, 6-7=-3852/1019, 7-8=-3134/836, 8-9=-3341/847, 9-11=-3528/972, 11-12=0/6
BOT CHORD	2-17=-838/3220, 15-17=-886/3805, 13-15=-874/3803, 11-13=-838/3203
WEBS	5-17=-101/680, 8-13=-95/676, 6-15=-2/164, 6-17=-939/276, 7-15=0/166, 7-13=-942/280, 4-17=-97/228, 9-13=-85/229

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 9-11-4, Exterior(2R) 9-11-4 to 17-0-2, Interior (1) 17-0-2 to 25-0-12, Exterior(2R) 25-0-12 to 32-1-10, Interior (1) 32-1-10 to 36-4-8 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) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP 1650F 1.5E crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A4	Hip	1	1	I75564012 Job Reference (optional)

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

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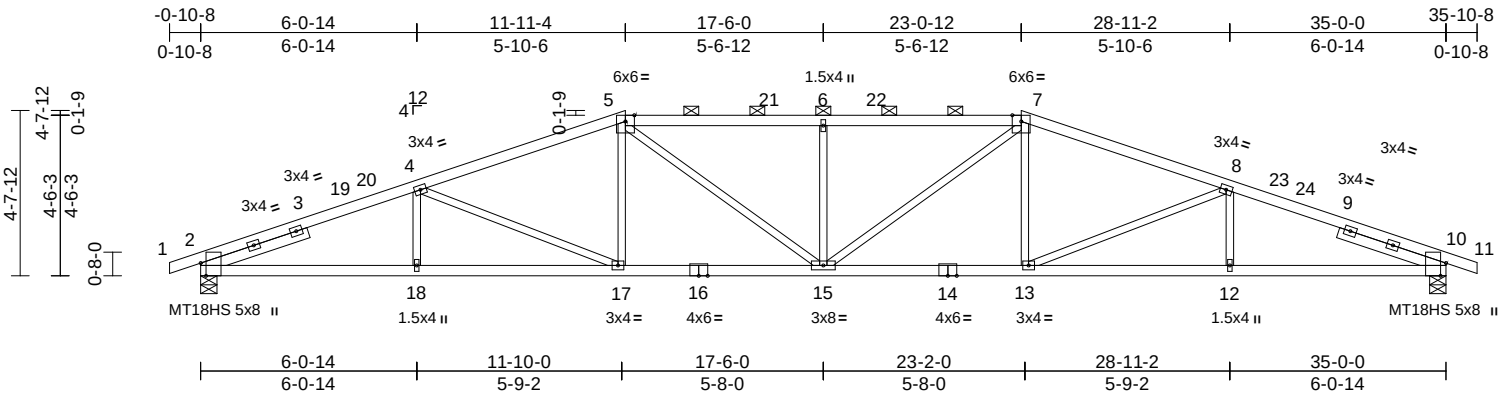


Scale = 1:64.8

Plate Offsets (X, Y): [2:0-4-5,Edge], [10:0-4-5,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	0.77	Vert(LL)	-0.31	15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.56	15-17	>749	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.18	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 152 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 1650F 1.5E *Except* 5-7:2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 3-2-0, Right 2x4 SP No.2 -- 3-2-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-4-0 oc purlins, except 2-0-0 oc purlins (2-7-14 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=-79 (LC 13)
Max Uplift 2=-353 (LC 8), 10=-353 (LC 9)
Max Grav 2=1636 (LC 1), 10=1636 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5/0, 2-4=-3628/945, 4-5=-3130/860, 5-6=-3310/954, 6-7=-3310/954, 7-8=-3130/860, 8-10=-3628/945, 10-11=-5/0
BOT CHORD	2-18=-824/3304, 17-18=-824/3304, 15-17=-662/2929, 13-15=-658/2929, 12-13=-820/3304, 10-12=-820/3304
WEBS	4-18=0/227, 4-17=-437/206, 5-17=-14/335, 5-15=-165/655, 6-15=-487/241, 7-15=-165/655, 7-13=-14/335, 8-13=-437/207, 8-12=0/227

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 11-11-4, Exterior(2R) 11-11-4 to 19-0-2, Interior (1) 19-0-2 to 23-0-12, Exterior(2R) 23-0-12 to 30-1-10, Interior (1) 30-1-10 to 35-10-8 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) All plates are MT20 plates unless otherwise indicated.
5) All plates are 3x4 MT20 unless otherwise indicated.
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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

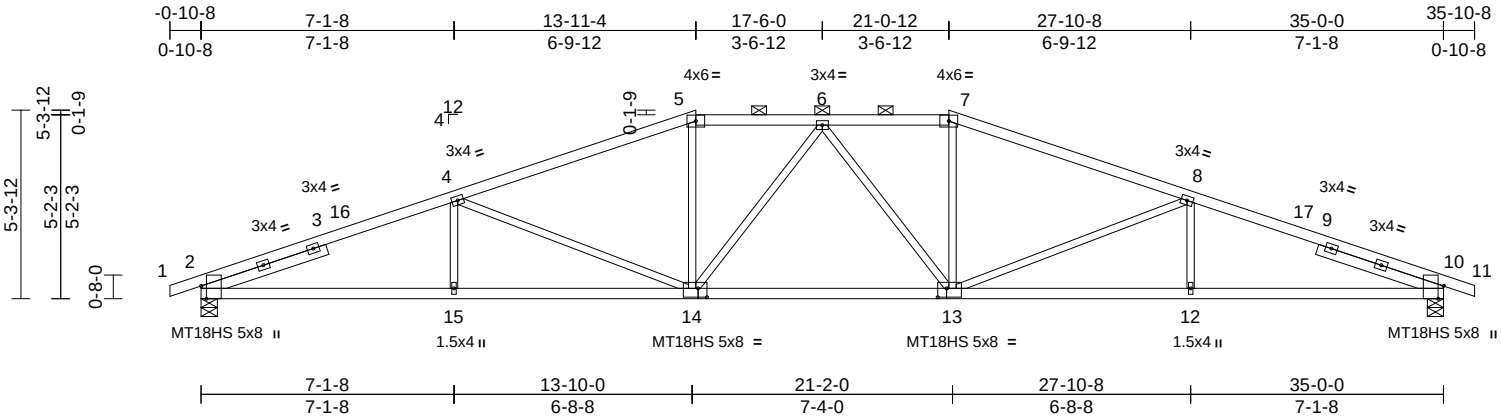
LOAD CASE(S) Standard

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A5	Hip	1	1	I75564013 Job Reference (optional)

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

Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:38:58 Page: 1
ID:BSI5DGbzEZJVq1JMdtd68LzXOLa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:64.9

Plate Offsets (X, Y): [2:0-4-5,Edge], [10:0-4-5,Edge], [13:0-3-0,0-3-0], [14:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.27	12-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.54	13-14	>784	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.18	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 153 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 1650F 1.5E *Except* 5-7:2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 3-8-11, Right 2x4 SP No.2 -- 3-8-11

BRACING

TOP CHORD	Structural wood sheathing directly applied or 1-7-8 oc purlins, except 2-0-0 oc purlins (3-3-11 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing, Except: 7-1-1 oc bracing: 13-14.

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=-92 (LC 17)
Max Uplift 2=-341 (LC 8), 10=-341 (LC 9)
Max Grav 2=1636 (LC 1), 10=1636 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5/0, 2-4=-3614/952, 4-5=-2928/846, 5-6=-2707/832, 6-7=-2707/867, 7-8=-2928/869, 8-10=-3614/986, 10-11=-5/0
BOT CHORD	2-15=-823/3309, 12-15=-852/3309, 10-12=-852/3309
WEBS	4-15=0/273, 4-14=-687/257, 5-14=-95/526, 7-13=-89/526, 8-13=-687/257, 8-12=0/273, 6-14=-364/129, 6-13=-364/129

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 13-11-4, Exterior(2E) 13-11-4 to 21-0-12, Exterior(2R) 21-0-12 to 27-10-8, Interior (1) 27-10-8 to 35-10-8 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) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
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.

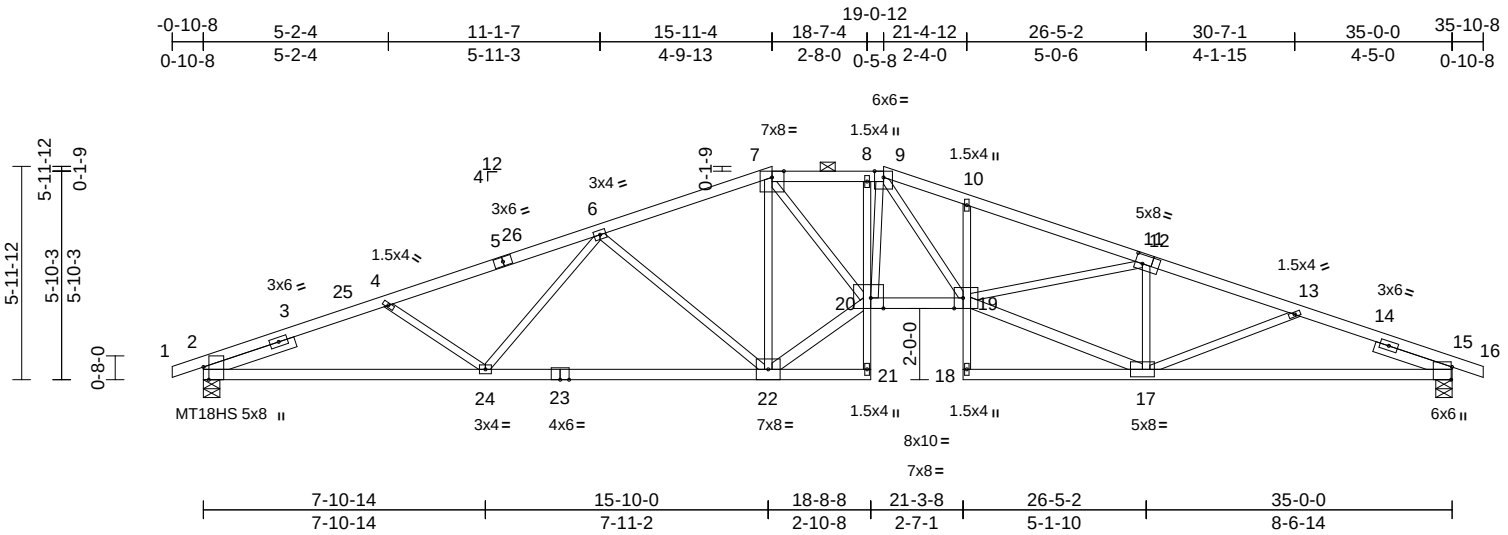
LOAD CASE(S) Standard

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A6	Hip	1	1	I75564014 Job Reference (optional)

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

Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:38:58 Page: 1
ID:b1_DsIdrXUh4hV1xJ?Apl_zXOLX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:64.6

Plate Offsets (X, Y): [2:0-4-5,Edge], [12:0-2-8,0-3-0], [15:0-4-5,Edge], [19:0-3-0,Edge], [20:0-4-4,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	0.83	Vert(LL)	-0.42	19-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.75	19-20	>558	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.31	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 173 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 1-5,12-16:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 21-8,10-18:2x3 SPF No.2, 20-19:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 22-20,19-17:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-8-4, Right 2x4 SP No.2 -- 2-3-3

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-9-2 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.

REACTIONS (size) 2=0-5-8, 15=0-5-8
Max Horiz 2=104 (LC 16)
Max Uplift 2=-328 (LC 8), 15=-328 (LC 9)
Max Grav 2=1636 (LC 1), 15=1636 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-3593/920, 4-6=-3366/840, 6-7=-2651/755, 7-8=-3831/1045, 8-9=-3838/1044, 9-10=-4692/1281, 10-11=-4802/1244, 11-13=-3426/880, 13-15=-3486/901, 15-16=-5/0
BOT CHORD 2-24=-784/3269, 22-24=-687/2970, 21-22=-9/27, 20-21=-3/0, 8-20=-94/65, 19-20=-795/3836, 18-19=0/64, 10-19=-49/131, 17-18=-13/52, 15-17=-781/3154
WEBS 7-22=-1199/282, 20-22=-594/3032, 7-20=-512/2265, 11-19=-268/1296, 11-17=-1155/372, 17-19=-777/3425, 6-22=-694/266, 6-24=-10/374, 4-24=-188/197, 13-17=0/194, 9-19=-358/1204, 9-20=-96/206

NOTES

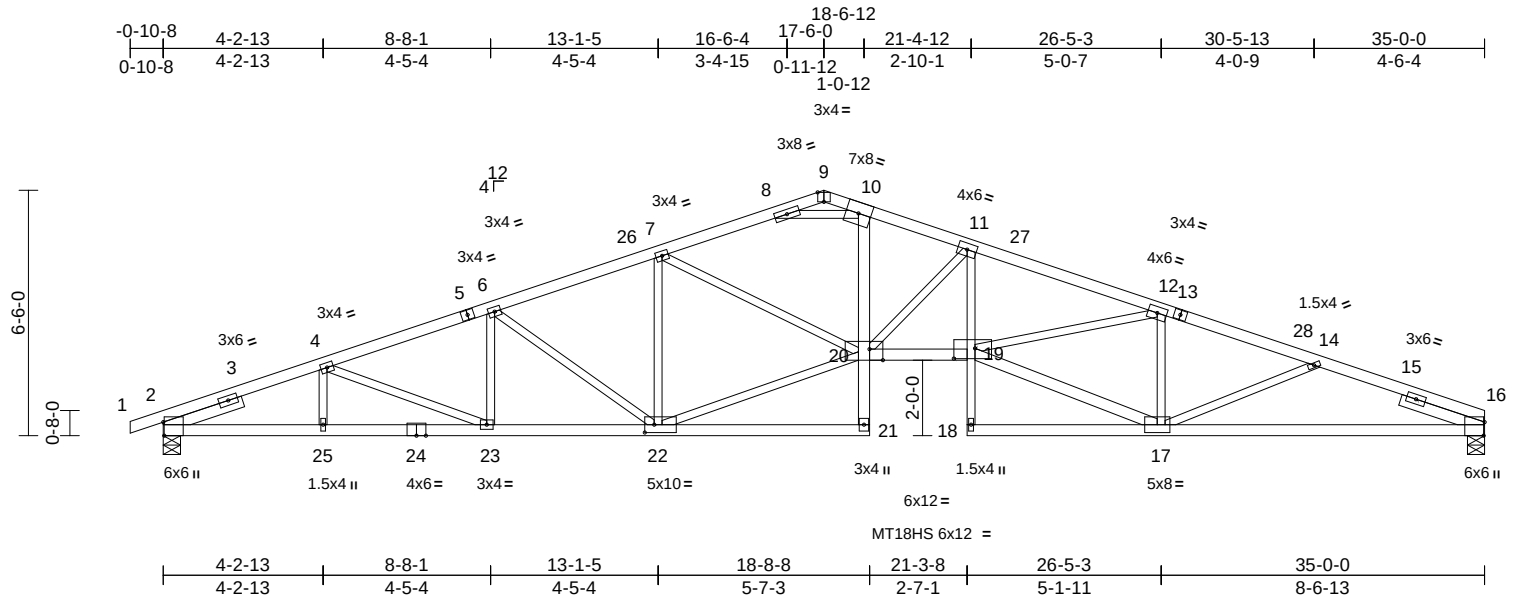
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 15-11-4, Exterior(2E) 15-11-4 to 19-0-12, Exterior(2R) 19-0-12 to 26-5-2, Interior (1) 26-5-2 to 35-10-8 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) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 15. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A7	Roof Special	1	1	I75564015 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:38:58 Page: 1
ID:u6NRltVauPRVUyH0jv?TMtzXOLh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:61

Plate Offsets (X, Y): [2:0-4-5,Edge], [9:0-2-0,Edge], [16:0-4-5,Edge], [19:0-6-12,0-3-4], [20:0-4-4,Edge], [22:0-3-0,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.44	19-20	>959	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.80	19-20	>528	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.32	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 174 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 1650F 1.5E *Except* 9-13,5-9:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 2-24,24-21:2x4 SP No.2, 11-18:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 19-17:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-2-6, Right 2x4 SP No.2 -- 2-3-14

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-4-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-1-14 oc bracing.

