

RE: P240547-01 - Roof - HR Lot 78

Site Information:

Project Customer: Clayton Properties Project Name: Sheffield - Modern Prairie
Lot/Block: 78 Subdivision: Hawthorne Ridge
Model:

Address: 1542 SW Arbor Falls Dr

City: Lee's Summit

State: MO

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

Design Code: IRC2018/TPI2014

Wind Code: ASCE 7-16 Wind Speed: 115 mph

Roof Load: 45.0 psf

Design Program: MiTek 20/20 8.6

Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16

Floor Load: N/A psf

Mean Roof Height (feet): 35

Exposure Category: C

MiTek, Inc.

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I65739510	A1	5/22/24	35	I65739544	J7	5/22/24
2	I65739511	A2	5/22/24	36	I65739545	LG1	5/22/24
3	I65739512	A3	5/22/24	37	I65739546	LG2	5/22/24
4	I65739513	A4	5/22/24	38	I65739547	LG3	5/22/24
5	I65739514	A5	5/22/24	39	I65739548	LG4	5/22/24
6	I65739515	A6	5/22/24	40	I65739549	LG5	5/22/24
7	I65739516	A7	5/22/24	41	I65739550	V1	5/22/24
8	I65739517	A8	5/22/24	42	I65739551	V2	5/22/24
9	I65739518	A9	5/22/24	43	I65739552	V3	5/22/24
10	I65739519	A10	5/22/24	44	I65739553	V4	5/22/24
11	I65739520	A11	5/22/24	45	I65739554	V5	5/22/24
12	I65739521	A12	5/22/24				
13	I65739522	A13	5/22/24				
14	I65739523	A14	5/22/24				
15	I65739524	A15	5/22/24				
16	I65739525	A16	5/22/24				
17	I65739526	A17	5/22/24				
18	I65739527	B1	5/22/24				
19	I65739528	B2	5/22/24				
20	I65739529	B3	5/22/24				
21	I65739530	C1	5/22/24				
22	I65739531	C2	5/22/24				
23	I65739532	CG1	5/22/24				
24	I65739533	CG2	5/22/24				
25	I65739534	D1	5/22/24				
26	I65739535	D2	5/22/24				
27	I65739536	D3	5/22/24				
28	I65739537	GR1	5/22/24				
29	I65739538	J1	5/22/24				
30	I65739539	J2	5/22/24				
31	I65739540	J3	5/22/24				
32	I65739541	J4	5/22/24				
33	I65739542	J5	5/22/24				
34	I65739543	J6	5/22/24				

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.

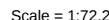
Truss Design Engineer's Name: Nathan Fox

My license renewal date for the state of Missouri is December 31, 2024.

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.



Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:00 Page: 1
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[2:0-5-6,0-2-1], [3:0-4-8,0-1-12], [4:0-2-8,0-2-0], [6:0-4-0,0-4-8], [8:0-2-8,0-2-0], [9:0-4-8,0-1-12], [10:0-5-6,0-2-1], [13:0-2-8,0-2-8], [14:0-2-8,0-3-0], [15:0-7-10,0-4-8], [17:0-7-10,0-4-8], [18:0-2-8,0-3-0], [19:0-2-8,0-2-8]

May 22, 2024

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

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

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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78
P240547-01	A1	Hip Girder	1	2	I65739510
					Job Reference (optional)

Vert: 3=-131 (F), 17=-39 (F), 20=-420 (F), 12=-420 (F), 9=-131 (F), 15=-39 (F), 16=-39 (F), 6=-131 (F), 22=-131 (F), 23=-131 (F), 24=-131 (F), 26=-131 (F), 27=-131 (F), 28=-131 (F), 29=-131 (F), 30=-131 (F), 31=-131 (F), 33=-131 (F), 34=-131 (F), 35=-131 (F), 37=-39 (F), 38=-39 (F), 39=-39 (F), 40=-39 (F), 41=-39 (F), 42=-39 (F), 43=-39 (F), 44=-39 (F), 45=-39 (F), 46=-39 (F)

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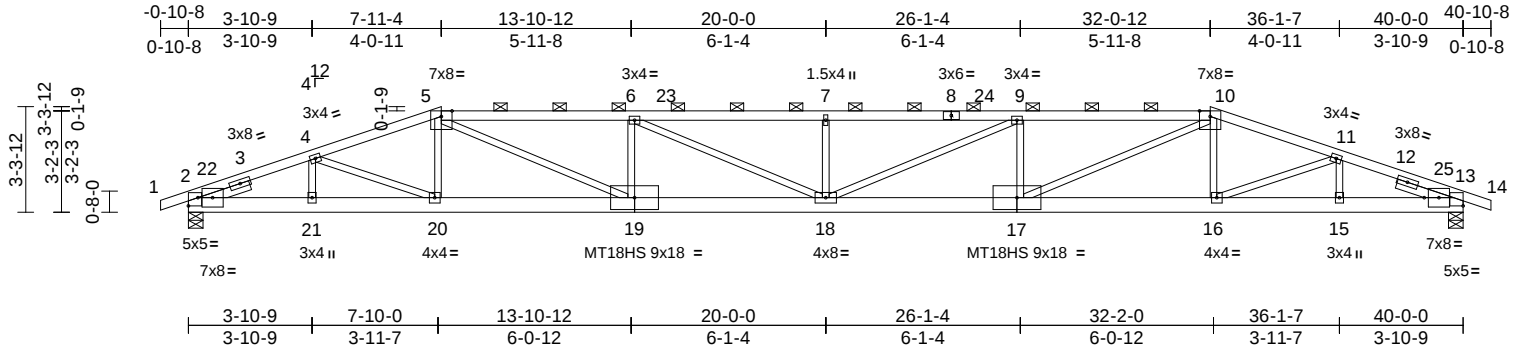
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	165739511
P240547-01	A2	Hip	1	1	Job Reference (optional)	

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Scale = 1:72.3

Plate Offsets (X, Y): [2:0-1-9,0-3-8], [2:Edge,0-3-2], [13:0-1-9,0-3-8], [13:Edge,0-3-2]

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	0.60	Vert(LL)	-0.54	18	>884	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.97	18	>491	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.15	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 186 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x6 SPF No.2 *Except* 19-17:2x6 SP 2400F 2.0E
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 1-8-2, Right 2x4 SP No.2 -- 1-10-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-4-11 oc purlins, except 2-0-0 oc purlins (2-10-10 max.): 5-10. Rigid ceiling directly applied or 7-11-15 oc bracing.
BOT CHORD	

REACTIONS	(size) 2=0-5-8, 13=0-5-8
	Max Horiz 2=-54 (LC 13)
	Max Uplift 2=-428 (LC 8), 13=-428 (LC 9)
	Max Grav 2=1857 (LC 1), 13=1857 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/1, 2-4=-3811/922, 4-5=-4122/1017, 5-6=-5737/1416, 6-7=-6271/1475, 7-9=-6271/1475, 9-10=-5738/1416, 10-11=-4122/1017, 11-13=-3832/925, 13-14=0/1
BOT CHORD	2-21=-805/3470, 20-21=-805/3470, 18-20=-1261/5707, 16-18=-1266/5707, 15-16=-803/3483, 13-15=-803/3483
WEBS	5-20=-32/163, 10-16=-31/164, 5-19=-477/2108, 10-17=-477/2109, 4-20=-115/639, 11-16=-113/626, 6-19=-798/285, 6-18=-162/706, 7-18=-417/187, 9-18=-162/706, 9-17=-798/285, 4-21=-155/94, 11-15=-139/91

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 3-10-9, Interior (1) 3-10-9 to 7-11-4, Exterior(2R) 7-11-4 to 15-0-2, Interior (1) 15-0-2 to 32-0-12, Exterior(2R) 32-0-12 to 39-1-10, Interior (1) 39-1-10 to 40-10-8 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 SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 428 lb uplift at joint 2 and 428 lb uplift at joint 13.
- 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



May 22,2024

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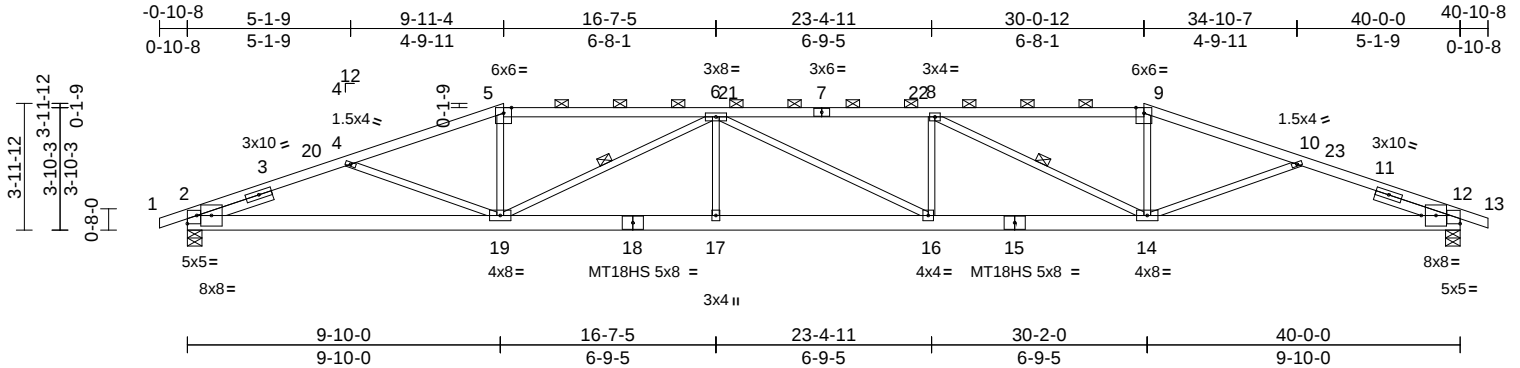
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	165739512
P240547-01	A3	Hip	1	1	Job Reference (optional)	