REACTIONS (size) 2=0-5-8, 16=0-5-7
Max Horiz 2=-118 (LC 17)
Max Uplift 2=-316 (LC 8), 16=-275 (LC 9)
Max Grav 2=1637 (LC 1), 16=1574 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-3514/800, 4-6=-3416/797, 6-7=-2910/719, 7-8=-3472/831, 8-9=-869/214, 9-10=-516/153, 10-11=-3727/882, 11-12=-4912/1098, 12-14=-3428/797, 14-16=-3507/887
BOT CHORD 2-25=-680/3179, 23-25=-680/3179, 22-23=-632/3229, 21-22=-17/128, 20-21=0/105, 10-20=-360/1821, 19-20=-865/4616, 18-19=0/64, 11-19=-181/1117, 17-18=-11/52, 16-17=-752/3178
WEBS 11-20=-1672/402, 12-19=-252/1403, 12-17=-1178/319, 17-19=-660/3438, 14-17=-23/164, 4-25=0/149, 4-23=-56/131, 6-23=0/166, 6-22=-678/190, 7-22=-440/145, 20-22=-511/2722, 7-20=-93/760, 8-10=-2642/647

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 4-2-13, Interior (1) 4-2-13 to 17-6-0, Exterior(2R) 17-6-0 to 22-6-0, Interior (1) 22-6-0 to 35-0-0 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) All plates are MT20 plates unless otherwise indicated.
4) All plates are 3x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 16 SP 1650F 1.5E crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 16. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A8	Roof Special	1	1	I75564016 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:38:58 Page: 1
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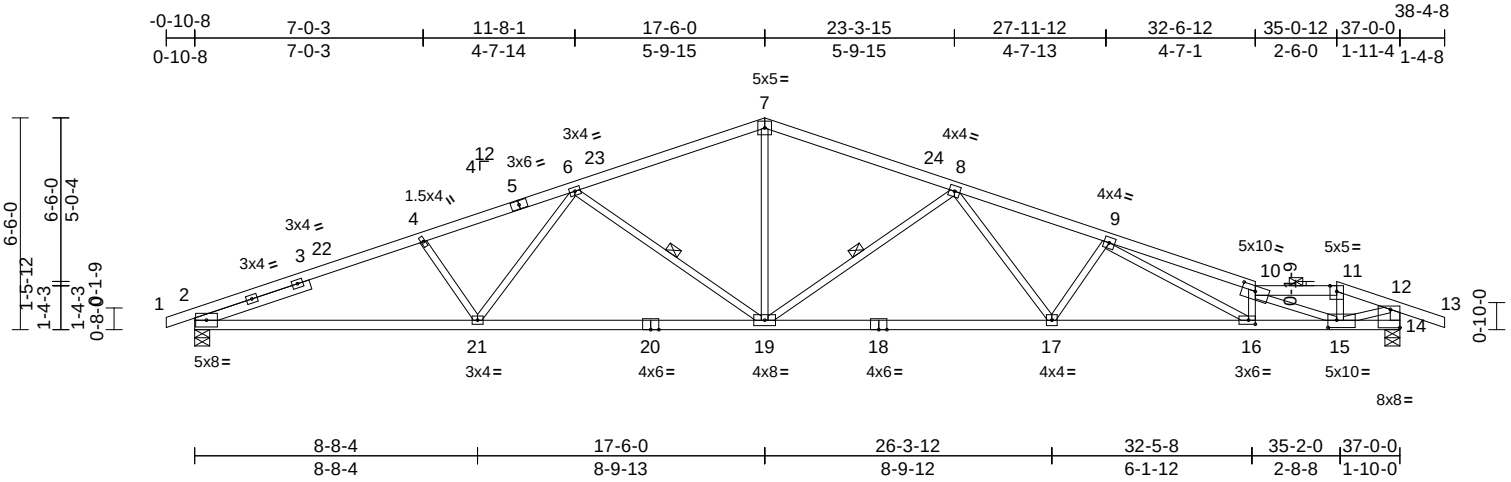

Scale = 1:70.7

Plate Offsets (X, Y): [2:0-0-5,0-3-5], [10:0-5-0,0-2-0], [14:Edge,0-6-12], [15:0-3-4,0-2-12], [16:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.39	16-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.76	17-19	>581	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.19	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 161 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 7-10,1-5:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 14-12:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-8-9

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-10 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-4 max.): 10-11.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 6-19, 8-19

REACTIONS (size) 2=0-5-8, 14=0-5-8
Max Horiz 2=107 (LC 16)
Max Uplift 2=-324 (LC 8), 14=-369 (LC 9)
Max Grav 2=1718 (LC 1), 14=1766 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-3779/864, 4-6=-3567/838, 6-7=-2694/686, 7-8=-2692/677, 8-9=-4086/929, 9-10=-5676/1252, 10-11=-2359/527, 11-12=-2552/554, 12-13=0/34, 12-14=-1719/504
BOT CHORD 2-21=-707/3457, 19-21=-623/3129, 17-19=-647/3347, 16-17=-831/4156, 15-16=-1113/5403, 14-15=-12/160
WEBS 7-19=-232/1274, 10-16=-722/231, 10-15=-3313/708, 11-15=-101/594, 12-15=-531/2385, 4-21=-228/184, 6-21=-54/450, 6-19=-828/279, 8-19=-1061/332, 8-17=-114/840, 9-17=-599/220, 9-16=-305/1382

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 17-6-0, Exterior(2R) 17-6-0 to 22-6-0, Interior (1) 22-6-0 to 35-0-12, Exterior(2E) 35-0-12 to 38-4-8 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 1650F 1.5E crushing capacity of 565 psi.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A9	Roof Special	1	1	I75564017 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:38:59 Page: 1
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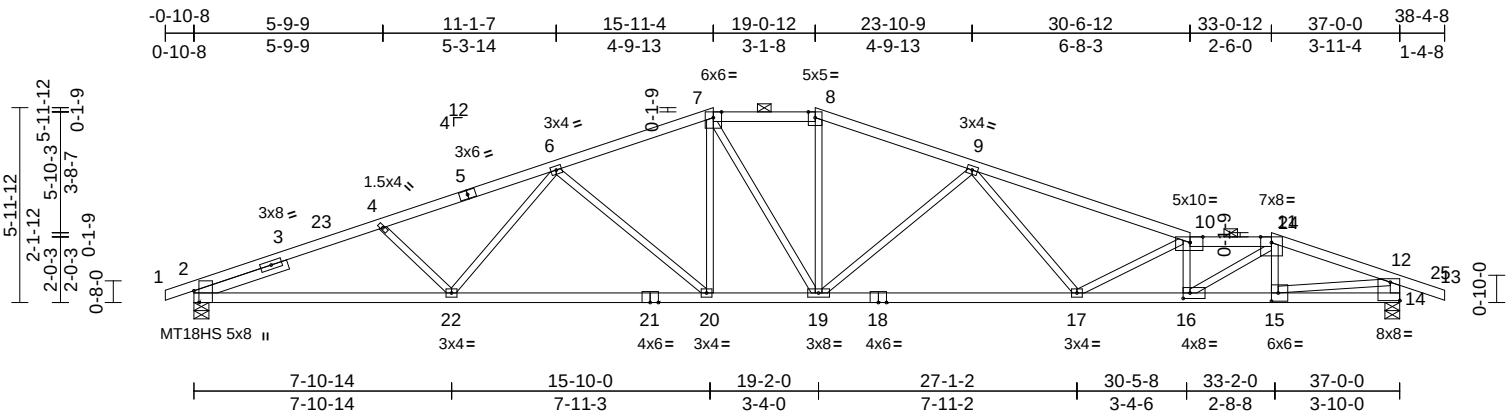

Scale = 1:70.7

Plate Offsets (X, Y): [2:0-4-5,Edge], [10:0-4-12,Edge], [14:Edge,0-6-12], [15:0-2-8,0-3-0], [16:0-2-8,0-2-0]

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	0.97	Vert(LL)	-0.35	17-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.72	17-19	>614	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.18	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 166 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 8-10,1-5:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 18-14:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 14-12:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-0-3

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-5-2 max.): 7-8, 10-11.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 2=0-5-8, 14=0-5-8
Max Horiz 2=96 (LC 16)
Max Uplift 2=-335 (LC 8), 14=-380 (LC 9)
Max Grav 2=1718 (LC 1), 14=1766 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-3812/936, 4-6=-3597/886, 6-7=-2887/791, 7-8=-2728/793, 8-9=-2942/808, 9-10=-4223/1018, 10-11=-4875/1206, 11-12=-3280/782, 12-13=0/34, 12-14=-1694/543
BOT CHORD 2-22=-768/3470, 20-22=-689/3183, 19-20=-514/2681, 17-19=-750/3451, 16-17=-1087/4803, 15-16=-676/3093, 14-15=-92/399
WEBS 7-20=-98/551, 7-19=-157/303, 8-19=-129/647, 9-19=-940/316, 9-17=-91/775, 10-17=-980/336, 10-16=-1228/316, 11-16=-525/2159, 11-15=-375/151, 12-15=-620/2706, 4-22=-177/182, 6-22=-30/374, 6-20=-679/242

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 15-11-4, Exterior(2E) 15-11-4 to 19-0-12, Exterior(2R) 19-0-12 to 23-10-9, Interior (1) 23-10-9 to 33-0-12, Exterior(2R) 33-0-12 to 38-0-12, Interior (1) 38-0-12 to 38-4-8 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) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 14 SP 1650F 1.5E crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. This connection is for uplift only and does not consider lateral forces.
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

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

August 12,2025

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

MiTek®
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Chesterfield, MO 63017
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/26/2025 3:56:22

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A10	Roof Special	1	1	I75564018 Job Reference (optional)

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

Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:38:59 Page: 1
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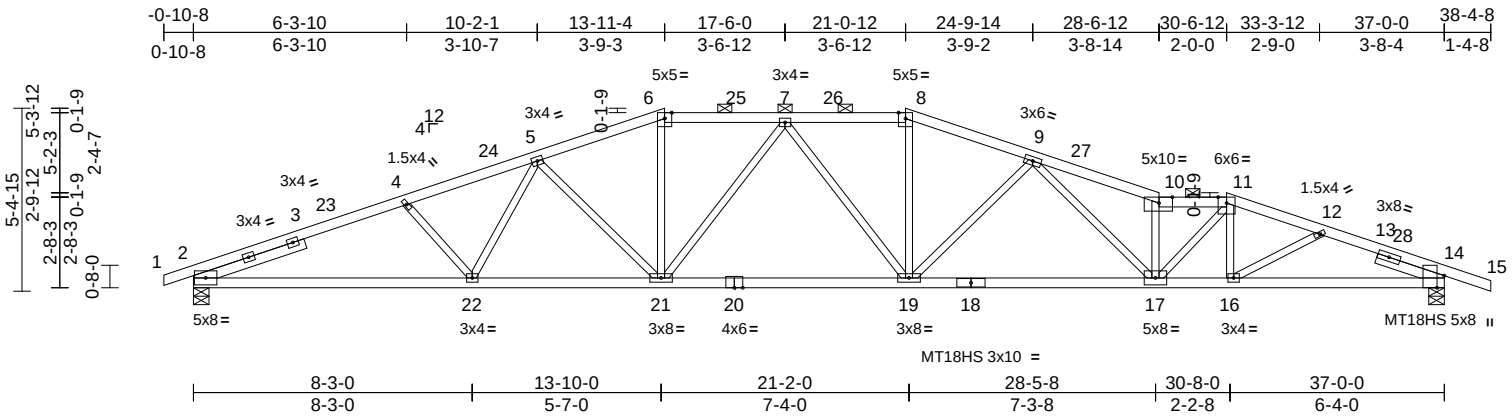

Scale = 1:68.2

Plate Offsets (X, Y): [2:0-0-5,0-3-5], [10:0-4-12,Edge], [14:0-4-5,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	0.69	Vert(LL)	-0.35	17-19	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.68	17-19	>650	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.20	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 168 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 1-6,11-15:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 18-14:2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-5-9, Right 2x4 SP No.2 -- 2-1-1

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-3-4 oc purlins, except 2-0-0 oc purlins (2-7-4 max.): 6-8, 10-11.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 2=0-5-8, 14=0-5-8
Max Horiz 2=-98 (LC 13)
Max Uplift 2=-350 (LC 8), 14=-387 (LC 9)
Max Grav 2=1725 (LC 1), 14=1762 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-3796/957, 4-5=-3600/919, 5-6=-3131/854, 6-7=-2929/827, 7-8=-3071/874, 8-9=-3280/899, 9-10=-4647/1231, 10-11=-4435/1152, 11-12=-3785/975, 12-14=-3597/963, 14-15=0/6
BOT CHORD 2-22=-792/3465, 21-22=-720/3284, 19-21=-674/3134, 17-19=-839/3612, 16-17=-835/3619, 14-16=-829/3239
WEBS 6-21=-153/750, 8-19=-169/795, 10-17=-1649/462, 11-17=-301/1253, 11-16=-126/63, 9-19=-756/290, 9-17=-247/1083, 12-16=-20/426, 7-21=-505/159, 7-19=-315/137, 4-22=-147/171, 5-22=-47/281, 5-21=-517/183

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 13-11-4, Exterior(2R) 13-11-4 to 18-11-4, Interior (1) 18-11-4 to 21-0-12, Exterior(2R) 21-0-12 to 26-0-12, Interior (1) 26-0-12 to 30-6-12, Exterior(2R) 30-6-12 to 35-6-12, Interior (1) 35-6-12 to 38-4-8 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) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearings are assumed to be: Joint 2 SP 1650F 1.5E crushing capacity of 565 psi, Joint 14 SP No.2 crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A11	Roof Special	1	1	I75564019 Job Reference (optional)

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

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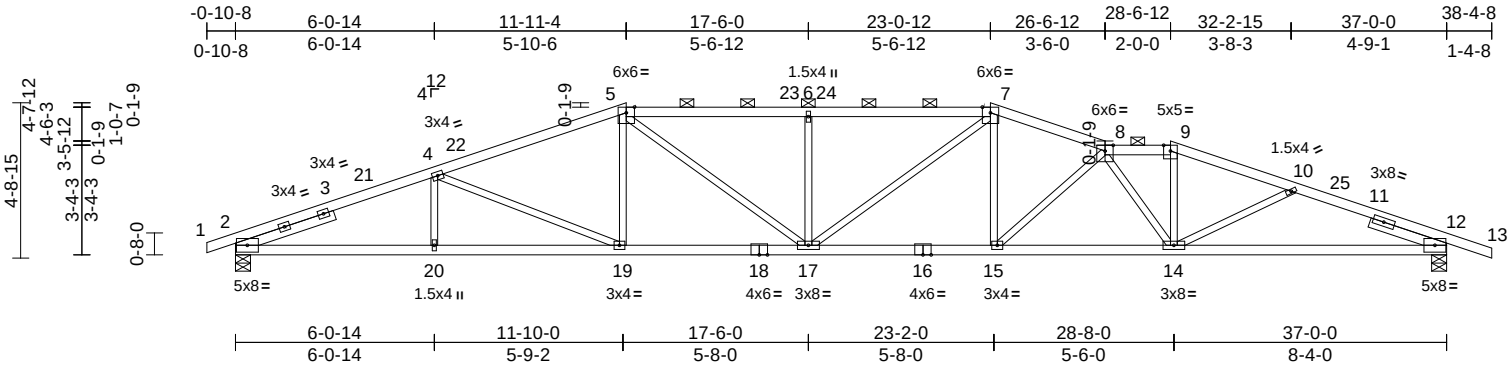

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Plate Offsets (X, Y): [2:0-0-5,0-3-5], [12:0-0-5,0-3-5]

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	0.87	Vert(LL)	-0.37	15-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.68	15-17	>651	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.20	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 163 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 1-5,9-13:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 18-16:2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-2-0, Right 2x4 SP No.2 -- 2-5-7

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-2-10 max.): 5-7, 8-9.
BOT CHORD Rigid ceiling directly applied or 6-10-3 oc bracing.

REACTIONS (size) 2=0-5-8, 12=0-5-8
Max Horiz 2=-86 (LC 13)
Max Uplift 2=-362 (LC 8), 12=-398 (LC 9)
Max Grav 2=1725 (LC 1), 12=1762 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-3862/948, 4-5=-3390/893, 5-6=-3682/1016, 6-7=-3682/1016, 7-8=-3613/982, 8-9=-3478/938, 9-10=-3693/960, 10-12=-3721/1009, 12-13=0/6
BOT CHORD 2-20=-793/3522, 19-20=-793/3522, 17-19=-664/3177, 15-17=-744/3391, 14-15=-938/3974, 12-14=-874/3371
WEBS 4-20=0/225, 4-19=-415/205, 5-19=-14/325, 5-17=-195/802, 6-17=-506/228, 7-17=-152/575, 7-15=-122/630, 8-15=-771/259, 8-14=-886/267, 9-14=-161/806, 10-14=0/273

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 11-11-4, Exterior(2R) 11-11-4 to 16-11-4, Interior (1) 16-11-4 to 23-0-12, Exterior(2E) 23-0-12 to 26-6-12, Interior (1) 26-6-12 to 28-6-12, Exterior(2R) 28-6-12 to 33-6-12, Interior (1) 33-6-12 to 38-4-8 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 1650F 1.5E crushing capacity of 565 psi.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A12	Hip	1	1	I75564020 Job Reference (optional)

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

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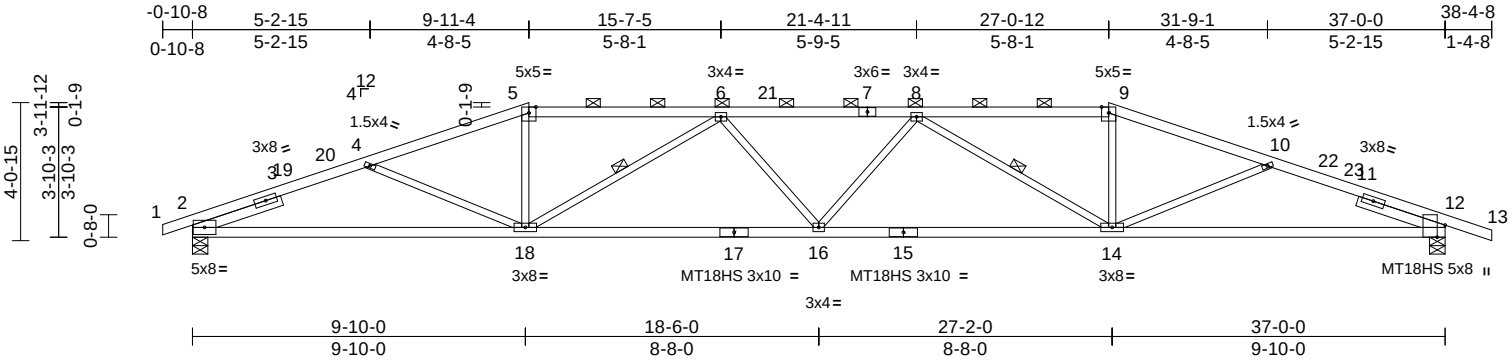

Scale = 1:68.1

Plate Offsets (X, Y): [2:0-0-5,0-3-5], [12:0-4-5,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	0.85	Vert(LL)	-0.43	16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.79	14-16	>561	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.21	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 155 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 1650F 1.5E *Except* 5-7,7-9:2x4 SP No.2
BOT CHORD	2x4 SP 1650F 1.5E
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 2-9-2, Right 2x4 SP No.2 -- 2-8-8

BRACING

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

REACTIONS (size) 2=0-5-8, 12=0-5-8
Max Horiz 2=-73 (LC 17)
Max Uplift 2=-383 (LC 8), 12=-407 (LC 9)
Max Grav 2=1725 (LC 1), 12=1762 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5/0, 2-4=-3775/1015, 4-5=-3610/907, 5-6=-3390/885, 6-8=-4312/1100, 8-9=-3385/881, 9-10=-3604/894, 10-12=-3760/1013, 12-13=0/6
BOT CHORD	2-18=-876/3435, 16-18=-980/4247, 14-16=-969/4245, 12-14=-875/3417
WEBS	5-18=-102/734, 9-14=-99/730, 6-16=0/205, 6-18=-1137/323, 8-16=0/206, 8-14=-1140/325, 4-18=-54/265, 10-14=-42/270

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 9-11-4, Exterior(2R) 9-11-4 to 17-0-2, Interior (1) 17-0-2 to 27-0-12, Exterior(2R) 27-0-12 to 34-1-10, Interior (1) 34-1-10 to 38-4-8 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) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP 1650F 1.5E crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A13	Hip	1	1	I75564021 Job Reference (optional)

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

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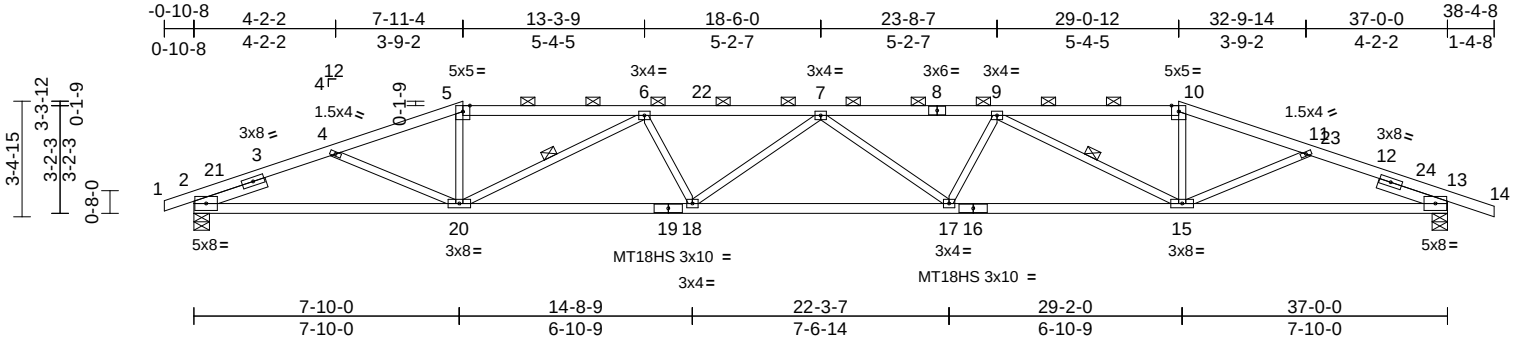

Scale = 1:68

Plate Offsets (X, Y): [2:0-0-5,0-3-5], [13:0-0-5,0-3-5]

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	0.85	Vert(LL)	-0.57	17-18	>776	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-1.08	17-18	>411	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.24	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 154 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 1650F 1.5E *Except* 5-8,8-10:2x4 SP No.2
BOT CHORD	2x4 SP 1650F 1.5E
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 2-2-13, Right 2x4 SP No.2 -- 2-1-12

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 5-10.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 6-20, 9-15

REACTIONS (size) 2=0-5-8, 13=0-5-8
Max Horiz 2=-60 (LC 13)
Max Uplift 2=-390 (LC 8), 13=-414 (LC 9)
Max Grav 2=1725 (LC 1), 13=1762 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5/0, 2-4=-3699/965, 4-5=-3754/936, 5-6=-3538/910, 6-7=-5095/1258, 7-9=-5092/1249, 9-10=-3530/895, 10-11=-3745/919, 11-13=-3664/952, 13-14=0/6
BOT CHORD	2-20=-823/3344, 18-20=-1124/4937, 17-18=-1183/5328, 15-17=-1114/4934, 13-15=-817/3320
WEBS	5-20=-122/793, 10-15=-117/787, 6-18=-7/401, 6-20=-1674/413, 7-18=-361/151, 7-17=-363/152, 9-17=-8/403, 9-15=-1677/418, 4-20=-13/444, 11-15=-17/452

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 3-11-13, Interior (1) 3-11-13 to 7-11-4, Exterior(2R) 7-11-4 to 15-0-2, Interior (1) 15-0-2 to 29-0-12, Exterior(2R) 29-0-12 to 36-1-10, Interior (1) 36-1-10 to 38-4-8 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) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP 1650F 1.5E crushing capacity of 565 psi.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	A14	Hip Girder	1	2	I75564022 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:00 Page: 1
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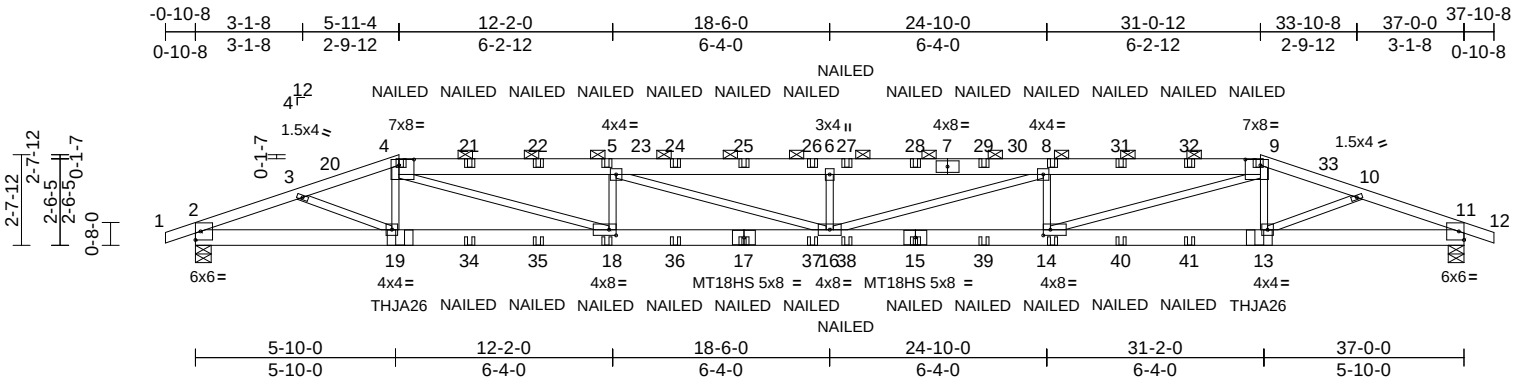

Scale = 1:67.2

Plate Offsets (X, Y): [4:0-5-4,0-2-0], [9:0-5-4,0-2-0], [14:0-2-8,0-2-0], [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	0.93	Vert(LL)	-0.56	16	>778	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-1.01	16	>433	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.12	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 398 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E *Except* 4-7,7-9:2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-2-3 oc purlins, except 2-0-0 oc purlins (5-4-10 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 11=0-5-8
Max Horiz 2=41 (LC 33)
Max Uplift 2=-932 (LC 8), 11=-932 (LC 9)
Max Grav 2=3292 (LC 1), 11=3292 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/1, 2-3=-7206/2105, 3-4=-8217/2371, 4-5=-13148/3796, 5-6=-14968/4259, 6-8=-14968/4259, 8-9=-13148/3788, 9-10=-8217/2367, 10-11=-7206/2108, 11-12=0/1
BOT CHORD 2-19=-1847/6463, 18-19=-2177/7864, 16-18=-3676/13142, 14-16=-3676/13142, 13-14=-2181/7864, 11-13=-1860/6463
WEBS 4-19=0/254, 9-13=0/254, 4-18=-1587/5637, 9-14=-1586/5637, 5-18=-1665/694, 5-16=-540/1976, 6-16=-918/483, 8-16=-541/1976, 8-14=-1665/694, 3-19=-410/1656, 10-13=-411/1656

NOTES
1) 2-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, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-11-4, Exterior(2R) 5-11-4 to 13-0-2, Interior (1) 13-0-2 to 31-0-12, Exterior(2E) 31-0-12 to 37-10-8 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
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
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 2400F 2.0E crushing capacity of 805 psi.
9) Two H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 5-11-10 from the left end to connect truss(es) to back face of bottom chord.
13) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 31-0-6 from the left end to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-9=-70, 9-12=-70, 2-11=-20
Concentrated Loads (lb)
Vert: 4=-131 (B), 17=-39 (B), 19=-420 (B), 13=-420 (B), 18=-39 (B), 9=-131 (B), 14=-39 (B), 5=-131 (B), 8=-131 (B), 15=-39 (B), 21=-131 (B), 22=-131 (B), 24=-131 (B), 25=-131 (B), 26=-131 (B), 27=-131 (B), 28=-131 (B), 29=-131 (B), 31=-131 (B), 32=-131 (B), 34=-39 (B), 35=-39 (B), 36=-39 (B), 37=-39 (B), 38=-39 (B), 39=-39 (B), 40=-39 (B), 41=-39 (B)

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	B1	Half Hip Girder	1	1	I75564023 Job Reference (optional)

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

Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:00 Page: 1
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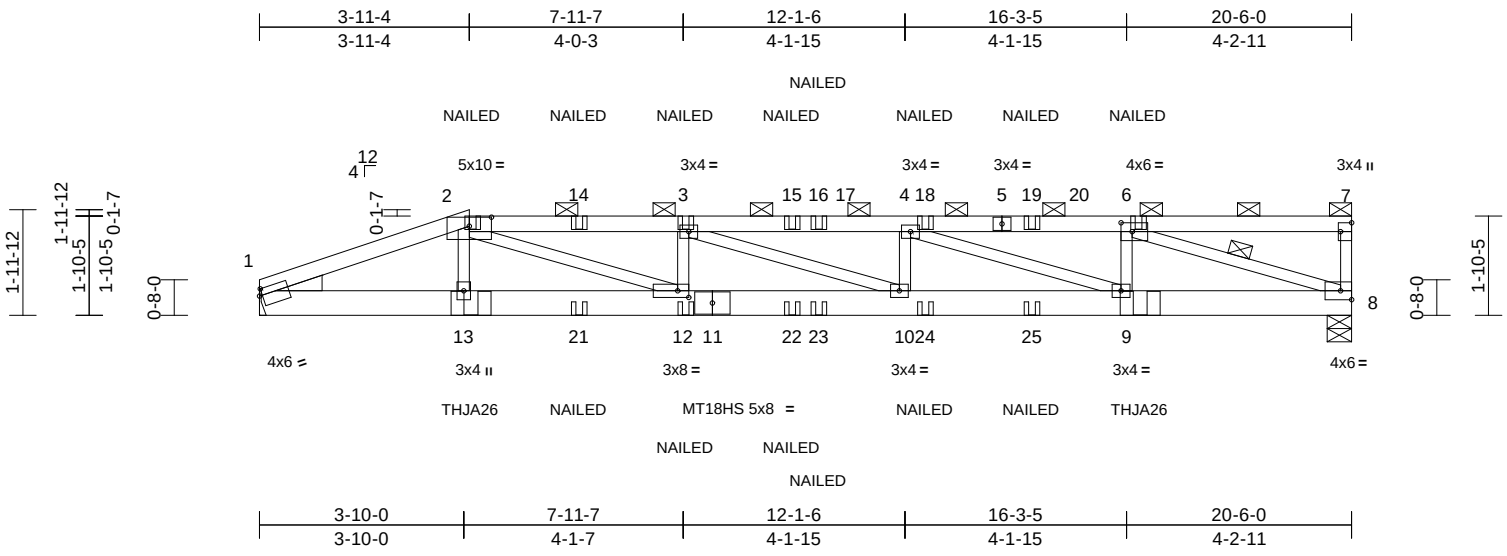

Scale = 1:43.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.26	10-12	>934	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.47	10-12	>520	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 2-5:2x4 SP 1650F 1.5E
BOT CHORD	2x6 SP 2400F 2.0E
WEBS	2x3 SPF No.2
WEDGE	Left: 2x4 SP No.3

BRACING

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

REACTIONS (size) 1= Mechanical, 8=0-5-8
Max Horiz 1=70 (LC 9)
Max Uplift 1=-397 (LC 8), 8=-396 (LC 8)
Max Grav 1=1431 (LC 1), 8=1423 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-3460/1089, 2-3=-4763/1510, 3-4=-4866/1490, 4-6=-3338/1009, 6-7=-87/57, 7-8=-139/90
BOT CHORD	1-13=-1010/3170, 12-13=-1008/3146, 10-12=-1449/4760, 9-10=-1477/4866, 8-9=-1051/3338
WEBS	2-13=-25/350, 2-12=-500/1780, 6-8=-3456/1056, 3-12=-558/275, 3-10=-36/149, 4-10=0/239, 4-9=-1622/511, 6-9=-149/787

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) 0-0-12 to 3-11-4, Exterior(2R) 3-11-4 to 11-0-2, Interior (1) 11-0-2 to 20-4-12 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) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearings are assumed to be: , Joint 8 SP 2400F 2.0E crushing capacity of 805 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 397 lb uplift at joint 1.
9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use Simpson Strong-Tie THJA26 (THJA26 on 1 ply, Right Hand Hip) or equivalent at 3-11-10 from the left end to connect truss(es) to back face of bottom chord.
13) Use Simpson Strong-Tie THJA26 (THJA26 on 1 ply, Left Hand Hip) or equivalent at 16-6-6 from the left end to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
16) 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, 2-7=-70, 1-8=-20
   Concentrated Loads (lb)
   Vert: 2=-59 (B), 13=-221 (B), 12=-19 (B), 6=-59 (B), 3=-59 (B), 9=-221 (B), 14=-59 (B), 15=-59 (B), 16=-59 (B), 18=-59 (B), 19=-59 (B), 21=-19 (B), 22=-19 (B), 23=-19 (B), 24=-19 (B), 25=-19 (B)

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	B2	Half Hip	1	1	I75564024 Job Reference (optional)

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

Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:00 ID:ckNNdHIAe55FEFlpHfrY8uzXOYt-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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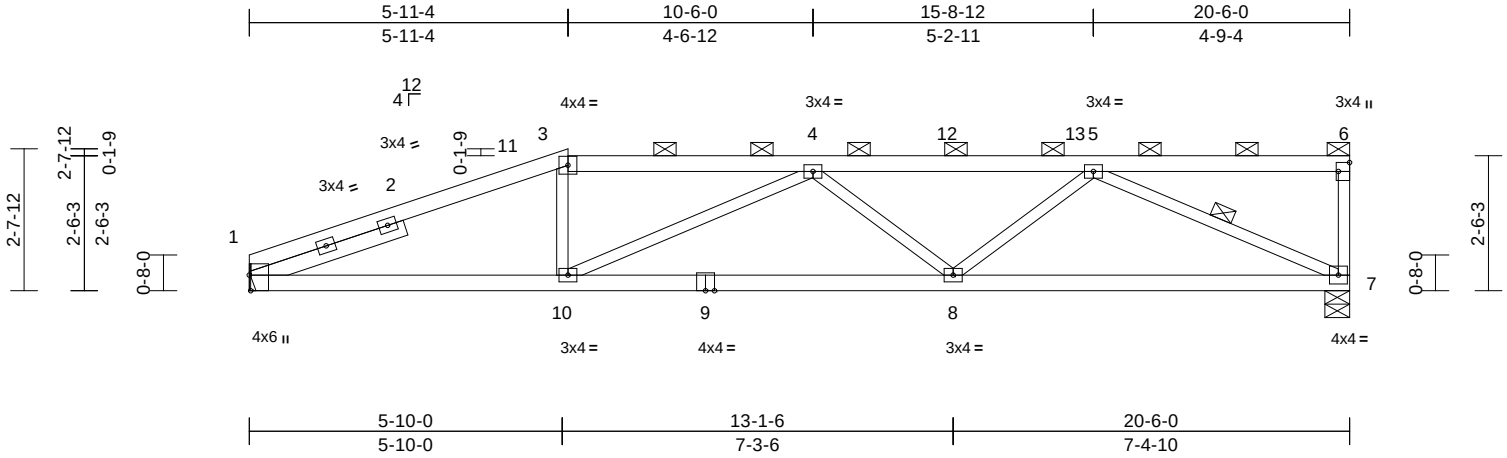