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Scale = 1:72.4

Plate Offsets (X, Y): [2:0-1-9,0-4-0], [2:Edge,0-3-2], [12:0-1-9,0-4-0], [12:Edge,0-3-2]

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	0.86	Vert(LL)	-0.46	16-17	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.84	16-17	>566	180	MT18HS 197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.18	12	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 179 lb FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-5-9, Right 2x4 SP No.2 -- 2-5-9

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-7-13 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

WEBS 1 Row at midpt 6-19, 8-14
REACTIONS (size) 2=0-5-8, 12=0-5-8
Max Horiz 2=-67 (LC 13)
Max Uplift 2=-421 (LC 8), 12=-421 (LC 9)
Max Grav 2=1857 (LC 1), 12=1857 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/1, 2-4=-4057/1075, 4-5=-3946/972, 5-6=-3707/949, 6-8=-4974/1273, 8-9=-3709/950, 9-10=-3947/973, 10-12=-4058/1076, 12-13=0/1
BOT CHORD 2-19=-942/3699, 17-19=-1108/4982, 16-17=-1108/4982, 14-16=-1107/4974, 12-14=-940/3700
WEBS 5-19=-101/799, 6-19=-1558/386, 6-17=0/253, 6-16=-136/119, 8-16=0/249, 8-14=-1548/382, 9-14=-101/798, 4-19=0/323, 10-14=0/324

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 30-0-12, Exterior(2R) 30-0-12 to 37-1-10, Interior (1) 37-1-10 to 40-10-8 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 SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 421 lb uplift at joint 2 and 421 lb uplift at joint 12.
- 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



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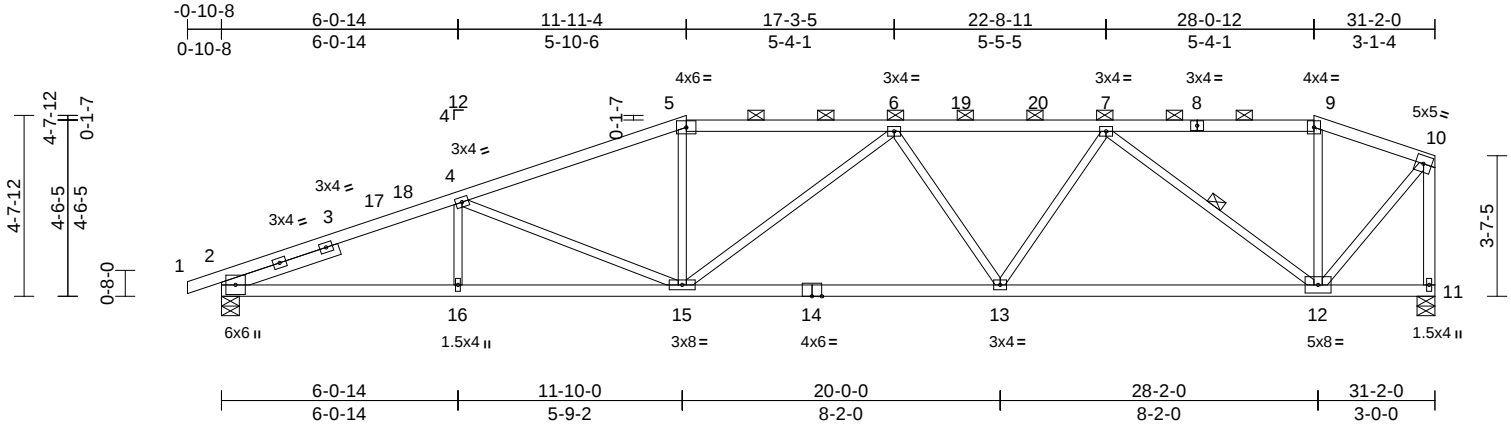
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	A4	Hip	1	1	Job Reference (optional)	I65739513

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Scale = 1:59.2

Plate Offsets (X, Y): [2:0-3-13,0-1-5]

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	0.98	Vert(LL)	-0.19	15-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.40	13-15	>937	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.12	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 140 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 11-10:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-2-0

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-4-6 max.): 5-9.

BOT CHORD Rigid ceiling directly applied or 6-2-6 oc bracing.

WEBS 1 Row at midpt 7-12

REACTIONS (size) 2=0-5-8, 11=0-5-8
Max Horiz 2=145 (LC 9)
Max Uplift 2=338 (LC 8), 11=280 (LC 9)
Max Grav 2=1458 (LC 1), 11=1395 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-3153/772, 4-5=-2625/684, 5-6=-2433/676, 6-7=-2345/634, 7-9=-882/301, 9-10=-950/293, 10-11=-1391/390

BOT CHORD 2-16=-902/2866, 15-16=-902/2866, 13-15=-735/2547, 12-13=-619/2034, 11-12=-65/69

WEBS 4-16=0/214, 4-15=-463/217, 5-15=-36/421, 9-12=-27/115, 10-12=-358/1350, 6-13=-381/197, 6-15=-343/109, 7-13=-72/582, 7-12=-1474/419

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 28-0-12, Exterior(2E) 28-0-12 to 31-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 338 lb uplift at joint 2 and 280 lb uplift at joint 11.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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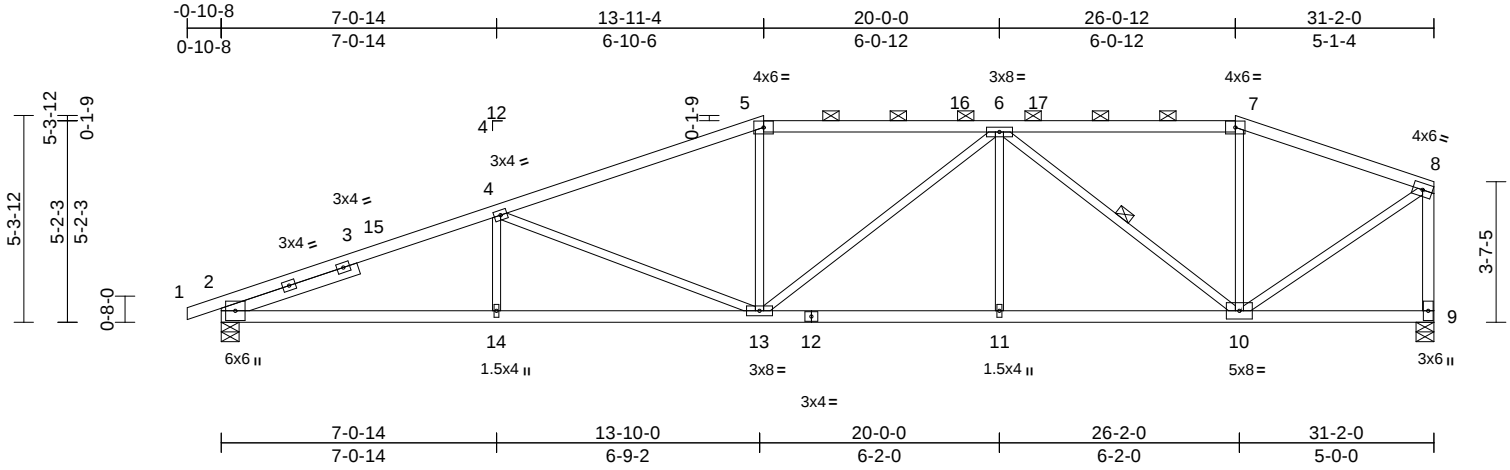
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	A5	Hip	1	1	Job Reference (optional)	165739514

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Scale = 1:59.2

Plate Offsets (X, Y): [2:0-3-13,0-1-5]

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	0.75	Vert(LL)	-0.18	13-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.35	13-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.11	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 142 lb	FT = 20%