Scale = 1:42.9

Plate Offsets (X, Y): [1:0-3-8,Edge], [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	0.67	Vert(LL)	-0.11	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.23	8-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.06	7	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
SLIDER	Left 2x4 SP No.2 -- 3-0-8

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-3-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-5 max.): 3-6.
BOT CHORD	Rigid ceiling directly applied or 7-2-15 oc bracing.
WEBS	1 Row at midpt 5-7

REACTIONS (size) 1= Mechanical, 7=0-5-8
Max Horiz 1=105 (LC 11)
Max Uplift 1=-198 (LC 8), 7=-203 (LC 8)
Max Grav 1=918 (LC 1), 7=918 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-3=-1919/604, 3-4=-1720/607, 4-5=-1928/569, 5-6=-72/50, 6-7=-142/96
BOT CHORD	1-10=-537/1732, 8-10=-651/2146, 7-8=-498/1526
WEBS	3-10=0/382, 4-8=-287/238, 4-10=-599/163, 5-8=-85/529, 5-7=-1652/511

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) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 5-11-4, Exterior(2R) 5-11-4 to 13-0-2, Interior (1) 13-0-2 to 20-4-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: , Joint 7 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 198 lb uplift at joint 1.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	C1	Hip Girder	1	2	I75564025 Job Reference (optional)

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

Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:01 Page: 1
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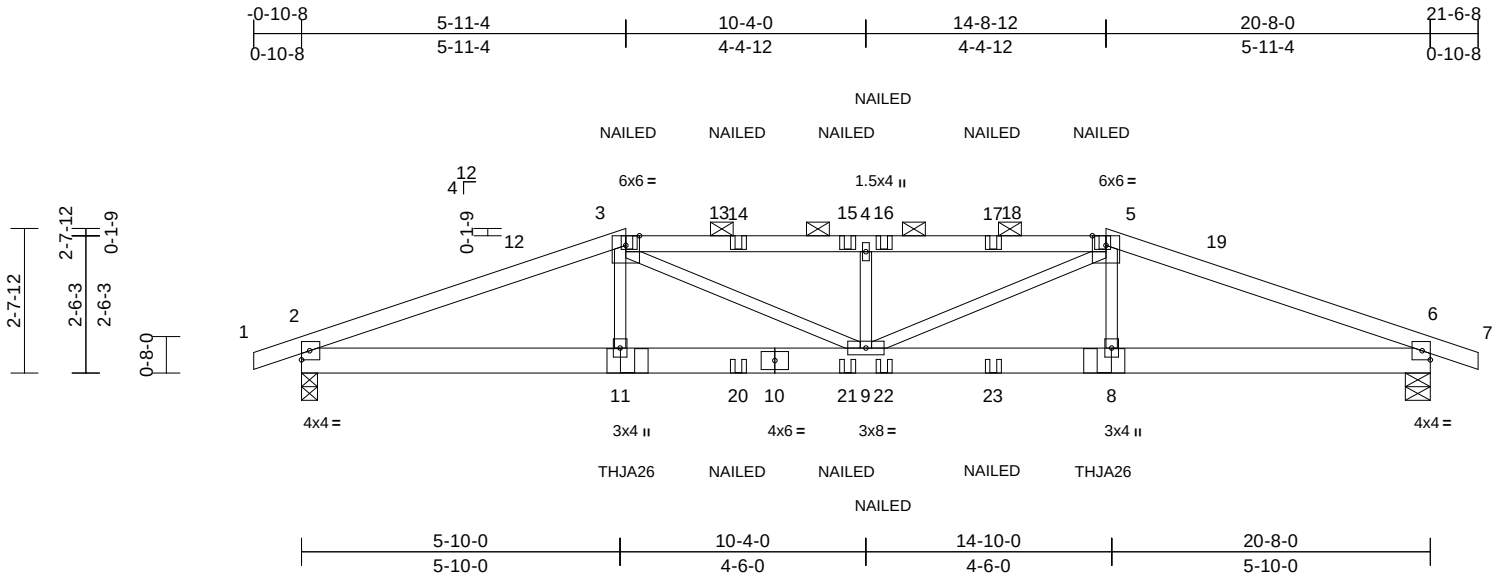

Scale = 1:42.2

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	0.71	Vert(LL)	-0.12	9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.22	9	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 168 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-0 oc purlins, except 2-0-0 oc purlins (5-0-12 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6=0-5-8
Max Horiz 2=-42 (LC 34)
Max Uplift 2=-536 (LC 8), 6=-543 (LC 9)
Max Grav 2=1872 (LC 1), 6=1885 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/1, 2-3=-4430/1380, 3-4=-5034/1629, 4-5=-5034/1629, 5-6=-4403/1384, 6-7=0/1
BOT CHORD 2-11=-1210/4070, 9-11=-1207/4042, 8-9=-1206/4010, 6-8=-1209/4038
WEBS 3-11=-62/590, 5-8=-64/587, 5-9=-361/1246, 3-9=-351/1215, 4-9=-870/448

NOTES
1) 2-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: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-11-4, Exterior(2R) 5-11-4 to 13-0-2, Interior (1) 13-0-2 to 14-8-12, Exterior(2E) 14-8-12 to 21-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
8) Two H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 5-11-10 from the left end to connect truss(es) to front face of bottom chord.
12) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 14-8-6 from the left end to connect truss(es) to front face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 3=-131 (F), 5=-131 (F), 11=-420 (F), 8=-420 (F), 14=-131 (F), 15=-131 (F), 16=-131 (F), 17=-131 (F), 20=-39 (F), 21=-39 (F), 22=-39 (F), 23=-39 (F)

August 12,2025

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/26/2025 3:56:23

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	C2	Hip	1	1	I75564026 Job Reference (optional)

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

Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:01 ID:TtJnGuPTc4N0CAdRjOskiPzXMe3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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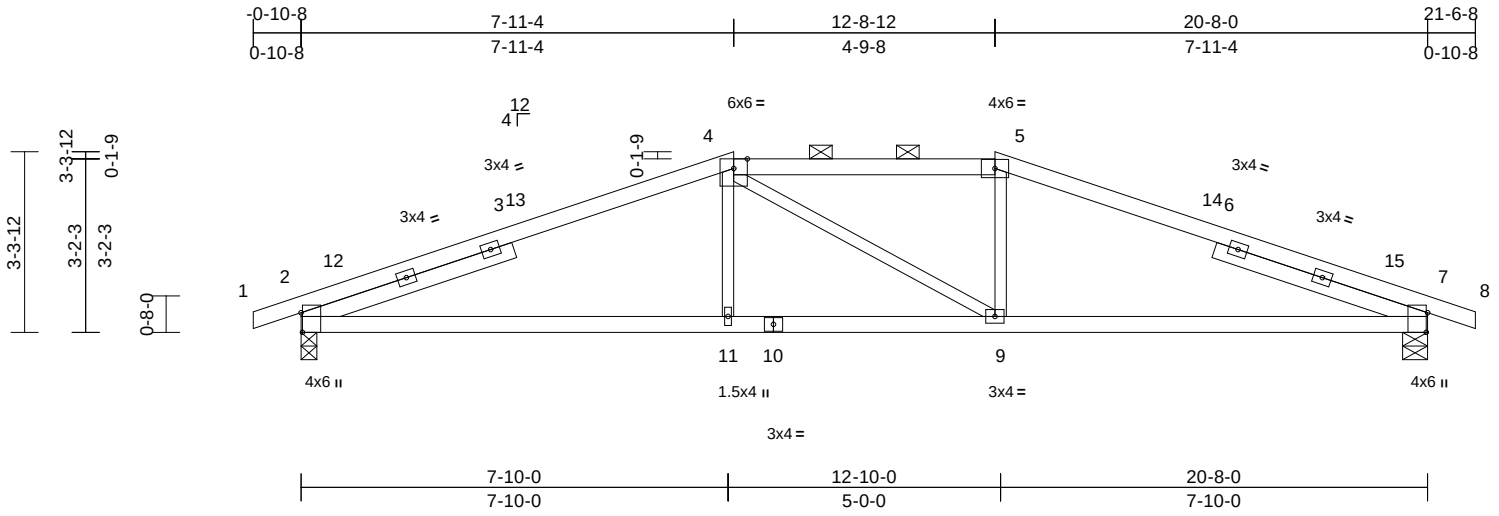

Scale = 1:42.3

Plate Offsets (X, Y): [2:0-4-5,Edge], [7:0-4-5,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	0.88	Vert(LL)	-0.12	2-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.26	2-11	>971	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 87 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 4-1-2, Right 2x4 SP No.2 -- 4-1-2

BRACING

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-3-8 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied or 8-5-5 oc bracing.

REACTIONS (size) 2=0-3-8, 7=0-5-8
Max Horiz 2=-54 (LC 17)
Max Uplift 2=-220 (LC 8), 7=-220 (LC 9)
Max Grav 2=991 (LC 1), 7=991 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5/0, 2-4=-1790/580, 4-5=-1597/629, 5-7=-1790/604, 7-8=-5/0
BOT CHORD	2-11=-453/1601, 9-11=-455/1597, 7-9=-468/1602
WEBS	4-11=0/261, 4-9=-204/204, 5-9=0/261

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 7-11-4, Exterior(2E) 7-11-4 to 12-8-12, Exterior(2R) 12-8-12 to 19-9-10, Interior (1) 19-9-10 to 21-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	C3	Hip Girder	1	1	I75564027 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:01 Page: 1
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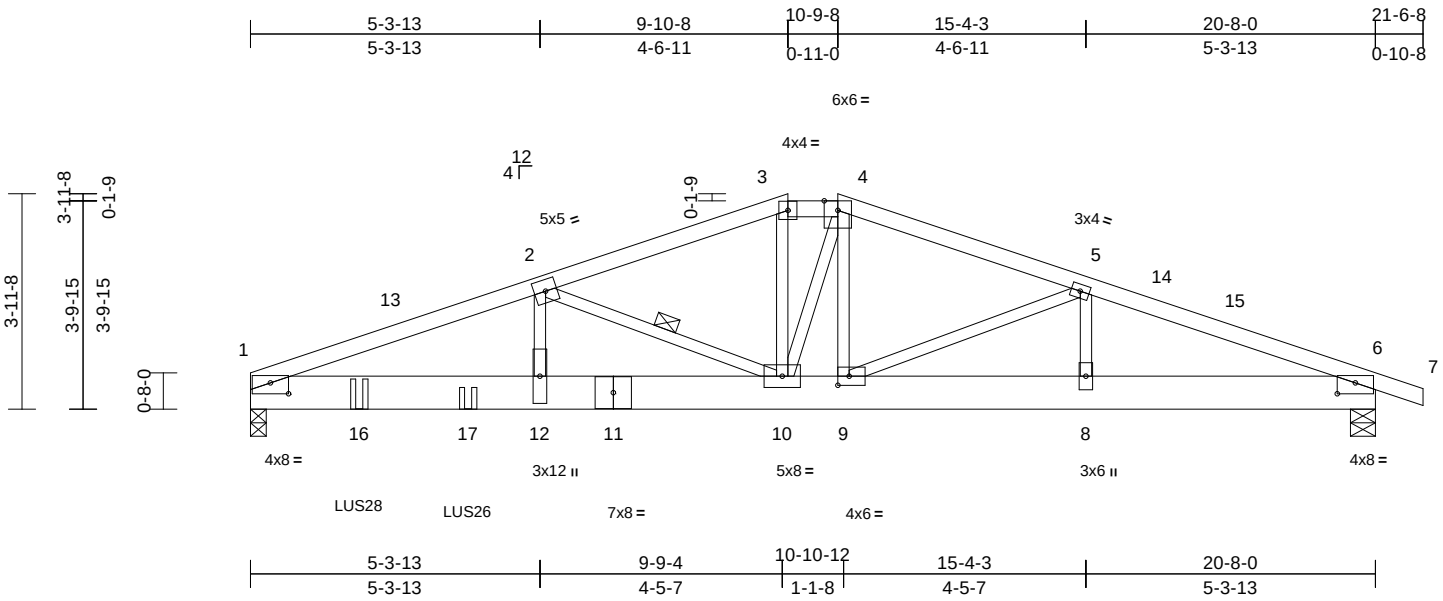

Scale = 1:42.3

Plate Offsets (X, Y): [1:0-4-0,0-2-6], [6:0-4-0,0-2-6], [9:0-2-8,0-2-0]

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	0.71	Vert(LL)	-0.13	1-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.24	1-12	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.58	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 105 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-3:2x4 SP 1650F 1.5E
BOT CHORD 2x8 SP 2400F 2.0E *Except* 11-6:2x8 SPF No.2
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-8-0 oc purlins, except 2-0-0 oc purlins (3-9-5 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-0-2 oc bracing: 10-12.
WEBS 1 Row at midpt 2-10

REACTIONS (size) 1=0-3-8, 6=0-5-8
Max Horiz 1=-68 (LC 17)
Max Uplift 1=-705 (LC 8), 6=-292 (LC 9)
Max Grav 1=2920 (LC 1), 6=1292 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4581/1285, 2-3=-2464/757, 3-4=-2280/732, 4-5=-2368/730, 5-6=-2709/802, 6-7=0/6
BOT CHORD 1-12=-1134/4237, 10-12=-1134/4237, 9-10=-541/2196, 8-9=-692/2464, 6-8=-692/2464
WEBS 3-10=-177/554, 4-10=-119/419, 4-9=-58/272, 2-10=-2181/647, 2-12=-285/1406, 5-9=-337/230, 5-8=0/149

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-3-13, Interior (1) 5-3-13 to 9-10-8, Exterior(2E) 9-10-8 to 10-9-8, Exterior(2R) 10-9-8 to 17-10-6, Interior (1) 17-10-6 to 21-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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 1 SP 2400F 2.0E crushing capacity of 805 psi, Joint 6 SPF No.2 crushing capacity of 425 psi.
6) Two H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
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) Use Simpson Strong-Tie LUS28 (6-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent at 2-0-0 from the left end to connect truss(es) to back face of bottom chord.
11) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 4-0-0 from the left end to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) 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: 1-3=-70, 3-4=-70, 4-7=-70, 1-6=-20
Concentrated Loads (lb)
Vert: 16=-1411 (B), 17=-898 (B)

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	CG1	Common Girder	1	1	I75564028 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:01 Page: 1
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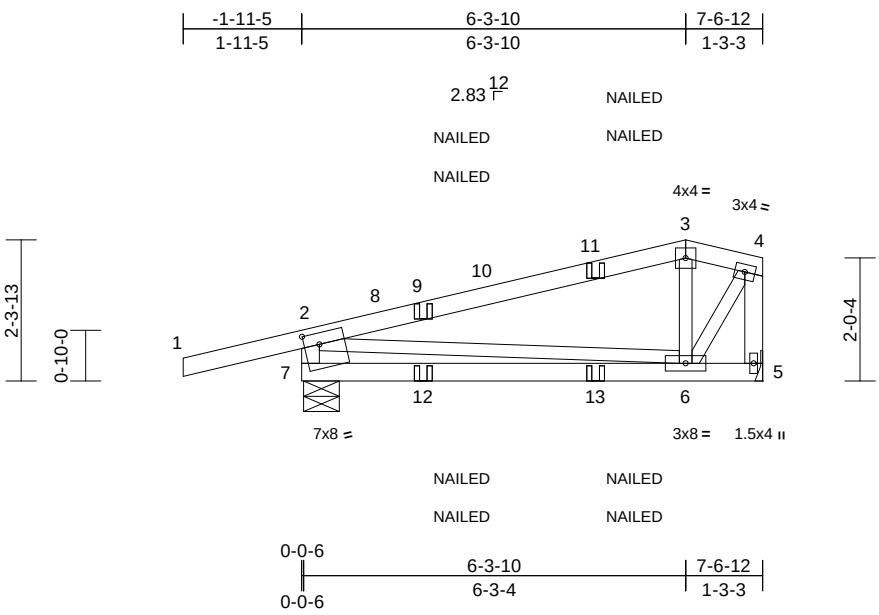

Scale = 1:37.8

Plate Offsets (X, Y): [7:0-3-0,0-2-4]

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	0.82	Vert(LL)	-0.05	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.10	6-7	>869	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 36 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= Mechanical, 7=0-7-0
Max Horiz 7=84 (LC 9)
Max Uplift 5=-80 (LC 9), 7=-170 (LC 8)
Max Grav 5=323 (LC 1), 7=482 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-247/71, 3-4=-204/99, 2-7=-431/388, 4-5=-386/208
BOT CHORD 6-7=-209/90, 5-6=-36/39
WEBS 4-6=-174/358, 3-6=-149/227, 2-6=-8/193

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) -1-11-5 to 3-0-11, Interior (1) 3-0-11 to 6-3-10, Exterior(2E) 6-3-10 to 7-5-0 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) 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 7 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 80 lb uplift at joint 5.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) 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: 9=36 (F), 11=-26 (B), 13=-13 (F=-4, B=-10)

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	CG2	Diagonal Hip Girder	3	1	I75564029 Job Reference (optional)

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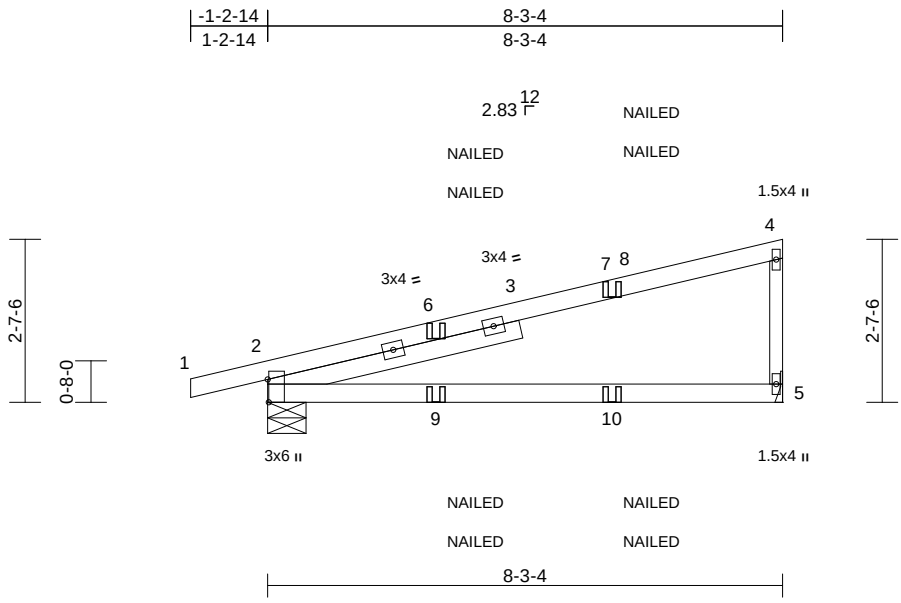

Scale = 1:37

Plate Offsets (X, Y): [2:0-4-6,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	0.94	Vert(LL)	-0.22	2-5	>454	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.43	2-5	>227	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 35 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-1-15

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=0-7-6, 5= Mechanical
Max Horiz 2=103 (LC 9)
Max Uplift 2=-149 (LC 8), 5=-115 (LC 12)
Max Grav 2=484 (LC 1), 5=410 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6/0, 2-4=-140/82, 4-5=-315/306
BOT CHORD 2-5=-47/51

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-14 to 5-10-0, Exterior(2R) 5-10-0 to 8-2-0 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) 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 2400F 2.0E crushing capacity of 805 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 115 lb uplift at joint 5.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) 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: 1-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 7=-53 (F=-26, B=-26), 10=-19 (F=-10, B=-10)

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	CG3	Diagonal Hip Girder	2	1	I75564030 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:01 Page: 1
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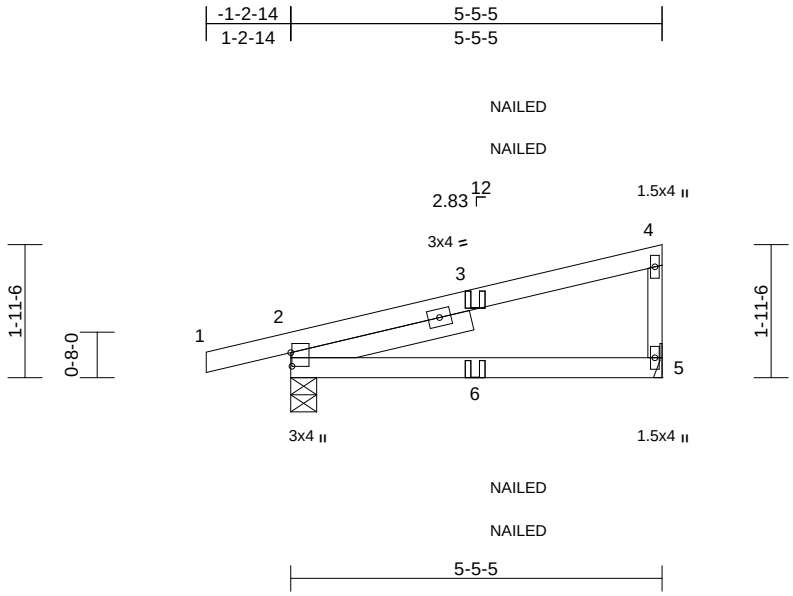

Scale = 1:33.8

Plate Offsets (X, Y): [2:0-2-6,0-0-3]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.05	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.10	2-5	>657	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-8-8

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-9, 5= Mechanical
Max Horiz 2=73 (LC 9)
Max Uplift 2=-111 (LC 8), 5=-54 (LC 12)
Max Grav 2=337 (LC 1), 5=230 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6/0, 2-4=-95/60, 4-5=-177/225
BOT CHORD 2-5=-34/36

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 Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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 5.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) 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: 1-4=-70, 2-5=-20

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	CG4	Diagonal Hip Girder	1	1	I75564031 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:01 Page: 1
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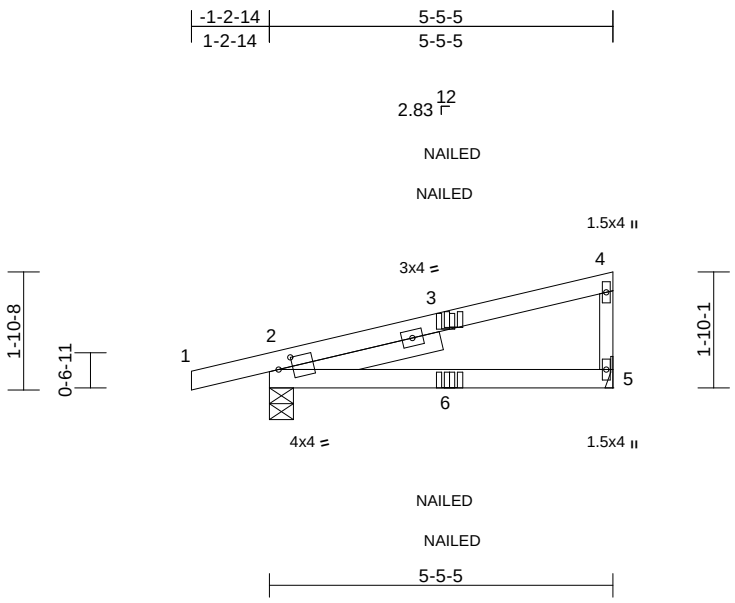

Scale = 1:36.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.04	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.08	2-5	>732	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-7-6

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-9, 5= Mechanical
Max Horiz 2=70 (LC 9)
Max Uplift 2=-121 (LC 8), 5=-51 (LC 12)
Max Grav 2=345 (LC 1), 5=218 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/2, 2-4=-91/56, 4-5=-166/211
BOT CHORD 2-5=-31/34

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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 51 lb uplift at joint 5.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) 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: 1-4=-70, 2-5=-20

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	CG5	Diagonal Hip Girder	1	1	I75564032 Job Reference (optional)

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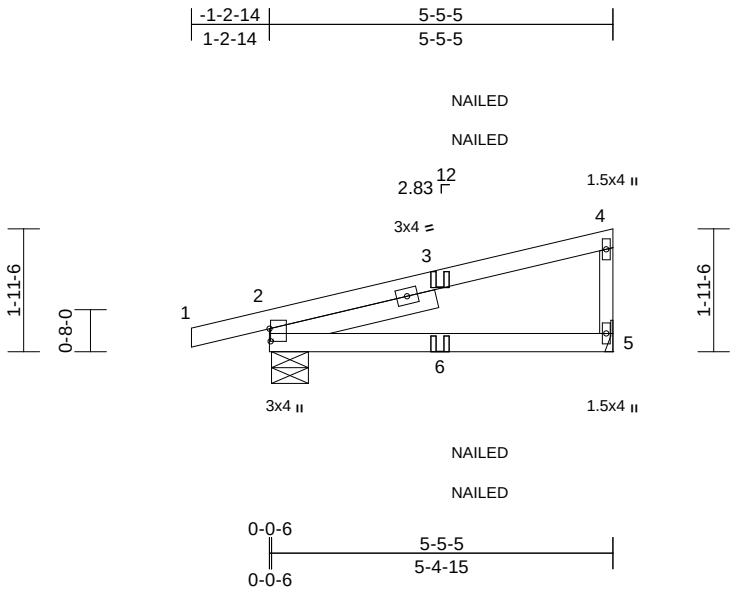

Scale = 1:36.5

Plate Offsets (X, Y): [2:0-2-6,0-0-3]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.05	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.10	2-5	>657	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-8-8

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-7-0, 5= Mechanical
Max Horiz 2=73 (LC 9)
Max Uplift 2=-111 (LC 8), 5=-54 (LC 12)
Max Grav 2=337 (LC 1), 5=230 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6/0, 2-4=-95/60, 4-5=-177/225
BOT CHORD 2-5=-34/36

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 Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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 5.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) 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: 1-4=-70, 2-5=-20

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	CG6	Diagonal Hip Girder	1	1	I75564033 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:02 Page: 1
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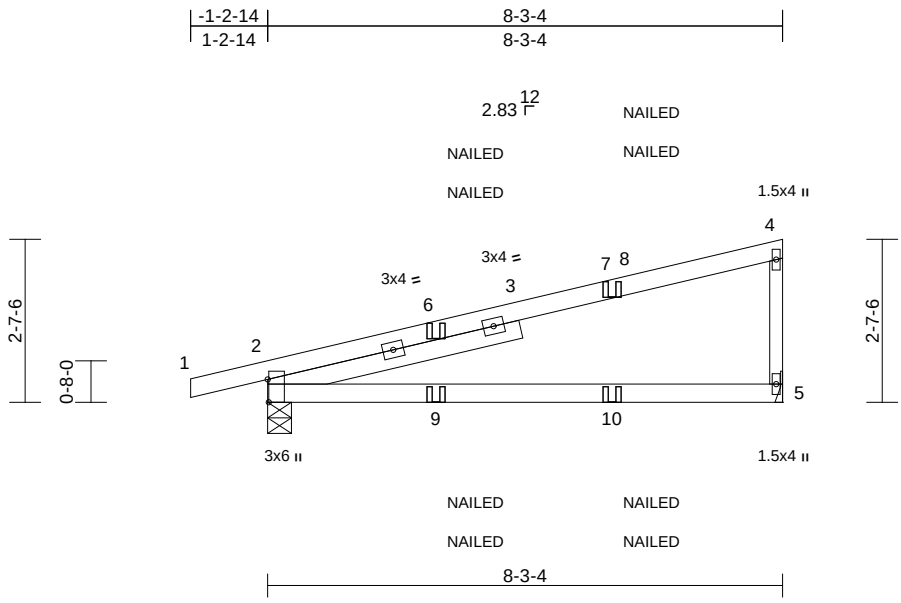

Scale = 1:37

Plate Offsets (X, Y): [2:0-4-6,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	0.94	Vert(LL)	-0.22	2-5	>454	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.43	2-5	>227	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 35 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-1-15

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=0-4-9, 5= Mechanical
Max Horiz 2=103 (LC 9)
Max Uplift 2=-149 (LC 8), 5=-115 (LC 12)
Max Grav 2=484 (LC 1), 5=410 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6/0, 2-4=-140/82, 4-5=-315/306
BOT CHORD 2-5=-47/51

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-14 to 5-10-0, Exterior(2R) 5-10-0 to 8-2-0 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) 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 2400F 2.0E crushing capacity of 805 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 115 lb uplift at joint 5.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) 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: 1-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 7=-53 (F=-26, B=-26), 10=-19 (F=-10, B=-10)

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	CG7	Diagonal Hip Girder	1	1	I75564034 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:02 Page: 1
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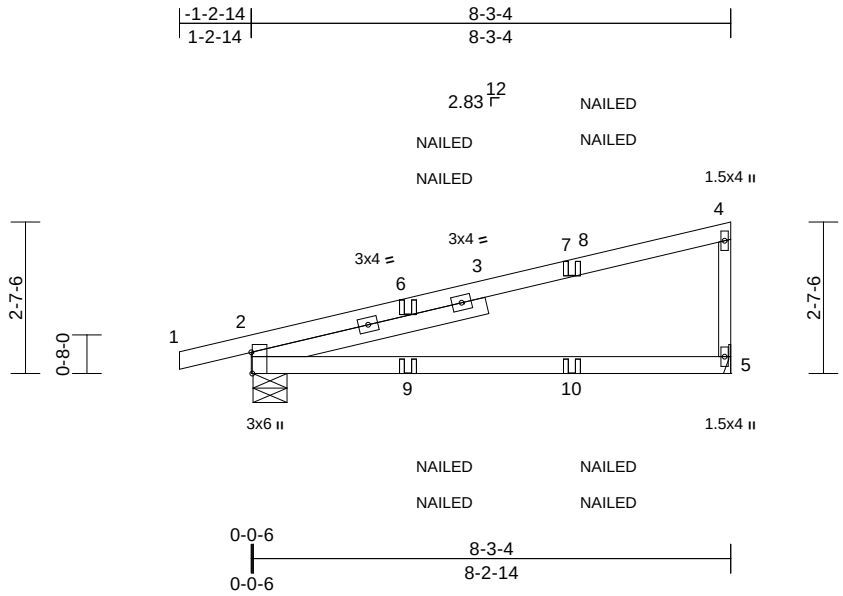

Scale = 1:39.8

Plate Offsets (X, Y): [2:0-4-6,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	0.94	Vert(LL)	-0.22	2-5	>454	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.43	2-5	>227	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 35 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-1-15

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=0-7-0, 5= Mechanical
Max Horiz 2=103 (LC 9)
Max Uplift 2=-149 (LC 8), 5=-115 (LC 12)
Max Grav 2=484 (LC 1), 5=410 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6/0, 2-4=-140/82, 4-5=-315/306
BOT CHORD 2-5=-47/51

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-14 to 5-10-0, Exterior(2R) 5-10-0 to 8-2-0 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) 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 2400F 2.0E crushing capacity of 805 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 115 lb uplift at joint 5.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) 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: 1-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 7=-53 (F=-26, B=-26), 10=-19 (F=-10, B=-10)

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	D1	Half Hip Girder	1	1	I75564035 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:02 Page: 1
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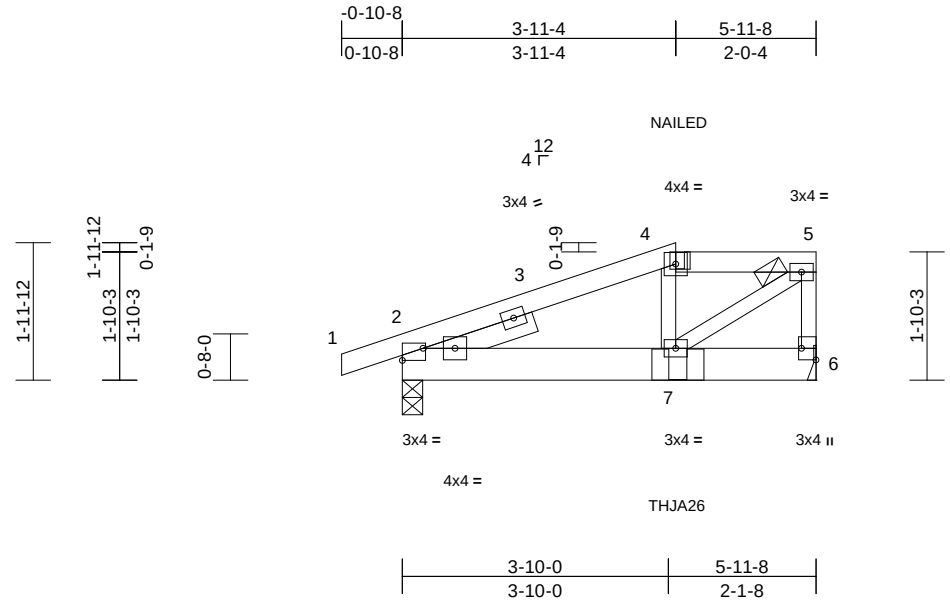

Scale = 1:33.2

Plate Offsets (X, Y): [2:0-3-9,0-2-0], [2:Edge,0-2-2], [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	0.31	Vert(LL)	-0.01	2-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	2-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-7-13

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6= Mechanical
Max Horiz 2=69 (LC 9)
Max Uplift 2=-139 (LC 8), 6=-123 (LC 8)
Max Grav 2=433 (LC 1), 6=432 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/1, 2-4=-532/218, 4-5=-440/258, 5-6=-400/255
BOT CHORD 2-7=-243/434, 6-7=-30/33
WEBS 4-7=-59/164, 5-7=-287/542

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 2 SPF No.2 crushing capacity of 425 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 123 lb uplift at joint 6.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Use Simpson Strong-Tie THJA26 (THJA26 on 1 ply, Right Hand Hip) or equivalent at 3-11-10 from the left end to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) 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: 1-4=-70, 4-5=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 4=-59 (B), 7=-221 (B)