LUMBER

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

BRACING

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

WEBS 1 Row at midpt 6-10

REACTIONS (size) 2=0-5-8, 9=0-5-8
Max Horiz 2=136 (LC 9)
Max Uplift 2=-333 (LC 8), 9=-267 (LC 9)
Max Grav 2=1458 (LC 1), 9=1395 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-3134/785, 4-5=-2402/653, 5-6=-2210/662, 6-7=-1192/420, 7-8=-1301/404, 8-9=-1352/440
BOT CHORD 2-14=-899/2864, 13-14=-899/2864, 11-13=-641/2086, 10-11=-641/2086, 9-10=-61/71

WEBS 4-14=0/282, 4-13=-708/259, 5-13=-2/359, 6-13=-110/184, 6-11=0/243, 6-10=-1185/312, 7-10=-26/159, 8-10=-405/1415

NOTES

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=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 21-0-2, Interior (1) 21-0-2 to 26-0-12, Exterior(2E) 26-0-12 to 31-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 333 lb uplift at joint 2 and 267 lb uplift at joint 9.
- 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



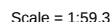
May 22, 2024

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

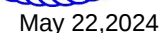
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:02 Page: 1
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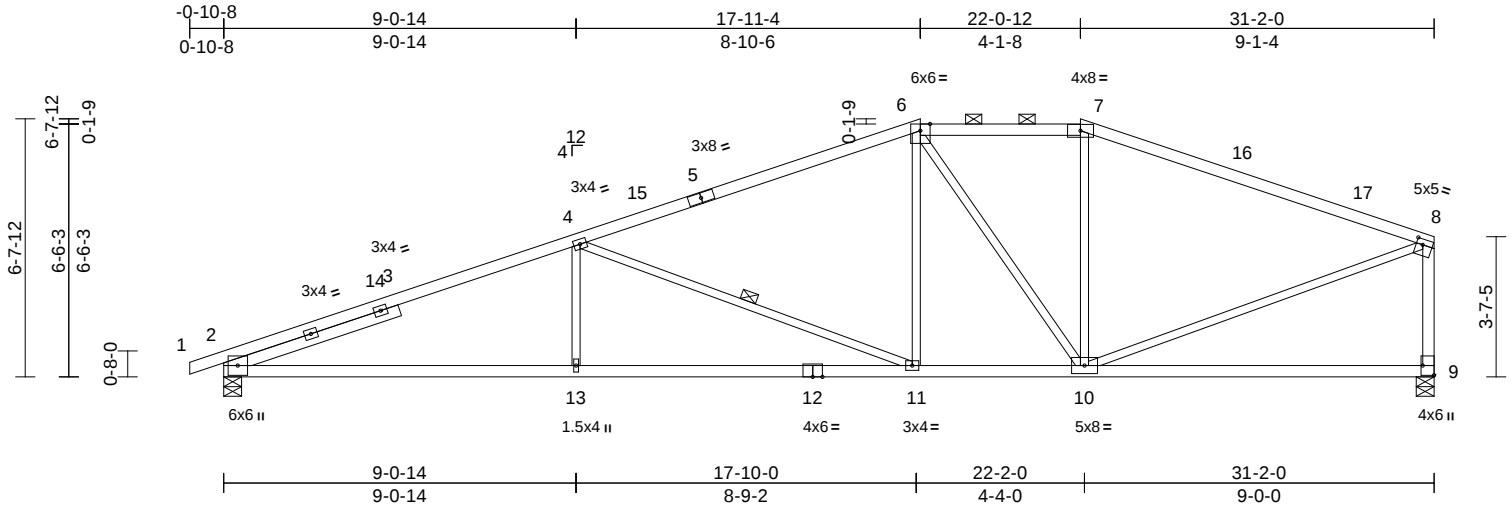
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	A7	Hip	1	1	Job Reference (optional)	I65739516

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:02

Page: 1

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Scale = 1:59.3

Plate Offsets (X, Y): [2:0-3-13,0-1-5], [8:0-2-0,0-1-12], [9:Edge,0-3-8]

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	0.95	Vert(LL)	-0.19	9-10	>999	240	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.40	9-10	>926	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.09	9	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 141 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E *Except* 6-7:2x4 SP No.2, 1-5:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 12-9:2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 9-8:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 4-9-0

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-3-7 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 6-4-9 oc bracing.

WEBS 1 Row at midpt 4-11

REACTIONS (size) 2=0-5-8, 9=0-5-8
Max Horiz 2=127 (LC 12)
Max Uplift 2=-318 (LC 8), 9=-235 (LC 9)
Max Grav 2=1458 (LC 1), 9=1395 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-3056/738, 4-6=-1922/563, 6-7=-1457/530, 7-8=-1631/493, 8-9=-1308/452
BOT CHORD 2-13=-841/2789, 11-13=-841/2789, 10-11=-527/1718, 9-10=-84/116
WEBS 4-13=0/392, 4-11=-1153/349, 6-11=-60/532, 6-10=-591/157, 7-10=-140/194, 8-10=-378/1454

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 17-11-4, Exterior(2E) 17-11-4 to 22-0-12, Exterior(2R) 22-0-12 to 29-1-10, Interior (1) 29-1-10 to 31-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) 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 SP 1650F 1.5E crushing capacity of 565 psi, Joint 9 SP No.2 crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 318 lb uplift at joint 2 and 235 lb uplift at joint 9.
- 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



May 22, 2024

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

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

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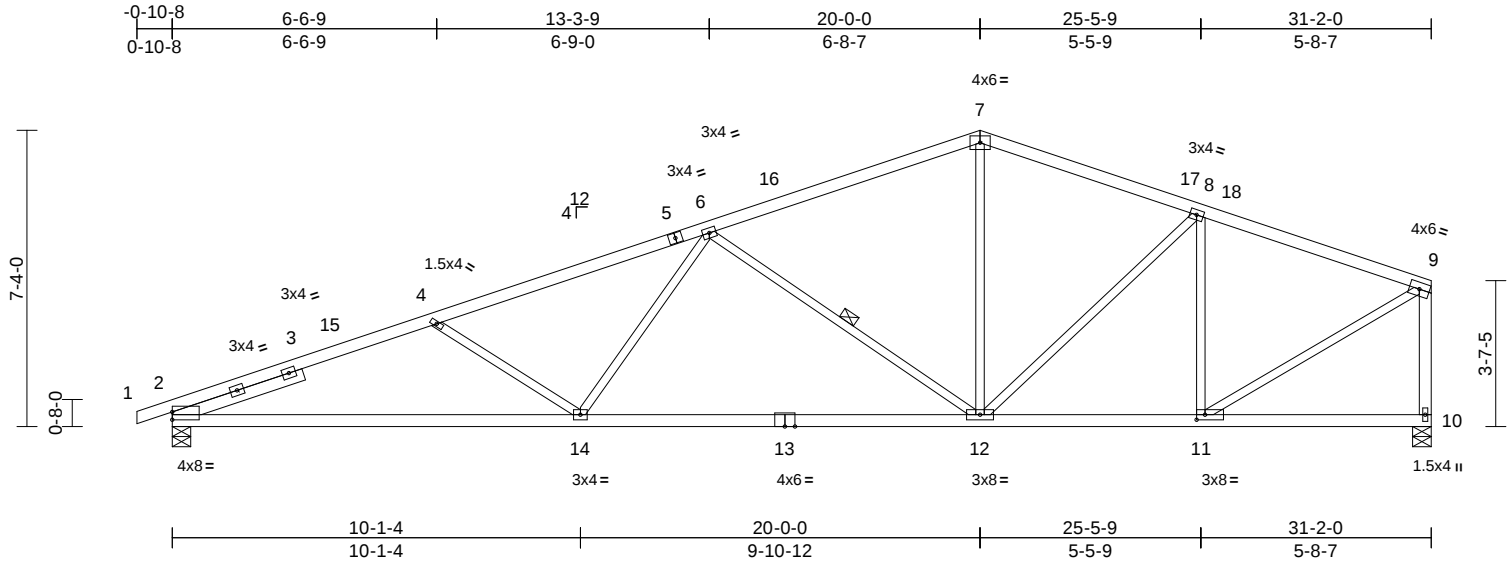
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	165739517
P240547-01	A8	Common	3	1	Job Reference (optional)	

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

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Scale = 1:57

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

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	0.85	Vert(LL)	-0.23	2-14	>999	240	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.50	2-14	>752	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.09	10	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 141 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 13-10:2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 10-9:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-4-14

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-3-2 oc bracing.