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	D2	Monopitch	1	1	I75564036 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:02 Page: 1
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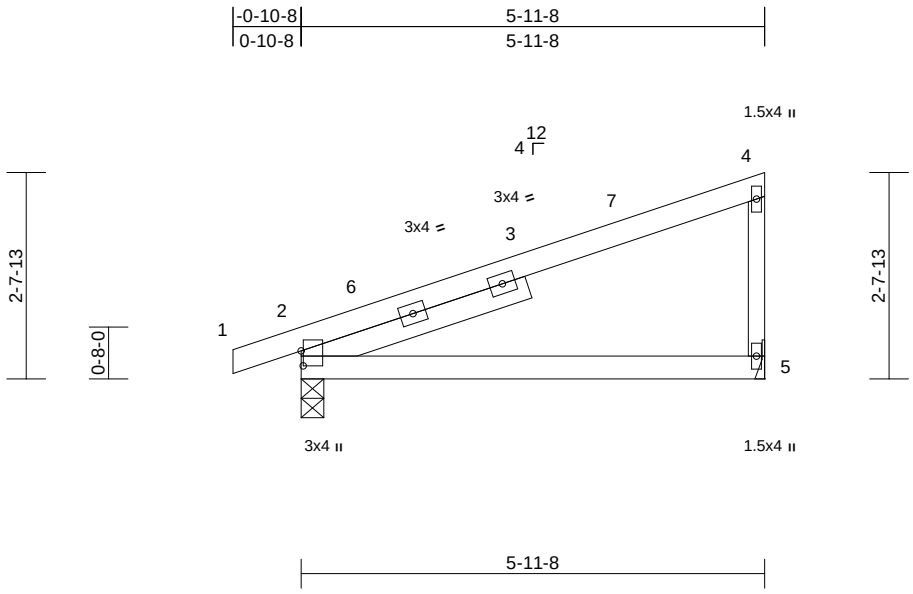

Scale = 1:29.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.07	2-5	>997	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.14	2-5	>499	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-P							Weight: 26 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-0-10

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

REACTIONS (size) 2=0-3-8, 5= Mechanical
Max Horiz 2=109 (LC 9)
Max Uplift 2=-91 (LC 8), 5=-66 (LC 12)
Max Grav 2=329 (LC 1), 5=259 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-146/86, 4-5=-200/293
BOT CHORD 2-5=-48/52

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 5-10-4 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
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 66 lb uplift at joint 5.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	D3	Monopitch	1	1	I75564037 Job Reference (optional)

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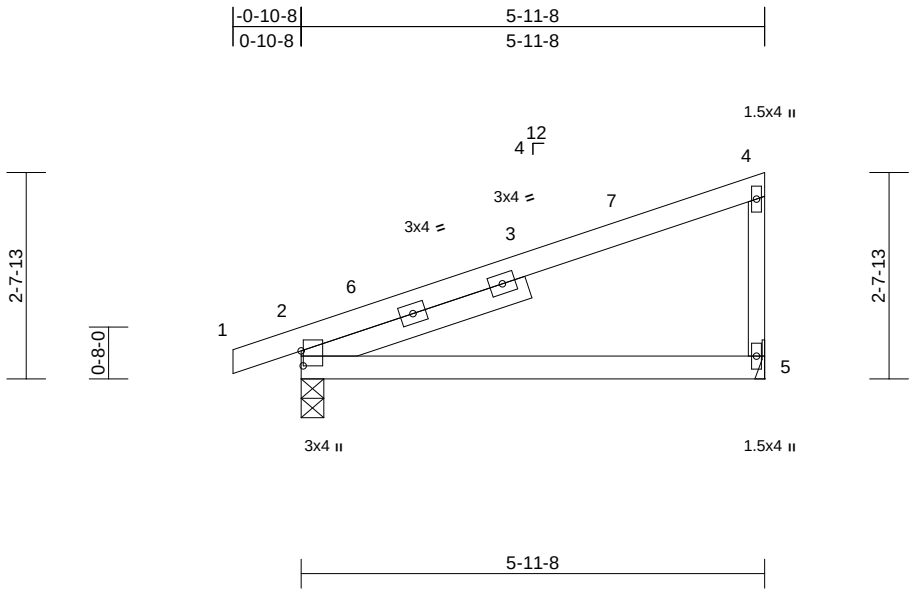

Scale = 1:29.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.07	2-5	>997	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.14	2-5	>499	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-P							Weight: 26 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-0-10

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

REACTIONS (size) 2=0-3-8, 5= Mechanical
Max Horiz 2=109 (LC 9)
Max Uplift 2=-91 (LC 8), 5=-66 (LC 12)
Max Grav 2=329 (LC 1), 5=259 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-146/86, 4-5=-200/293
BOT CHORD 2-5=-48/52

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 5-10-4 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
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 66 lb uplift at joint 5.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	D4	Half Hip Girder	1	1	I75564038 Job Reference (optional)

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

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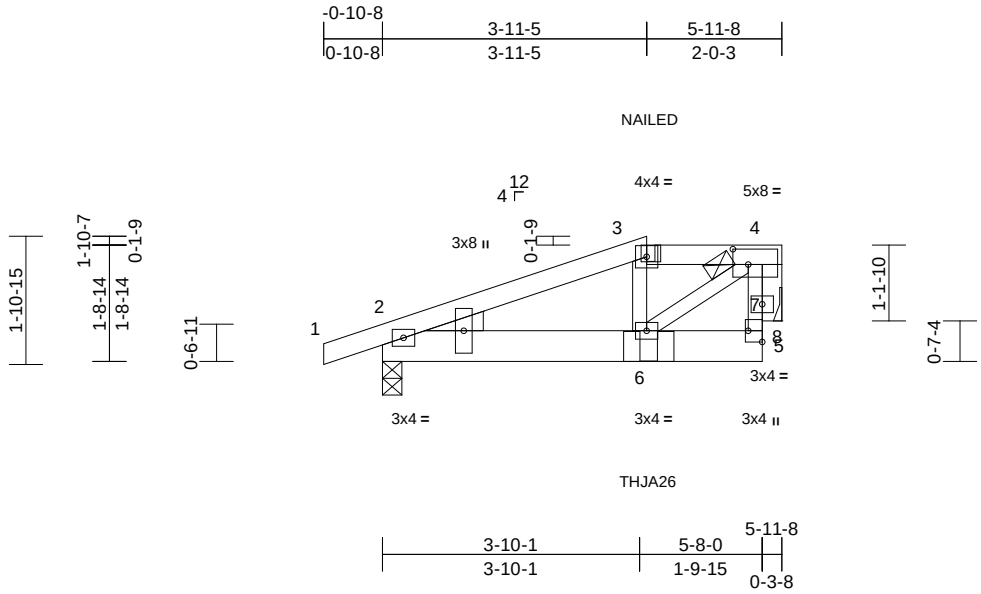

Scale = 1:34.4

Plate Offsets (X, Y): [2:0-1-13,0-0-4], [4:0-2-12,0-2-12], [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	0.34	Vert(LL)	0.01	2-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	2-6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.15	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x4 SP No.2
WEDGE Left: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 8= Mechanical
Max Horiz 2=58 (LC 31)
Max Uplift 2=-134 (LC 8), 8=-114 (LC 8)
Max Grav 2=427 (LC 1), 8=390 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/8, 2-3=-525/175, 3-4=-450/229, 5-7=-13/37, 4-7=-13/37
BOT CHORD 2-6=-199/445, 5-6=-60/100
WEBS 3-6=-43/153, 4-6=-203/444, 4-8=-417/240

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 2 SPF No.2 crushing capacity of 425 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 114 lb uplift at joint 8.
8) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Use Simpson Strong-Tie THJA26 (THJA26 on 1 ply, Right Hand Hip) or equivalent at 3-11-11 from the left end to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) 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: 1-3=-70, 3-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 3=-51 (B), 6=-207 (B)

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	D5	Monopitch	2	1	I75564039 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:02 Page: 1
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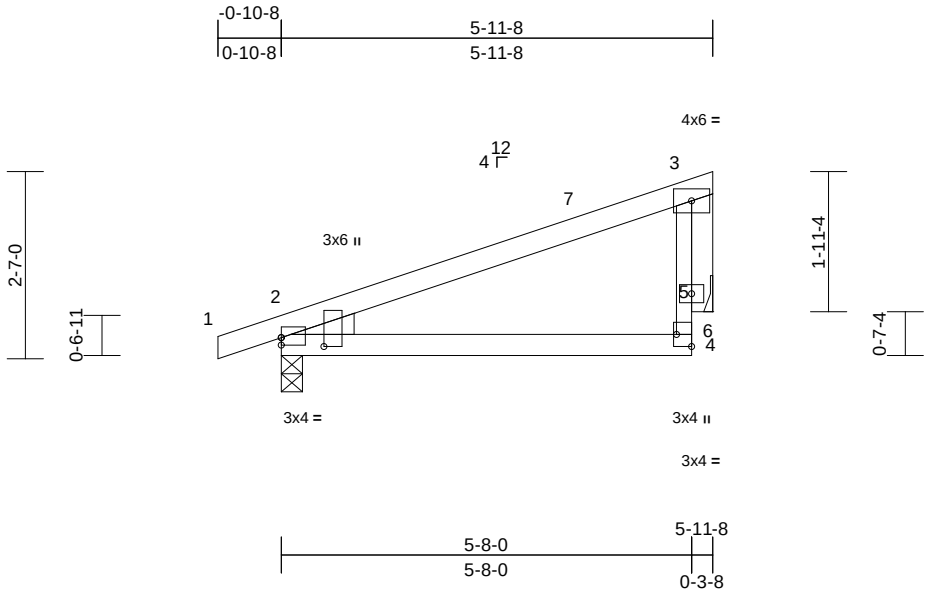


Scale = 1:31.8

Plate Offsets (X, Y): [2:Edge,0-1-4], [2:0-1-8,0-7-1], [4: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	0.46	Vert(LL)	-0.02	2-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.05	2-4	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	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 2x3 SPF No.2
OTHERS 2x4 SP No.2
WEDGE Left: 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) 2=0-3-8, 6= Mechanical
Max Horiz 2=84 (LC 12)
Max Uplift 2=-91 (LC 8), 6=-64 (LC 12)
Max Grav 2=336 (LC 1), 6=223 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/2, 2-3=-229/65, 4-5=0/116, 3-5=-132/280
BOT CHORD 2-4=-128/156
WEBS 3-6=-116/0

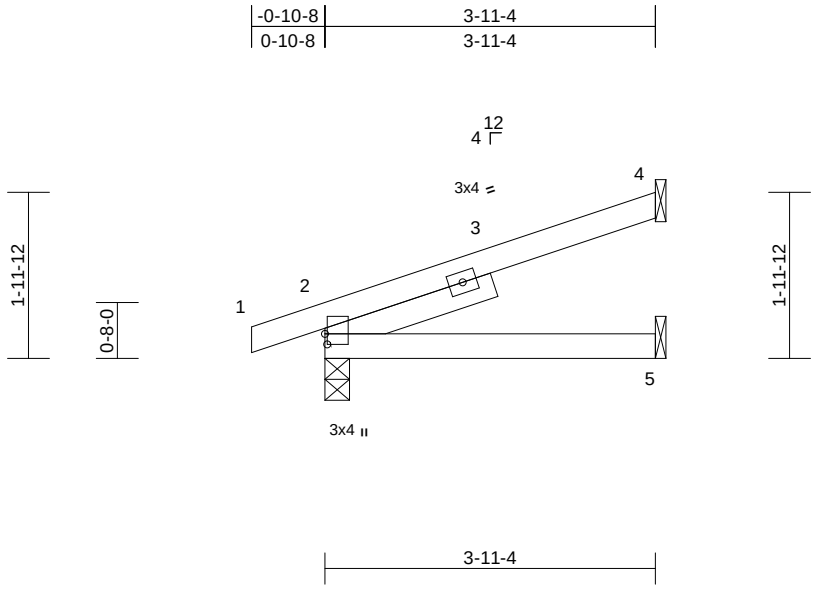
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-9-8 to 5-9-8, Interior (1) 5-9-8 to 7-2-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 64 lb uplift at joint 6.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	J1	Jack-Open	9	1	I75564040 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:02 Page: 1
ID:taSTi6ix2L8dZNOgki0MTmzXOcD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:27.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.01	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-1-3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=70 (LC 12)
Max Uplift 2=-68 (LC 8), 4=-74 (LC 12)
Max Grav 2=243 (LC 1), 4=129 (LC 1), 5=78 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-76/32
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 74 lb uplift at joint 4.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

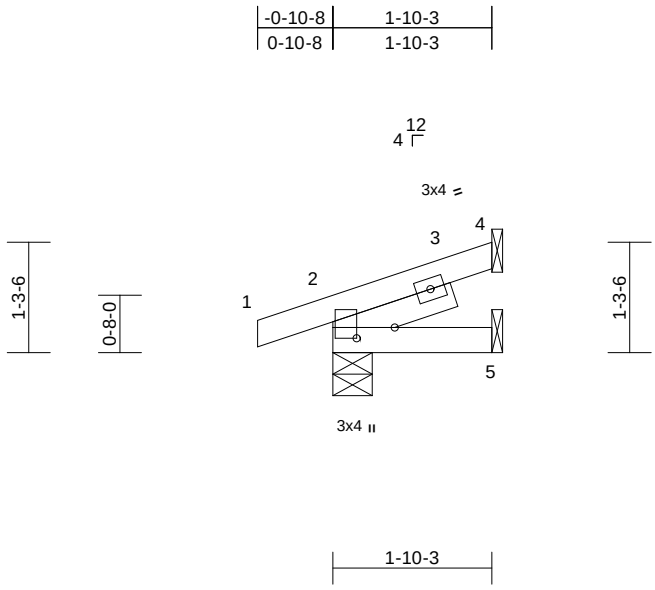
LOAD CASE(S) Standard

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	J2	Jack-Open	14	1	I75564041 Job Reference (optional)

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

Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:02 Page: 1
ID:AwN7AVnKOV0duRQ0fge?FEzXOc6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:26.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	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: 9 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-5-8

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-10-3 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=40 (LC 12)
Max Uplift 2=-57 (LC 8), 4=-35 (LC 12)
Max Grav 2=158 (LC 1), 4=50 (LC 1), 5=37 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-43/16
BOT CHORD 2-5=0/0

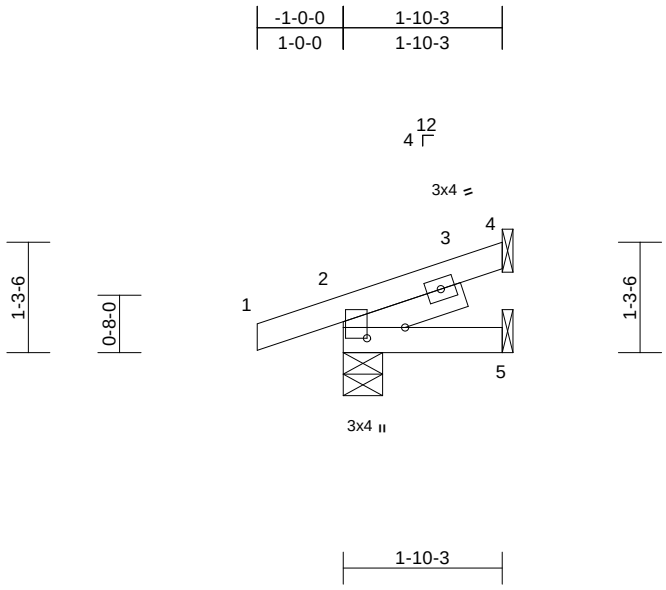
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for 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 35 lb uplift at joint 4.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	J3	Jack-Open	1	1	I75564042 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:02 Page: 1
ID:AwN7AVnKOV0duRQ0fge?FEzXOc6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:26.8

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

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	0.07	Vert(LL)	0.00	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	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: 10 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-5-8

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-10-3 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=41 (LC 12)
Max Uplift 2=-65 (LC 8), 4=-34 (LC 12)
Max Grav 2=172 (LC 1), 4=45 (LC 1), 5=37 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2/0, 2-4=-44/16
BOT CHORD 2-5=0/0

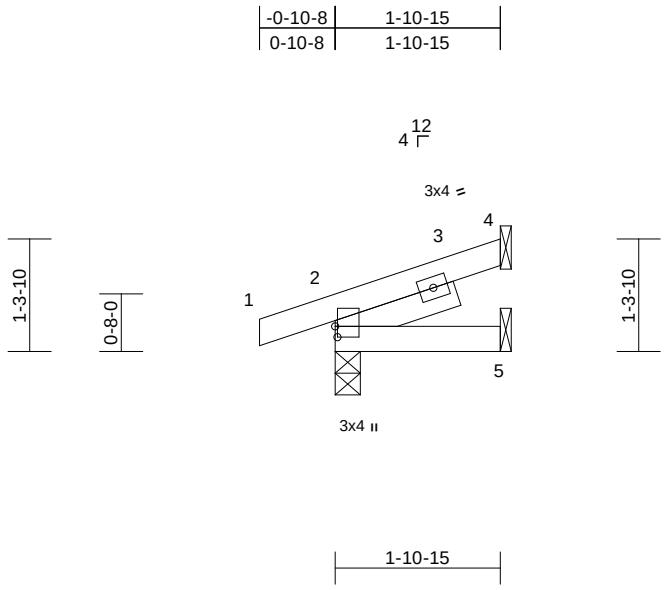
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for 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 34 lb uplift at joint 4.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	J4	Jack-Open	2	1	I75564043 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:03 Page: 1
ID:erP3p1bH9a?uz_CyjJLFcszXOcM-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:26.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	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: 10 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-5-8