WEBS 1 Row at midpt 6-12

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=142 (LC 12)
Max Uplift 2=-306 (LC 8), 10=-215 (LC 9)
Max Grav 2=1458 (LC 1), 10=1395 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-3103/743, 4-6=-2739/619, 6-7=-1604/466, 7-8=-1585/462, 8-9=-1388/390, 9-10=-1338/400
BOT CHORD 2-14=-804/2831, 12-14=-636/2264, 11-12=-371/1266, 10-11=-61/75
WEBS 7-12=-101/586, 9-11=-363/1442, 4-14=-375/251, 6-14=-9/552, 6-12=-1027/331, 8-12=-60/358, 8-11=-654/255

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 20-0-0, Exterior(2R) 20-0-0 to 25-0-0, Interior (1) 25-0-0 to 31-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Bearings are assumed to be: Joint 2 SP 1650F 1.5E crushing capacity of 565 psi, Joint 10 SP No.2 crushing capacity of 565 psi.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 306 lb uplift at joint 2 and 215 lb uplift at joint 10.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 22, 2024

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

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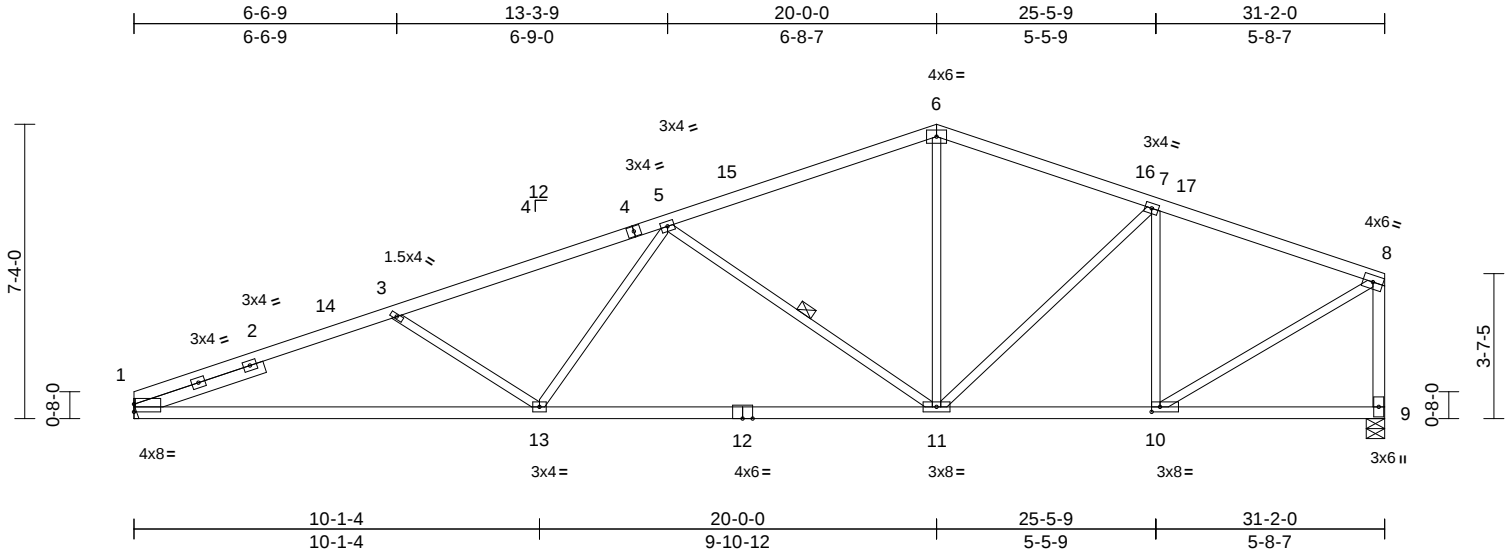
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	A9	Common	2	1	Job Reference (optional)	165739518

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

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Scale = 1:57.4

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

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	0.97	Vert(LL)	-0.23	1-13	>999	240	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.51	1-13	>735	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.09	9	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 140 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 12-9:2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 9-8:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-4-14

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-3-1 oc bracing.

WEBS 1 Row at midpt 5-11

REACTIONS (size) 1= Mechanical, 9=0-5-8
Max Horiz 1=144 (LC 16)
Max Uplift 1=-265 (LC 8), 9=-215 (LC 9)
Max Grav 1=1396 (LC 1), 9=1396 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-3113/774, 3-5=-2746/638, 5-6=-1605/471, 6-7=-1587/467, 7-8=-1389/393, 8-9=-1339/400
BOT CHORD 1-13=-808/2840, 11-13=-637/2267, 10-11=-372/1267, 9-10=-61/75
WEBS 6-11=-104/587, 8-10=-363/1443, 3-13=-379/265, 5-13=-18/554, 5-11=-1030/332, 7-11=-60/359, 7-10=-654/255

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 20-0-0, Exterior(2R) 20-0-0 to 25-0-0, Interior (1) 25-0-0 to 31-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Bearings are assumed to be: , Joint 9 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 265 lb uplift at joint 1 and 215 lb uplift at joint 9.
- 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



May 22, 2024

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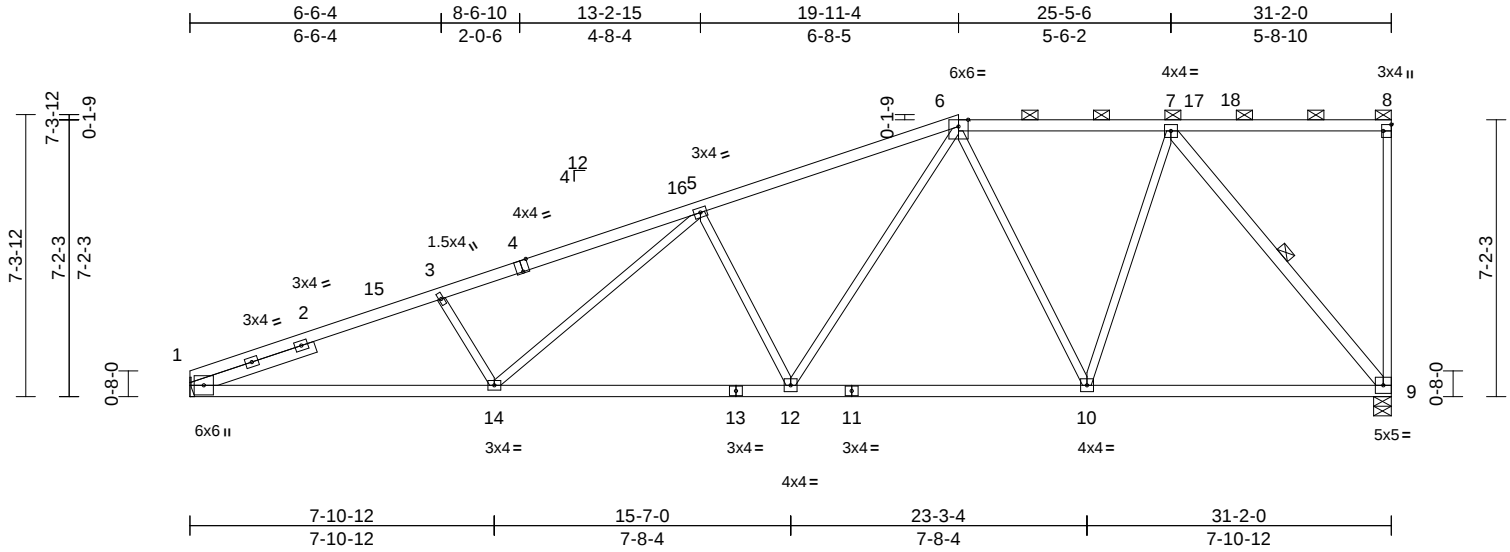
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	A10	Half Hip	1	1	Job Reference (optional)	I65739519

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Page: 1



Scale = 1:59.8

Plate Offsets (X, Y): [1:0-3-13,0-1-5], [4:0-2-0,Edge], [8: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	0.78	Vert(LL)	-0.18	12-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.36	12-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
Weight: 148 lb											FT = 20%	

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 1-4:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 9-7:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-4-14

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-10 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 5-11-2 oc bracing.

WEBS 1 Row at midpt 7-9

REACTIONS (size) 1= Mechanical, 9=0-5-8
Max Horiz 1=327 (LC 9)
Max Uplift 1=-289 (LC 8), 9=-321 (LC 8)
Max Grav 1=1398 (LC 1), 9=1398 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-3=-3143/755, 3-5=-2939/737,
5-6=-2140/600, 6-7=-1190/418,
7-8=-144/151, 8-9=-160/88

BOT CHORD 1-14=-974/2867, 12-14=-819/2283,
10-12=-550/1446, 9-10=-394/963
WEBS 6-12=-241/963, 6-10=-598/268,
7-10=-132/744, 7-9=-1513/475,
3-14=-280/217, 5-14=-134/596,
5-12=-741/320

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0,
Interior (1) 5-0-0 to 19-11-4, Exterior(2R) 19-11-4 to
27-0-2, Interior (1) 27-0-2 to 31-0-12 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: , Joint 9 SP No.2 crushing
capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 321 lb uplift at
joint 9 and 289 lb uplift at joint 1.
- This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.