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=41 (LC 12)
Max Uplift 2=-57 (LC 8), 4=-36 (LC 12)
Max Grav 2=161 (LC 1), 4=52 (LC 1), 5=38 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-44/17
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 36 lb uplift at joint 4.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	J5	Jack-Open	1	1	I75564044 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:03 Page: 1
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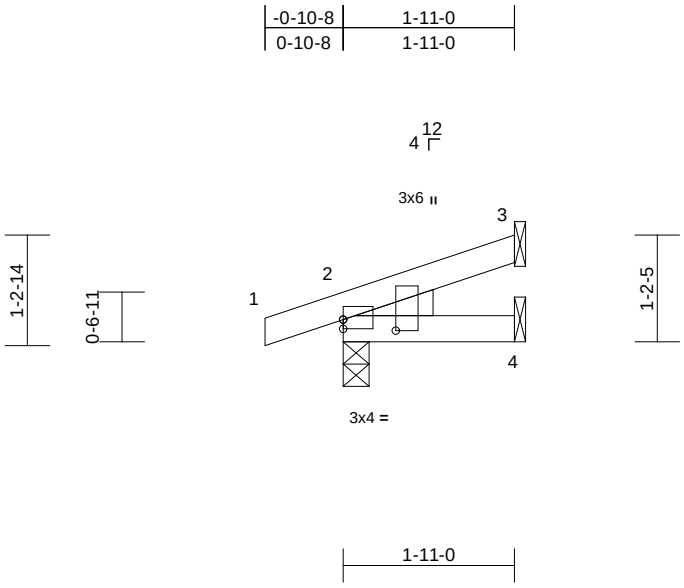


Scale = 1:25.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	2-4	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE Left: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=41 (LC 8)
Max Uplift 2=-61 (LC 8), 3=-33 (LC 12)
Max Grav 2=163 (LC 1), 3=50 (LC 1), 4=38 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/2, 2-3=-44/22
BOT CHORD 2-4=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 33 lb uplift at joint 3.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

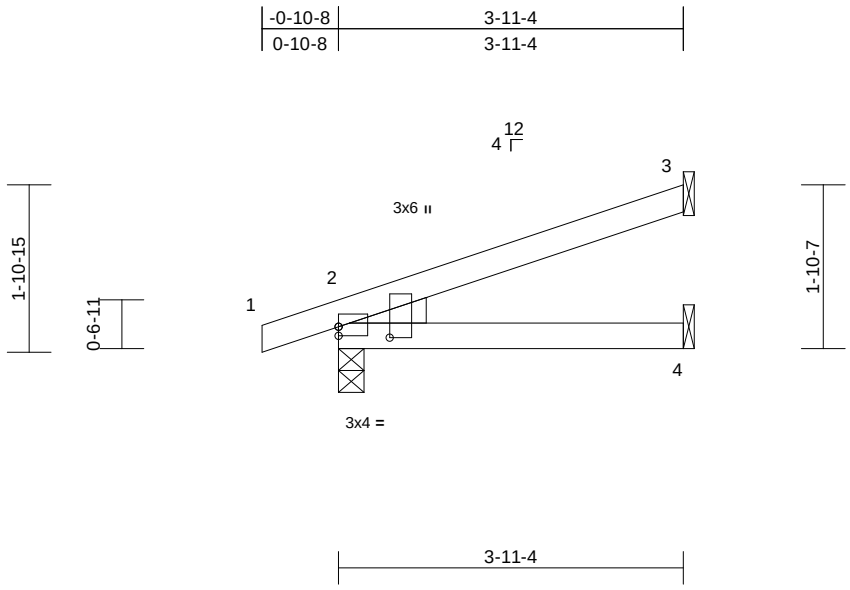
LOAD CASE(S) Standard

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	J6	Jack-Open	1	1	I75564045
					Job Reference (optional)

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

Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:03 ID:AsBPqlR8xBnZKGU17nipCXzXOhj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:26.3

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

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	0.33	Vert(LL)	-0.01	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	2-4	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE Left: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=70 (LC 8)
Max Uplift 2=-76 (LC 8), 3=-69 (LC 12)
Max Grav 2=249 (LC 1), 3=121 (LC 1), 4=75 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/2, 2-3=-85/37
BOT CHORD 2-4=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 69 lb uplift at joint 3.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	J7	Jack-Open	1	1	I75564046 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:03 Page: 1
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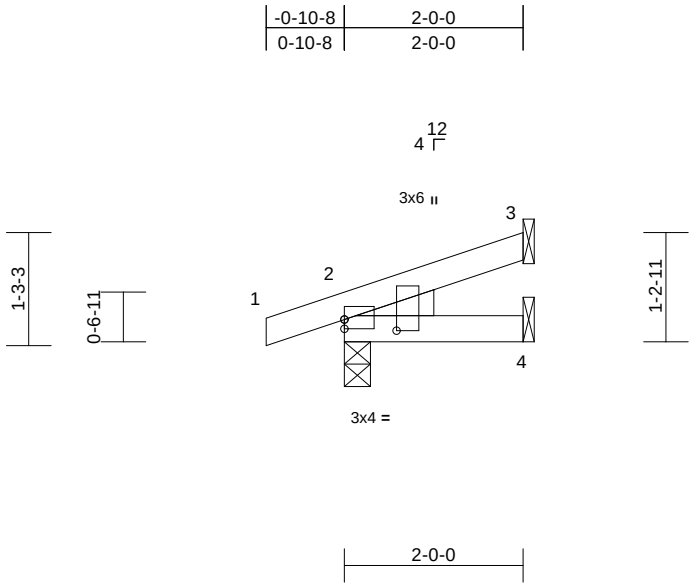


Scale = 1:25.8

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

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	0.13	Vert(LL)	0.00	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	2-4	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE Left: 2x4 SP No.2

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

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=42 (LC 8)
Max Uplift 2=-61 (LC 8), 3=-35 (LC 12)
Max Grav 2=166 (LC 1), 3=54 (LC 1), 4=39 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/2, 2-3=-46/23
BOT CHORD 2-4=0/0

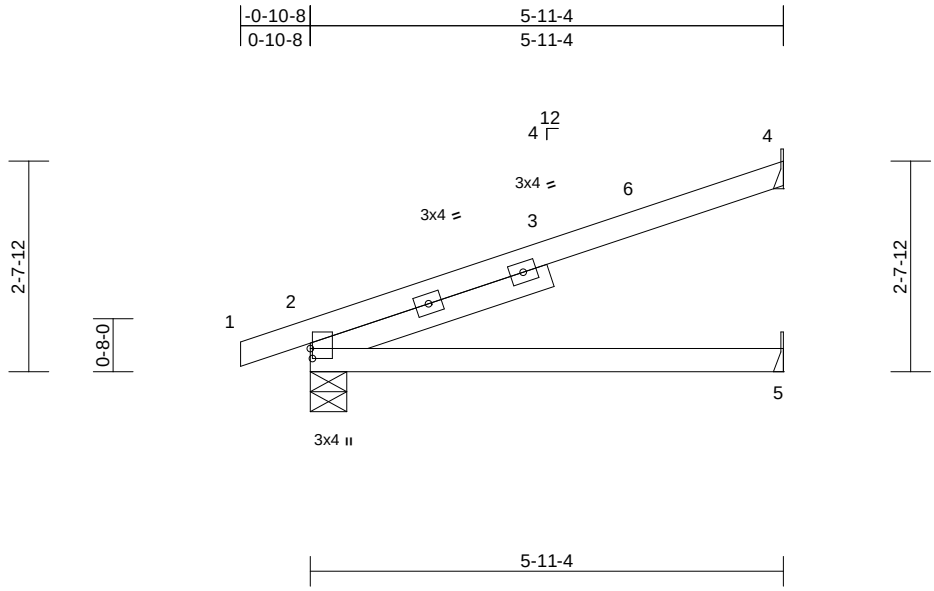
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for 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 35 lb uplift at joint 3.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	J8	Jack-Open	32	1	I75564047 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:03 ID:y?n6v?h_L0KNnGwv5Zm_S1zXOLS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:28.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.07	2-5	>987	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.14	2-5	>493	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-1-13

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-4 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=99 (LC 12)
Max Uplift 2=-81 (LC 8), 4=-111 (LC 12)
Max Grav 2=330 (LC 1), 4=201 (LC 1), 5=118 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-105/50
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) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-10-8 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) 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 111 lb uplift at joint 4.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	J9	Jack-Open	11	1	I75564048 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:03 Page: 1
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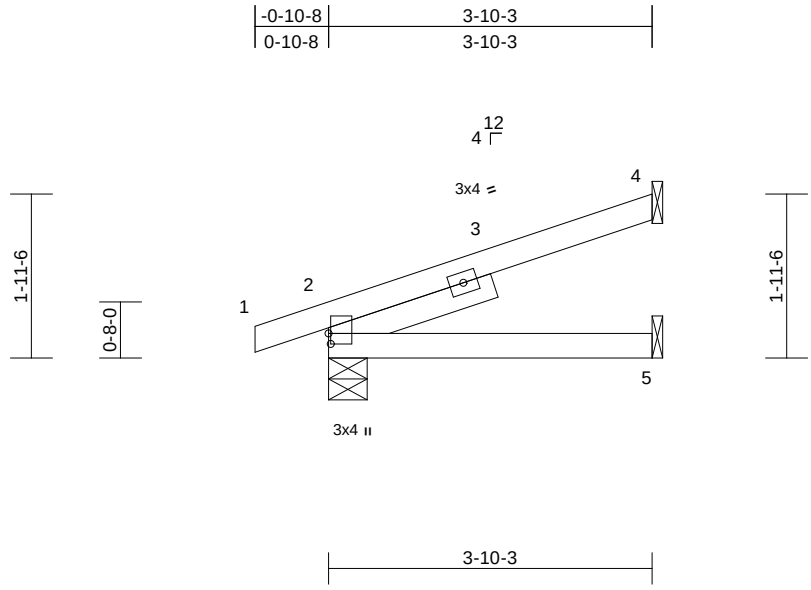

Scale = 1:27.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.01	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-0-10

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-10-3 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=-67 (LC 8), 4=-73 (LC 12)
Max Grav 2=239 (LC 1), 4=125 (LC 1), 5=76 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-76/31
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 73 lb uplift at joint 4.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	J10	Jack-Open	1	1	I75564049 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:03 Page: 1
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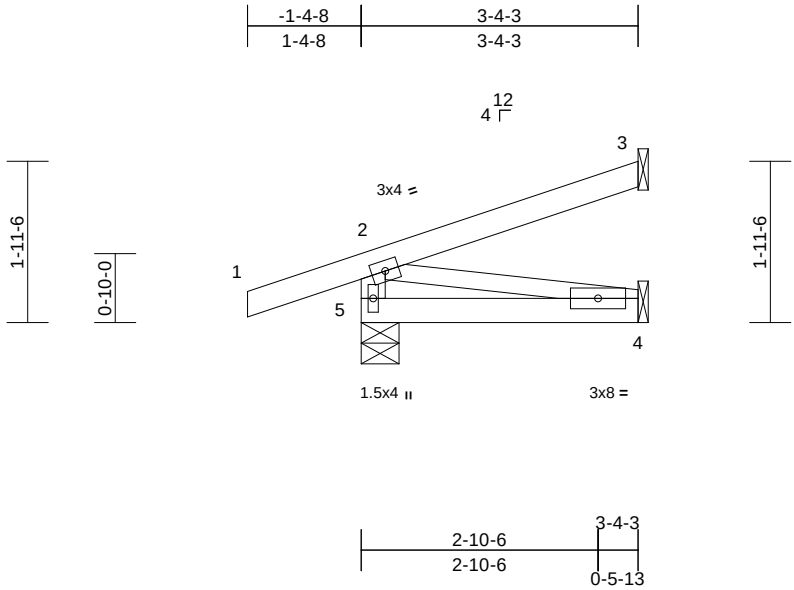

Scale = 1:27.9

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	0.19	Vert(LL)	-0.01	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 20%

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

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

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=65 (LC 8)
Max Uplift 3=-46 (LC 12), 5=-100 (LC 8)
Max Grav 3=84 (LC 1), 4=64 (LC 3), 5=274 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-242/276, 1-2=0/34, 2-3=-47/26
BOT CHORD 4-5=-150/35
WEBS 2-4=-36/152

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 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 46 lb uplift at joint 3.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
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

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	J11	Jack-Open	1	1	I75564050 Job Reference (optional)

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

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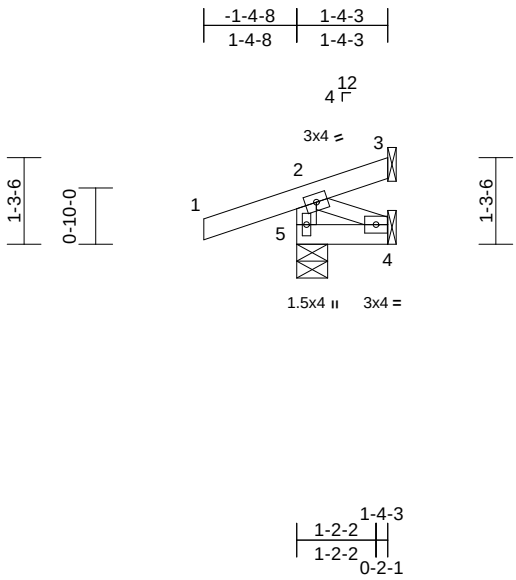

Scale = 1:34.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-4-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=36 (LC 11)
Max Uplift 3=-26 (LC 1), 4=-12 (LC 8), 5=-111 (LC 8)
Max Grav 3=29 (LC 8), 4=24 (LC 3), 5=228 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-216/257, 1-2=0/34, 2-3=-35/15
BOT CHORD 4-5=-80/13
WEBS 2-4=-14/89

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 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 26 lb uplift at joint 3.
6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 4. This connection is for uplift only and does not consider lateral forces.
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

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	LAY01	Lay-In Gable	1	1	I75564051 Job Reference (optional)

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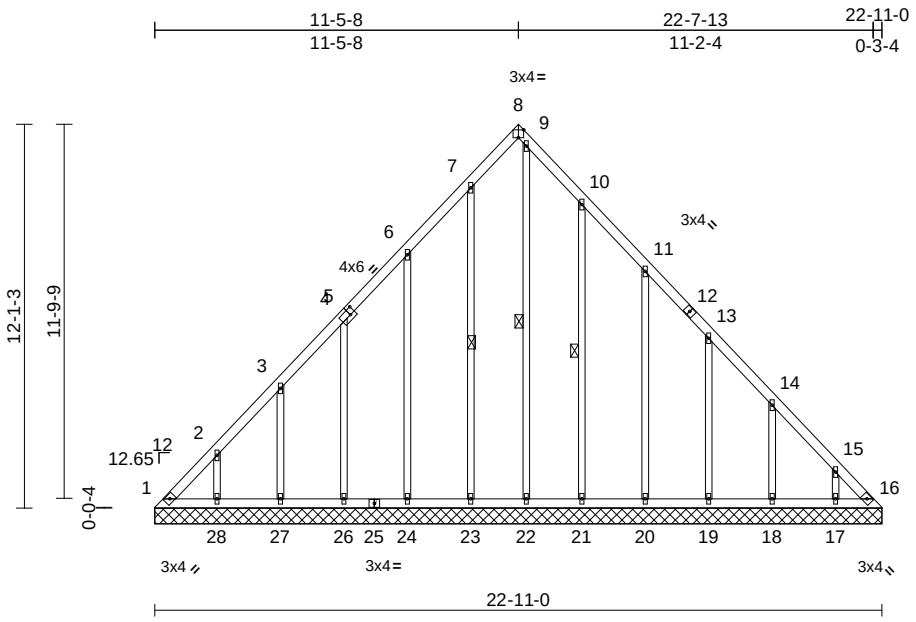

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Plate Offsets (X, Y): [5:0-2-0,0-2-4], [8:Edge,0-3-0]

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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horiz(TL)	0.01	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 136 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 7-23, 9-22, 10-21

REACTIONS (size) 1=22-11-0, 16=22-11-0, 17=22-11-0, 18=22-11-0, 19=22-11-0, 20=22-11-0, 21=22-11-0, 22=22-11-0, 23=22-11-0, 24=22-11-0, 26=22-11-0, 27=22-11-0, 28=22-11-0
Max Horiz 1=-333 (LC 8)
Max Uplift 1=-159 (LC 10), 16=-137 (LC 11), 17=-120 (LC 13), 18=-140 (LC 13), 19=-134 (LC 13), 20=-143 (LC 13), 21=-137 (LC 13), 23=-73 (LC 12), 24=-153 (LC 12), 26=-134 (LC 12), 27=-136 (LC 12), 28=-137 (LC 12)
Max Grav 1=350 (LC 12), 16=341 (LC 13), 17=182 (LC 20), 18=211 (LC 20), 19=204 (LC 20), 20=210 (LC 20), 21=200 (LC 20), 22=219 (LC 13), 23=191 (LC 19), 24=211 (LC 19), 26=206 (LC 19), 27=206 (LC 19), 28=209 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-501/325, 2-3=-374/231, 3-4=-239/181, 4-6=-165/132, 6-7=-140/165, 7-8=-180/186, 8-9=-67/55, 9-10=-200/194, 10-11=-101/101, 11-13=-128/87, 13-14=-234/139, 14-15=-371/246, 15-16=-479/329
BOT CHORD 1-28=-232/346, 27-28=-233/346, 26-27=-233/346, 24-26=-233/346, 23-24=-233/346, 22-23=-233/346, 21-22=-233/346, 20-21=-233/346, 19-20=-233/346, 18-19=-233/346, 17-18=-233/346, 16-17=-232/346
WEBS 2-28=-177/155, 3-27=-183/162, 4-26=-178/157, 6-24=-200/177, 7-23=-153/96, 9-22=-199/148, 10-21=-176/159, 11-20=-189/167, 13-19=-179/158, 14-18=-187/165, 15-17=-156/136