LOAD CASE(S) Standard



May 22, 2024

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

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

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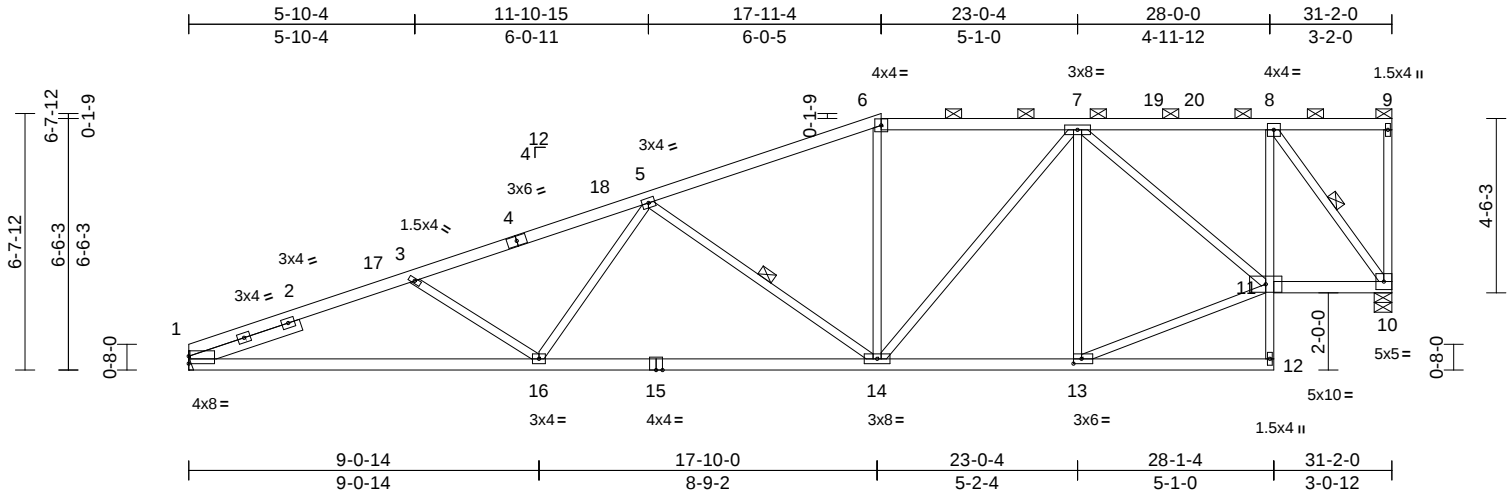
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	A11	Half Hip	1	1	Job Reference (optional)	I65739520

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:03

Page: 1

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Scale = 1:59.7

Plate Offsets (X, Y): [1:Edge,0-2-5], [13:0-2-8,0-1-8]

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	0.67	Vert(LL)	-0.17	14-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.39	14-16	>967	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 149 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-4:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 1-15:2x4 SP 1650F 1.5E, 12-8:2x3 SPF No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-0-7
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-7-0 oc purlins, except 2-0-0 oc purlins (4-1-10 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 6-10-9 oc bracing.
WEBS 1 Row at midpt 8-10, 5-14
REACTIONS (size) 1= Mechanical, 10=0-5-8
Max Horiz 1=273 (LC 12)
Max Uplift 1=-278 (LC 8), 10=-332 (LC 8)
Max Grav 1=1398 (LC 1), 10=1398 (LC 1)
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-3139/721, 3-5=-2822/604, 5-6=-1887/464, 6-7=-1723/477, 7-8=-934/265, 8-9=0/0
BOT CHORD 1-16=-876/2852, 14-16=-723/2419, 13-14=-371/1370, 12-13=-3/24, 11-12=0/91, 8-11=-208/983, 10-11=-264/932
WEBS 6-14=0/293, 7-14=-170/547, 7-11=-571/166, 9-10=-75/47, 8-10=-1589/449, 7-13=-449/208, 11-13=-397/1451, 3-16=-260/237, 5-16=-15/463, 5-14=-860/309

- 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 17-11-4, Exterior(2R) 17-11-4 to 25-0-2, Interior (1) 25-0-2 to 31-0-12 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: , Joint 10 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 278 lb uplift at joint 1 and 332 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

NOTES

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



May 22, 2024

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

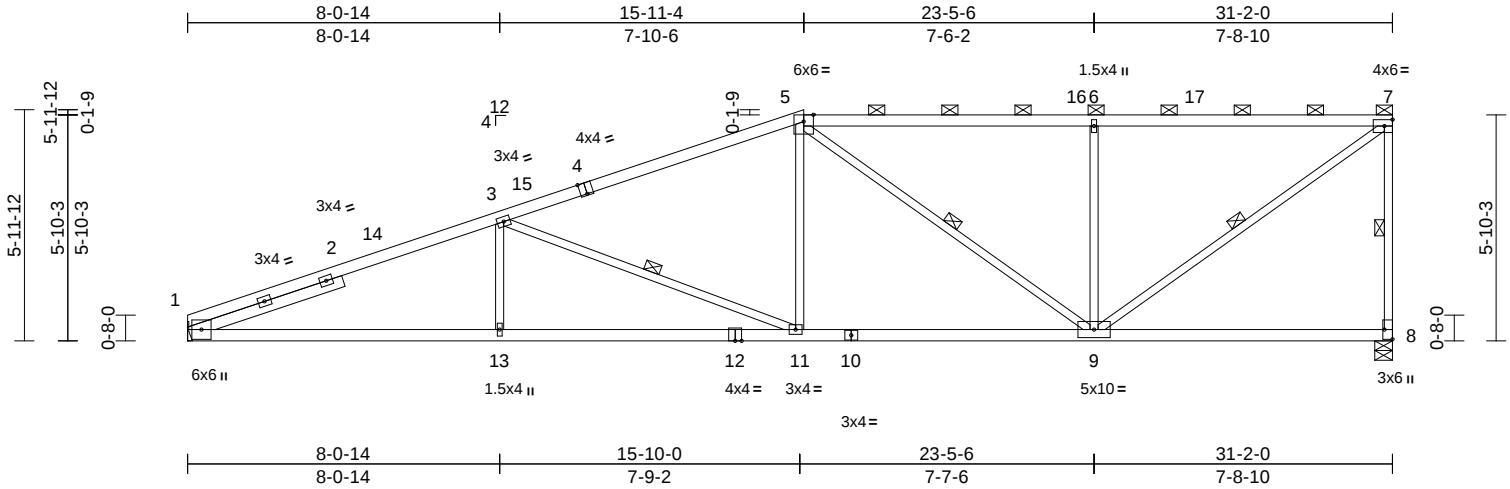
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	A12	Half Hip	1	1	Job Reference (optional)	I65739521

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:03
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Page: 1



Scale = 1:59.6

Plate Offsets (X, Y): [1:0-3-13,0-1-5], [4:0-2-0,Edge], [8: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	0.92	Vert(LL)	-0.18	11-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.36	11-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 137 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-2-10

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-6-4 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 5-11-15 oc bracing.

WEBS 1 Row at midpt 7-8, 3-11, 5-9, 7-9

REACTIONS (size) 1= Mechanical, 8=0-5-8
Max Horiz 1=264 (LC 9)
Max Uplift 1=295 (LC 8), 8=315 (LC 8)
Max Grav 1=1398 (LC 1), 8=1398 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-3=-3113/747, 3-5=-2182/588,
5-6=-1543/497, 6-7=-1541/495,
7-8=-1330/429

BOT CHORD 1-13=-945/2845, 11-13=-945/2845,
9-11=-656/1980, 8-9=-102/120

WEBS 3-13=0/332, 3-11=-920/311, 5-11=-31/516,
5-9=-549/201, 6-9=-634/291, 7-9=-508/1885

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 15-11-4, Exterior(2R) 15-11-4 to 23-0-2, Interior (1) 23-0-2 to 31-0-12 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 8 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 315 lb uplift at joint 8 and 295 lb uplift at joint 1.
- 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

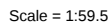


May 22, 2024

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

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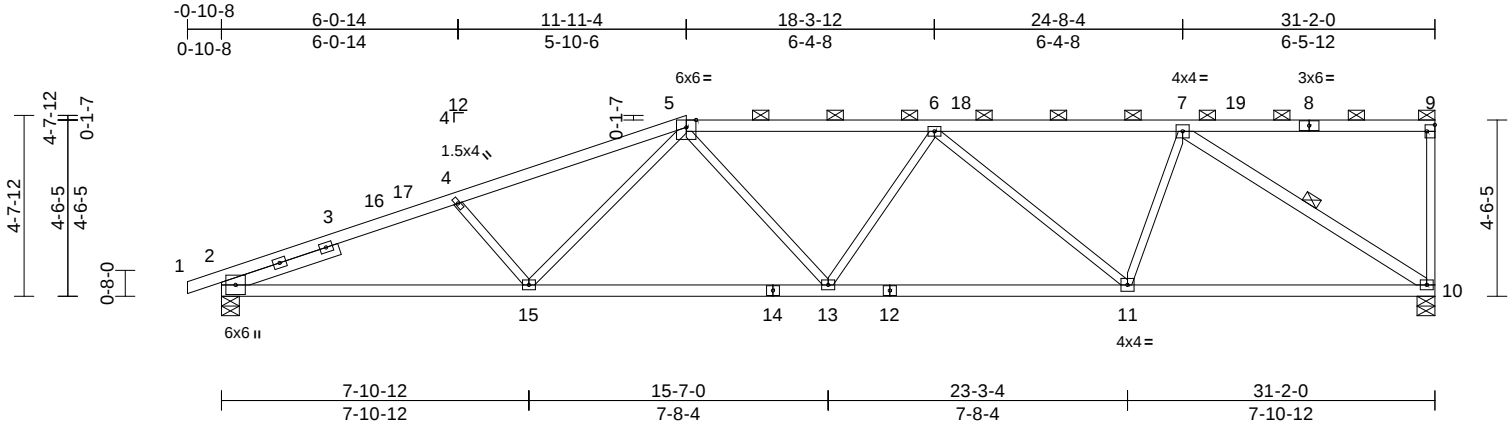
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	165739523
P240547-01	A14	Half Hip	1	1	Job Reference (optional)	

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:03

Page: 1

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Scale = 1:59.2

Plate Offsets (X, Y): [2:0-3-13,0-1-5], [9:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.20	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.39	13-15	>949	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.12	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 138 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 1-5:2x4 SP 1650F

1.5E

BOT CHORD 2x4 SP No.2

WEBS 2x3 SPF No.2 *Except* 7-10:2x4 SP No.2

SLIDER Left 2x4 SP No.2 -- 3-2-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-1-13 oc purlins, except end verticals, and 2-0-0 oc purlins (2-7-4 max.): 5-9.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

WEBS 1 Row at midpt 7-10

REACTIONS (size) 2=0-5-8, 10=0-5-8

Max Horiz 2=199 (LC 9)

Max Uplift 2=-340 (LC 8), 10=-310 (LC 8)

Max Grav 2=1460 (LC 1), 10=1397 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-3147/782, 4-5=-2917/737, 5-6=-2532/677, 6-7=-1954/520, 7-9=-102/97, 9-10=-189/113

BOT CHORD 2-15=-947/2861, 13-15=-745/2409,

11-13=-712/2524, 10-11=-510/1735

WEBS 4-15=-225/220, 5-15=-95/451, 5-13=-3/342,

6-13=-131/146, 6-11=-750/266,

7-11=-78/689, 7-10=-2058/533

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 31-0-12 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 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 310 lb uplift at joint 10 and 340 lb uplift at joint 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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



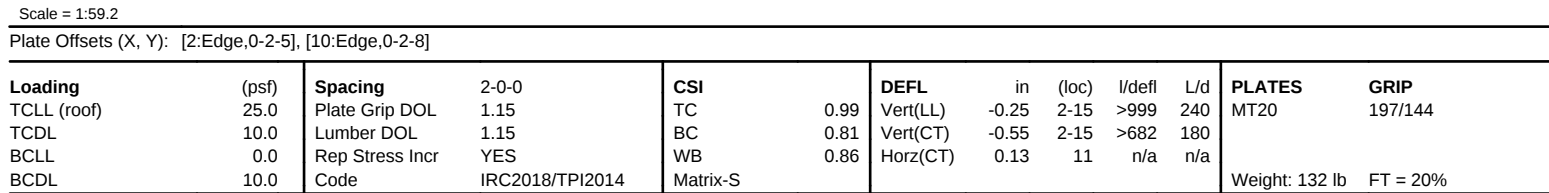
May 22, 2024

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

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

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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:03 Page: 1
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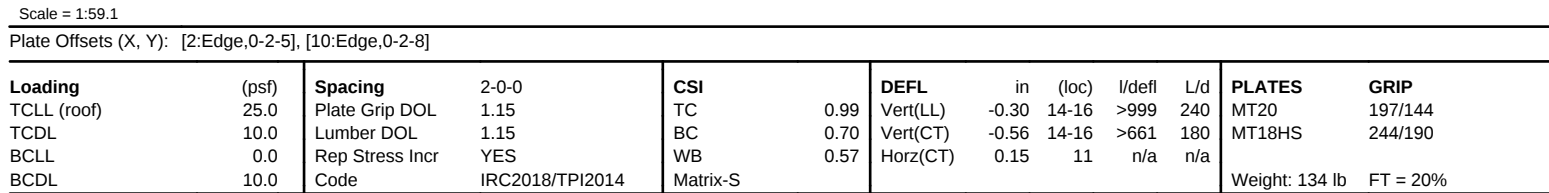
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8,
Interior (1) 4-1-8 to 9-11-4, Exterior(2R) 9-11-4 to 17-0-2,
Interior (1) 17-0-2 to 31-0-12 zone; cantilever 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 2 SP 1650F 1.5E
crushing capacity of 565 psi, Joint 11 SP No.2 crushing
capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 309 lb uplift at
joint 11 and 342 lb uplift at joint 2.
- 7) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.

STATE OF MISSOURI
NATHANIEL
FOX
NUMBER
PE-2022042259
PROFESSIONAL ENGINEER

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

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ID:UvOnZt6ESPASeMc0lzOmc6zZ?ql-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J34zJC?f



- 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 31-0-12 zone 1; 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 gpw 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) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 307 lb uplift at
joint 11 and 343 lb uplift at joint 2.
- 8) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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404-4200 MitekUSA.com
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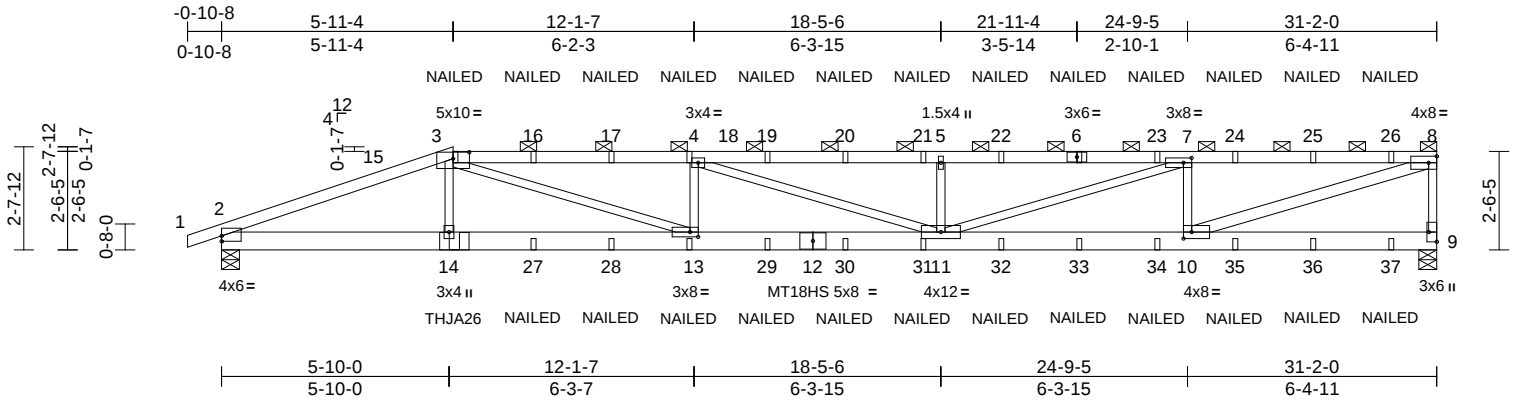
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	I65739526
P240547-01	A17	Half Hip Girder	1	2	Job Reference (optional)	

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:04

Page: 1

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Scale = 1:59.1

Plate Offsets (X, Y): [2:Edge,0-1-10], [3:0-5-0,0-2-0], [7:0-2-8,0-1-8], [9:Edge,0-2-8], [10:0-2-8,0-2-0], [13:0-2-8,0-1-8]

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	0.89	Vert(LL)	-0.39	11-13	>946	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.71	11-13	>524	180	MT18HS 244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.06	9	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 307 lb FT = 20%											

LUMBER	
TOP CHORD	2x4 SP No.2 *Except* 3-6:2x4 SP 2400F 2.0E, 6-8:2x4 SP 1650F 1.5E
BOT CHORD	2x6 SP 2400F 2.0E
WEBS	2x3 SPF No.2 *Except* 8-10:2x4 SP No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 4-4-5 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-15 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=102 (LC 11)
Max Uplift	2=-772 (LC 8), 9=-751 (LC 8)
Max Grav	2=2714 (LC 1), 9=2728 (LC 1)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/1, 2-3=-6730/1916, 3-4=-9594/2760, 4-5=-9582/2700, 5-7=-9582/2700, 7-8=-6569/1847, 8-9=-2577/815
BOT CHORD	2-14=-1836/6209, 13-14=-1834/6180, 11-13=-2724/9591, 10-11=-1857/6569, 9-10=-83/123
WEBS	3-14=-36/652, 3-13=-1014/3714, 8-10=-1875/6814, 4-13=-1014/503, 4-11=-9/62, 5-11=-820/435, 7-11=-901/3182, 7-10=-1955/787