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) 0-4-1 to 5-4-1, Interior (1) 5-4-1 to 11-5-12, Exterior(2R) 11-5-12 to 16-5-12, Interior (1) 16-5-12 to 22-7-7 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) N/A
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

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

August 12,2025

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

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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/26/2025 3:56:25

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	LAY02	Lay-In Gable	1	1	I75564052 Job Reference (optional)

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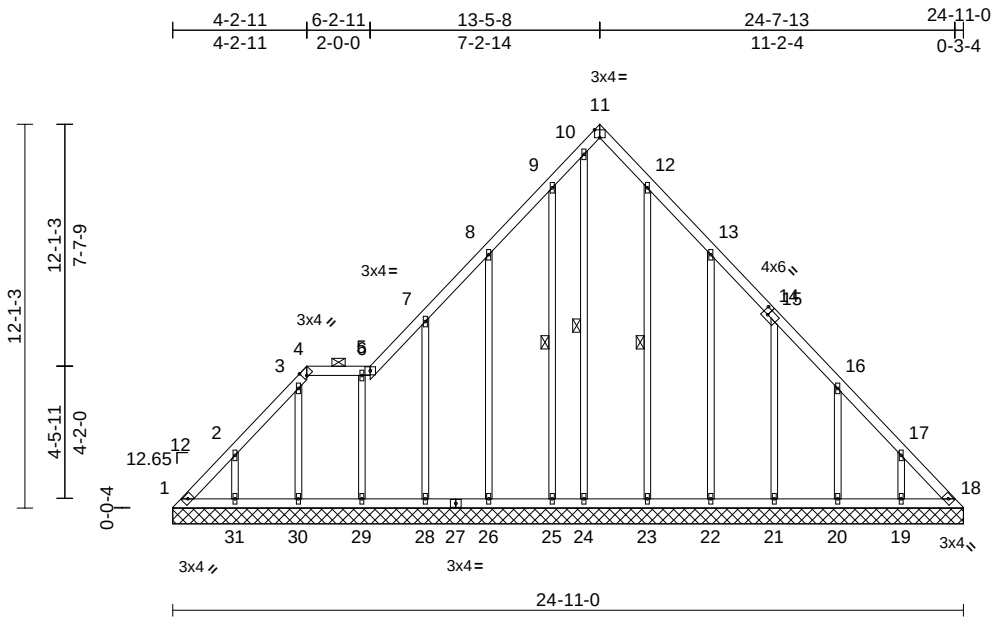


Scale = 1:72.6

Plate Offsets (X, Y): [4:0-1-7,Edge], [11:Edge,0-3-0], [14:0-2-0,0-2-4]

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horiz(TL)	0.01	18	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 147 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.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-25, 10-24, 12-23

REACTIONS (size) 1=24-11-0, 18=24-11-0, 19=24-11-0, 20=24-11-0, 21=24-11-0, 22=24-11-0, 23=24-11-0, 24=24-11-0, 25=24-11-0, 26=24-11-0, 28=24-11-0, 29=24-11-0, 30=24-11-0, 31=24-11-0
Max Horiz 1=-333 (LC 8)
Max Uplift 1=-151 (LC 10), 18=-130 (LC 11), 19=-137 (LC 13), 20=-137 (LC 13), 21=-133 (LC 13), 22=-160 (LC 13), 23=-46 (LC 13), 25=-122 (LC 12), 26=-160 (LC 12), 28=-98 (LC 12), 29=-70 (LC 8), 30=-304 (LC 12), 31=-126 (LC 12)
Max Grav 1=353 (LC 12), 18=343 (LC 13), 19=209 (LC 20), 20=206 (LC 20), 21=206 (LC 20), 22=211 (LC 20), 23=190 (LC 20), 24=205 (LC 13), 25=155 (LC 19), 26=218 (LC 19), 28=193 (LC 19), 29=215 (LC 20), 30=243 (LC 19), 31=210 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-506/331, 2-3=-388/235, 3-4=-117/87, 4-5=-195/119, 5-6=-195/119, 6-7=-222/159, 7-8=-152/124, 8-9=-123/134, 9-10=-191/199, 10-11=-77/68, 11-12=-152/146, 12-13=-115/121, 13-15=-127/92, 15-16=-229/141, 16-17=-364/233, 17-18=-490/331
BOT CHORD 1-31=-242/365, 30-31=-242/365, 29-30=-242/365, 28-29=-242/365, 26-28=-242/365, 25-26=-242/365, 24-25=-242/365, 23-24=-242/365, 22-23=-242/365, 21-22=-242/365, 20-21=-242/365, 19-20=-242/365, 18-19=-242/365
WEBS 2-31=-172/142, 3-30=-260/330, 5-29=-174/94, 7-28=-158/122, 8-26=-201/185, 9-25=-150/139, 10-24=-187/138, 12-23=-148/71, 13-22=-202/184, 15-21=-176/156, 16-20=-181/162, 17-19=-175/155

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) 0-4-1 to 6-2-14, Interior (1) 6-2-14 to 13-5-12, Exterior(2R) 13-5-12 to 18-5-12, Interior (1) 18-5-12 to 24-7-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) N/A
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

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

August 12,2025

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

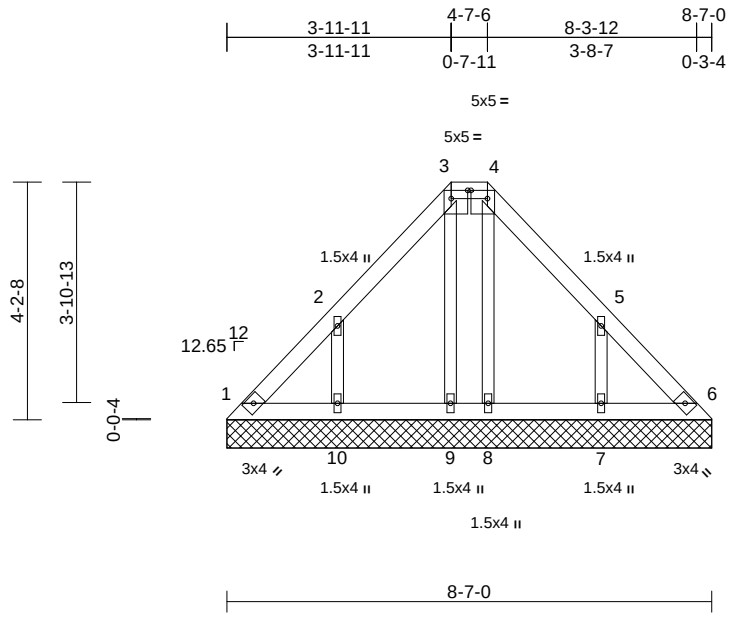
MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/26/2025 3:56:25

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	LAY03	Lay-In Gable	1	1	I75564053 Job Reference (optional)

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

Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:04 Page: 1
ID:XUB0rCOD4T7IysU2czqGd_zXMe5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:40.8

Plate Offsets (X, Y): [3:0-3-8,0-1-12], [4:0-3-8,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	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	0.05	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 38 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.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=8-7-0, 6=8-7-0, 7=8-7-0, 8=8-7-0, 9=8-7-0, 10=8-7-0
Max Horiz 1=110 (LC 9)
Max Uplift 1=-32 (LC 8), 6=-10 (LC 9), 7=-158 (LC 13), 9=-14 (LC 9), 10=-158 (LC 12)
Max Grav 1=98 (LC 20), 6=86 (LC 22), 7=232 (LC 20), 8=87 (LC 26), 9=97 (LC 22), 10=232 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-116/96, 2-3=-105/90, 3-4=-93/91, 4-5=-105/86, 5-6=-96/67
BOT CHORD 1-10=-57/90, 9-10=-58/90, 8-9=-58/90, 7-8=-58/90, 6-7=-57/90
WEBS 2-10=-233/183, 3-9=-71/29, 4-8=-62/8, 5-7=-233/183

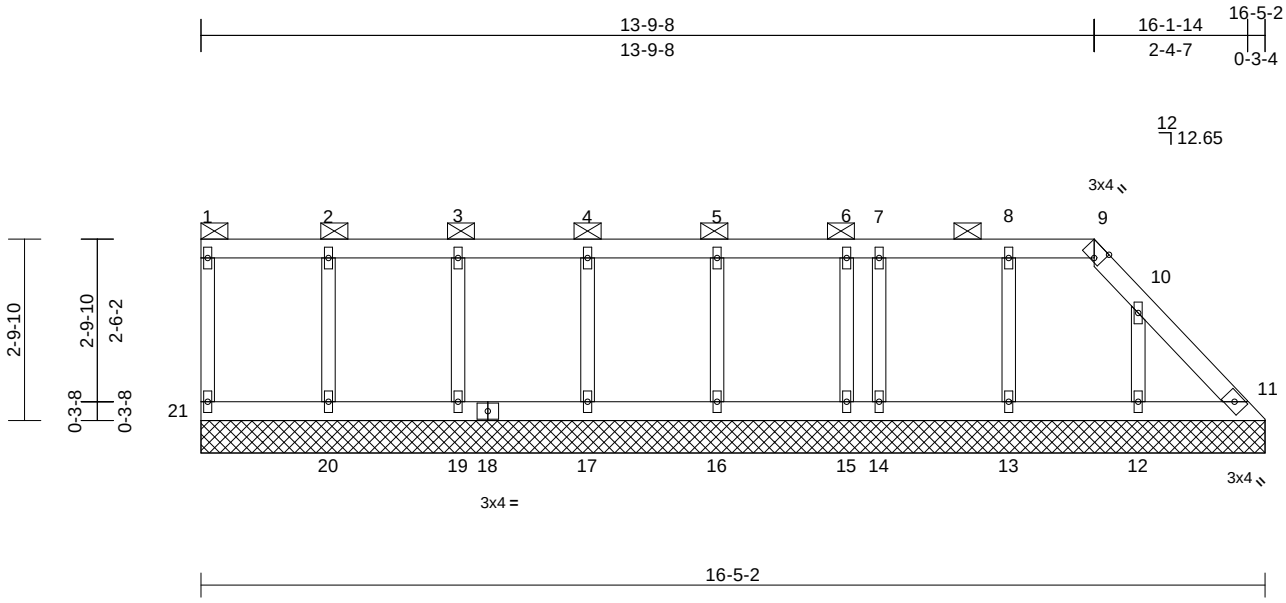
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end 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) Provide adequate drainage to prevent water ponding.
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) N/A
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	LAY04	Lay-In Gable	1	1	I75564054 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:04 Page: 1
ID:rxNwNk_UXPyokPL?JvvgdczXOZG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:35.6

Plate Offsets (X, Y): [9:0-1-7,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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 66 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.): 1-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 11=16-5-2, 12=16-5-2, 13=16-5-2, 14=16-5-2, 15=16-5-2, 16=16-5-2, 17=16-5-2, 19=16-5-2, 20=16-5-2, 21=16-5-2
Max Horiz 21=-107 (LC 8)
Max Uplift 11=-20 (LC 9), 12=-90 (LC 13), 13=-51 (LC 8), 14=-29 (LC 9), 15=-25 (LC 8), 16=-40 (LC 8), 17=-40 (LC 9), 19=-40 (LC 8), 20=-43 (LC 9), 21=-18 (LC 8)
Max Grav 11=95 (LC 19), 12=195 (LC 20), 13=185 (LC 1), 14=108 (LC 1), 15=108 (LC 1), 16=185 (LC 1), 17=179 (LC 1), 19=179 (LC 1), 20=190 (LC 1), 21=70 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-54/28, 1-2=-53/56, 2-3=-53/56, 3-4=-53/56, 4-5=-53/56, 5-6=-53/56, 6-7=-53/56, 7-8=-53/56, 8-9=-53/56, 9-10=-70/56, 10-11=-156/161
BOT CHORD 20-21=-125/130, 19-20=-125/130, 17-19=-125/130, 16-17=-125/130, 15-16=-125/130, 14-15=-125/130, 13-14=-125/130, 12-13=-125/130, 11-12=-125/130
WEBS 2-20=-148/70, 3-19=-139/64, 4-17=-140/63, 5-16=-144/65, 6-15=-85/40, 7-14=-84/43, 8-13=-144/76, 10-12=-201/148

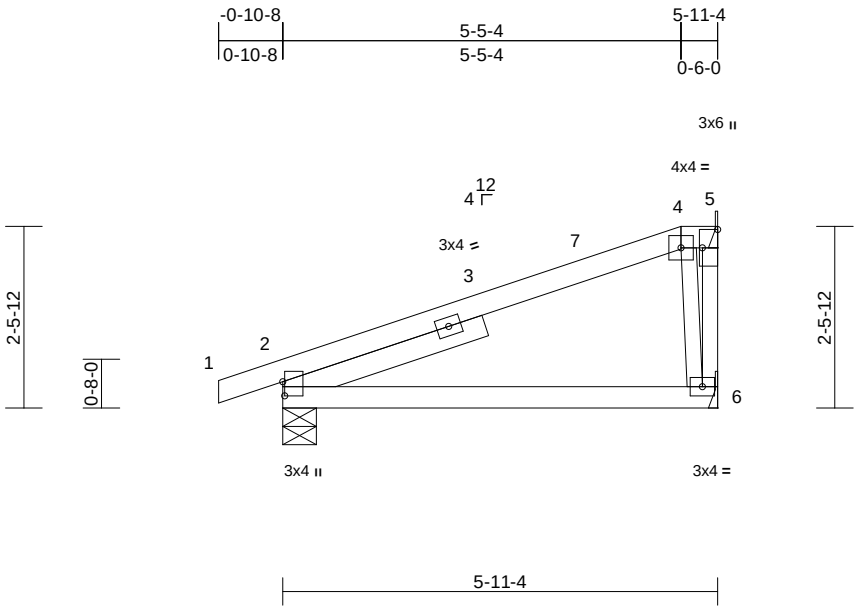
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-4 to 5-1-4, Interior (1) 5-1-4 to 13-9-8, Exterior(2E) 13-9-8 to 16-1-5 zone; cantilever left and right exposed ; 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
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) Provide adequate drainage to prevent water ponding.
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) N/A
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

August 12,2025

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 350
P250562-01	M1	Half Hip	1	1	I75564055 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.99 S 8.63 Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Tue Aug 12 08:39:04 Page: 1
ID:UpDkhfgMbjCW96LiYrFlwqzXOLT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:31.5

Plate Offsets (X, Y): [2:0-2-5,0-0-5], [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	0.64	Vert(LL)	-0.07	2-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.14	2-6	>504	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-10-10

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 5= Mechanical, 6= Mechanical
Max Horiz 2=102 (LC 9)
Max Uplift 2=-92 (LC 8), 5=-6 (LC 9), 6=-57 (LC 8)
Max Grav 2=328 (LC 1), 5=14 (LC 1), 6=244 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-115/50, 4-5=-45/49, 5-6=0/0
BOT CHORD 2-6=-77/64
WEBS 4-6=-189/254

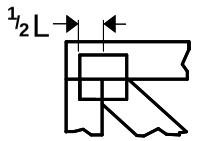
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-5-4, Exterior(2E) 5-5-4 to 5-10-0 zone; cantilever left and right exposed ; 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) 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) Bearings are assumed to be: , Joint 2 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 6 lb uplift at joint 5 and 57 lb uplift at joint 6.
7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard

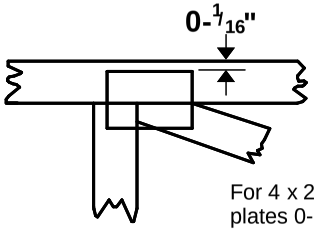
August 12,2025

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

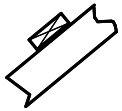
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

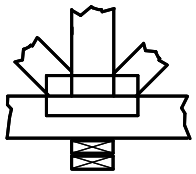
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

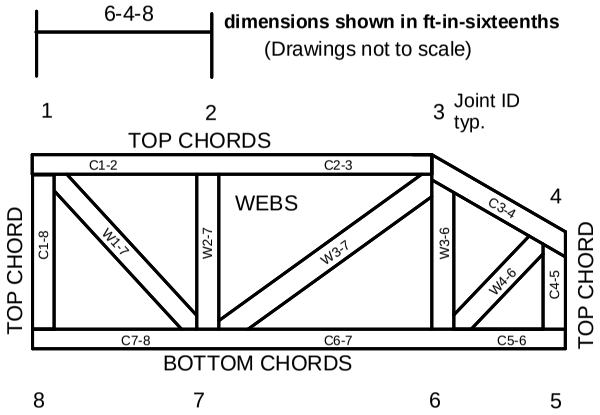


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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