NOTES

- 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, 2x3 - 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, 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, 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 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 751 lb uplift at joint 9 and 772 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie 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.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-8=-70, 2-9=-20
Concentrated Loads (lb)
Vert: 3=-131 (B), 6=-131 (B), 14=-420 (B), 13=-39 (B), 4=-131 (B), 16=-131 (B), 17=-131 (B), 19=-131 (B), 20=-131 (B), 21=-131 (B), 22=-131 (B), 23=-131 (B), 24=-131 (B), 25=-131 (B), 26=-131 (B), 27=-39 (B), 28=-39 (B), 29=-39 (B), 30=-39 (B), 31=-39 (B), 32=-39 (B), 33=-39 (B), 34=-39 (B), 35=-39 (B), 36=-39 (B), 37=-39 (B)



May 22,2024

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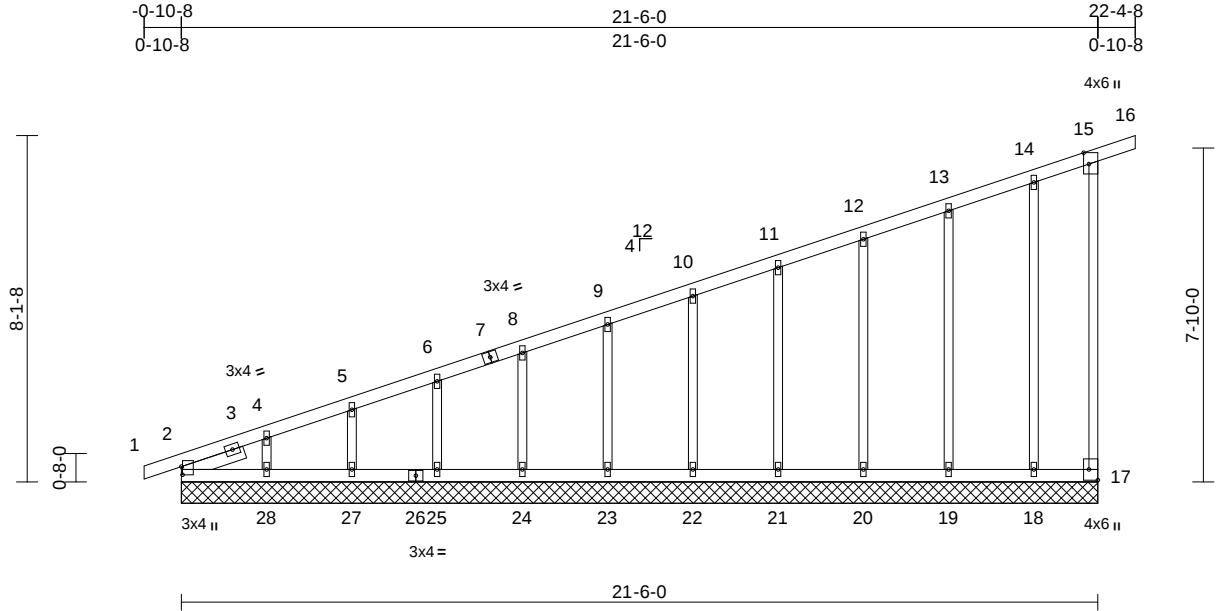
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	I65739527
P240547-01	B1	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:04
ID:uDYVd5xSl6PRycXKw08U29zZ?qW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:54.1

Plate Offsets (X, Y): [2:0-2-5,0-0-5], [15:0-3-3,Edge], [17: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	0.88	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	17	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 107 lb FT = 20%											

LUMBER

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

BRACING

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

REACTIONS (size)	2=21-6-0, 17=21-6-0, 18=21-6-0, 19=21-6-0, 20=21-6-0, 21=21-6-0, 22=21-6-0, 23=21-6-0, 24=21-6-0, 25=21-6-0, 27=21-6-0, 28=21-6-0
Max Horiz	2=370 (LC 9)
Max Uplift	17=79 (LC 9), 18=41 (LC 8), 19=44 (LC 12), 20=52 (LC 8), 21=48 (LC 12), 22=49 (LC 8), 23=49 (LC 12), 24=49 (LC 8), 25=50 (LC 12), 27=45 (LC 8), 28=101 (LC 12)
Max Grav	2=194 (LC 20), 17=139 (LC 1), 18=141 (LC 1), 19=185 (LC 1), 20=179 (LC 1), 21=180 (LC 1), 22=180 (LC 1), 23=180 (LC 1), 24=180 (LC 1), 25=180 (LC 1), 27=181 (LC 1), 28=180 (LC 1)

FORCES

TOP CHORD	(lb) - Maximum Compression/Maximum Tension
	1-2=-5/0, 2-4=-540/299, 4-5=-458/265, 5-6=-424/255, 6-8=-387/243, 8-9=-351/231, 9-10=-315/219, 10-11=-279/207, 11-12=-242/196, 12-13=-206/184, 13-14=-171/174, 14-15=-121/129, 15-16=-22/0, 15-17=-129/184

BOT CHORD	2-28=-148/194, 27-28=-148/194, 25-27=-148/194, 24-25=-148/194, 23-24=-148/194, 22-23=-148/194, 21-22=-148/194, 20-21=-148/194, 19-20=-148/194, 18-19=-148/194, 17-18=-148/194
WEBS	4-28=-138/192, 5-27=-142/88, 6-25=-139/93, 8-24=-140/91, 9-23=-140/91, 10-22=-140/91, 11-21=-140/91, 12-20=-140/91, 13-19=-144/105, 14-18=-171/140

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(3E) -0-10-8 to 4-0-0, Exterior(2N) 4-0-0 to 22-4-8 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
- 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) All plates are 1.5x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 17, 101 lb uplift at joint 28, 45 lb uplift at joint 27, 50 lb uplift at joint 25, 49 lb uplift at joint 24, 49 lb uplift at joint 23, 49 lb uplift at joint 22, 48 lb uplift at joint 21, 52 lb uplift at joint 20, 44 lb uplift at joint 19 and 41 lb uplift at joint 18.

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



May 22, 2024

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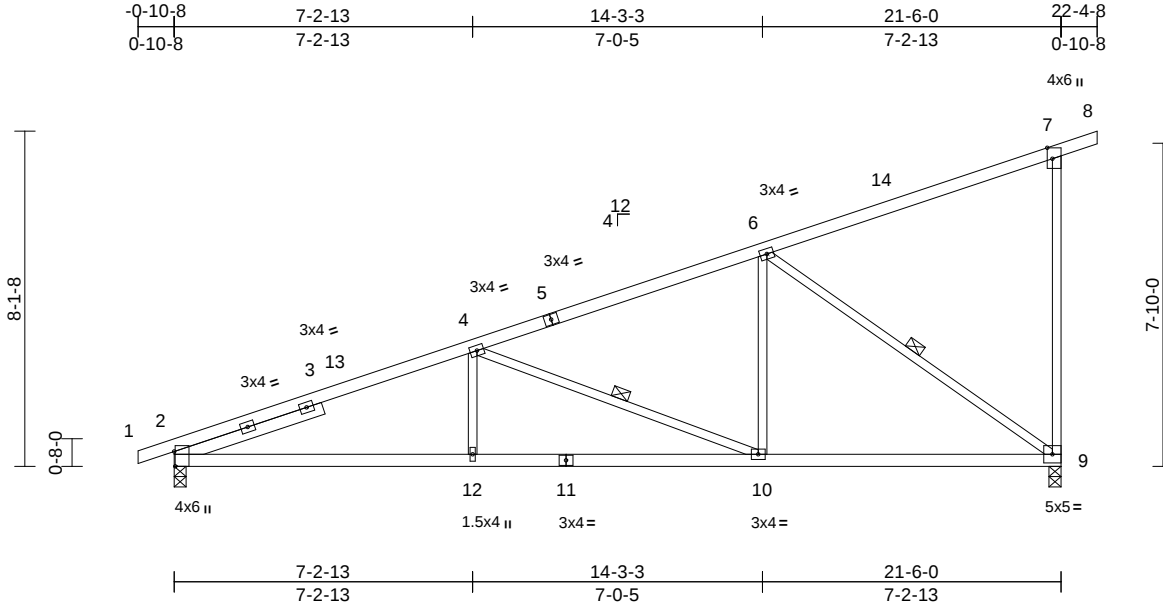
Job P240547-01	Truss B2	Truss Type Monopitch	Qty 1	Ply 1	Roof - HR Lot 78 Job Reference (optional)	I65739528
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:04

Page: 1

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Scale = 1:55.9

Plate Offsets (X, Y): [2:0-4-5,Edge], [7:0-3-3,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	0.79	Vert(LL)	-0.09	9-10	>999	240	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.18	2-12	>999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.05	9	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 99 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 -- 3-9-6

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-7-1 oc bracing.

WEBS 1 Row at midpt 4-10, 6-9

REACTIONS (size) 2=0-3-8, 9=0-3-8
Max Horiz 2=370 (LC 9)
Max Uplift 2=-219 (LC 8), 9=-269 (LC 12)
Max Grav 2=1024 (LC 1), 9=1032 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-1938/407, 4-6=-1100/264, 6-7=-194/138, 7-8=-22/0, 7-9=-275/221
BOT CHORD 2-12=-584/1746, 10-12=-584/1746, 9-10=-372/977
WEBS 4-12=0/289, 4-10=-826/258, 6-10=-23/516, 6-9=-1192/330

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 22-4-8 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
- 2) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) All bearings are assumed to be SP No.2 crushing
capacity of 565 psi.

- 4) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 269 lb uplift at
joint 9 and 219 lb uplift at joint 2.
- 5) 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



May 22,2024

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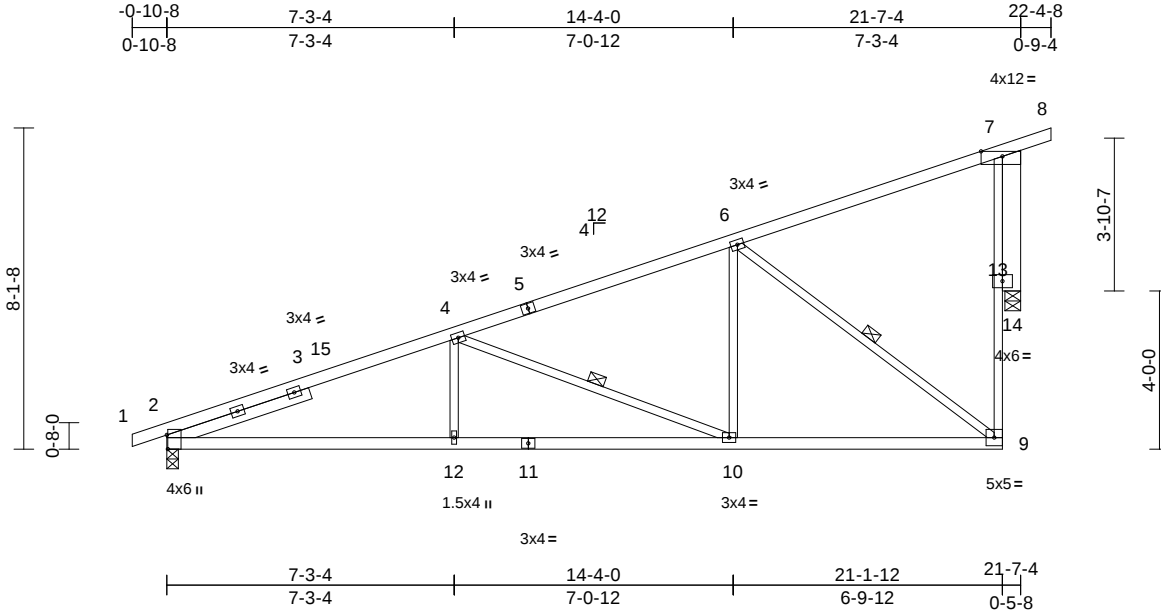
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Job P240547-01	Truss B3	Truss Type Monopitch	Qty 10	Ply 1	Roof - HR Lot 78 Job Reference (optional)	165739529
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:04
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Page: 1



Scale = 1:58.3

Plate Offsets (X, Y): [2:0-4-5,Edge], [7:0-6-8,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	1.00	Vert(LL)	-0.09	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.19	2-12	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.36	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
Weight: 104 lb											FT = 20%	

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
OTHERS 2x6 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-9-9

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-11-9 oc bracing.

WEBS 1 Row at midpt 4-10, 6-9

REACTIONS (size)

2=0-3-8, 14=0-4-12
Max Horiz 2=306 (LC 9)
Max Uplift 2=-197 (LC 8), 14=-291 (LC 12)
Max Grav 2=1024 (LC 1), 14=1024 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-1942/292, 4-6=-1085/142, 6-7=-161/14, 7-8=-30/0, 9-13=-153/760, 7-13=-153/760
BOT CHORD 2-12=-535/1749, 10-12=-535/1749, 9-10=-317/961
WEBS 4-12=0/296, 4-10=-847/277, 6-10=-21/500, 6-9=-1136/305, 7-14=-1030/316

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8,
Interior (1) 4-1-8 to 22-4-8 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
- This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.

- Bearings are assumed to be: Joint 2 SP No.2 crushing
capacity of 565 psi, Joint 14 SPF No.2 crushing capacity
of 425 psi.
- Bearing at joint(s) 14 considers parallel to grain value
using ANSI/TPI 1 angle to grain formula. Building
designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 197 lb uplift at
joint 2 and 291 lb uplift at joint 14.
- This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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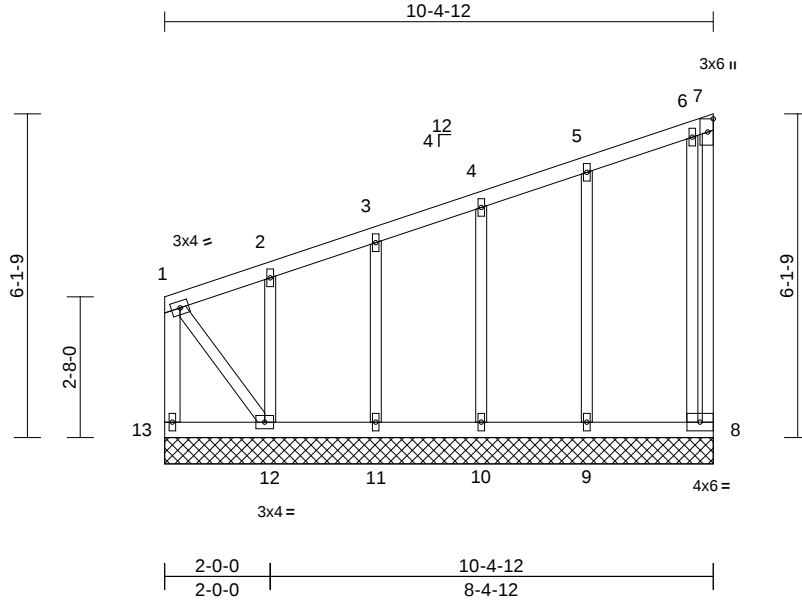
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	165739530
P240547-01	C1	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:05

Page: 1

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 59 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 13-1:2x4 SP No.2
OTHERS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-3-10 oc bracing: 12-13.

REACTIONS (size)
8=10-4-12, 9=10-4-12, 10=10-4-12, 11=10-4-12, 12=10-4-12, 13=10-4-12
Max Horiz 13=260 (LC 9)
Max Uplift 8=-41 (LC 9), 9=-62 (LC 8), 10=-45 (LC 12), 11=-51 (LC 8), 12=-251 (LC 9)
Max Grav 8=96 (LC 1), 9=200 (LC 1), 10=176 (LC 1), 11=180 (LC 1), 12=188 (LC 1), 13=275 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-355/203, 2-3=-298/188, 3-4=-238/170, 4-5=-182/157, 5-6=-113/127, 6-7=-88/118, 7-8=-76/93, 1-13=-597/338
BOT CHORD 12-13=-507/367, 11-12=-120/159, 10-11=-120/159, 9-10=-120/159, 8-9=-120/159
WEBS 2-12=-145/172, 3-11=-140/166, 4-10=-138/169, 5-9=-153/194, 6-8=-148/166, 1-12=-395/688

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(3E) 8-1-12 to 13-1-12, Exterior(2N) 13-1-12 to 18-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 1.5x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 8, 251 lb uplift at joint 12, 51 lb uplift at joint 11, 45 lb uplift at joint 10 and 62 lb uplift at joint 9.
- 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



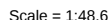
May 22, 2024

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

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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:05 Page: 1
ID:jNvmt80DKyAbXq THHFulQzZ?aq-RfC?PsB70Hq3NSaPanL8w3ulTXbGKWrCDoi7J4zJC?i



LUMBER	LOAD CASE(S)	Standard
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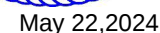
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 6-1:2x4 SP No.2

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-7-5 oc bracing.

Max Horiz 6=260 (LC 9)
Max Uplift 4=-120 (LC 12), 6=-83 (LC 8)
Max Gray 4=457 (LC 1), 6=457 (LC 1)

TOP CHORD 1-2=-408/196, 2-3=-143/115, 3-4=-138/157,
1-6=-411/270
BOT CHORD 5-6=-463/332, 4-5=-397/405
WEBS 1-5=-138/343 2-4=-435/403 2-5=-32/141

- 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) 8-1-12 to 13-3-3,
Interior (1) 13-3-3 to 18-3-8 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 6 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 120 lb uplift at
joint 4 and 83 lb uplift at joint 6.
- 6) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.



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Crestwood, MO 63017
844-420-0100 | MiTekUSA.com
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	CG1	Diagonal Hip Girder	3	1	Job Reference (optional)	I65739532

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:05
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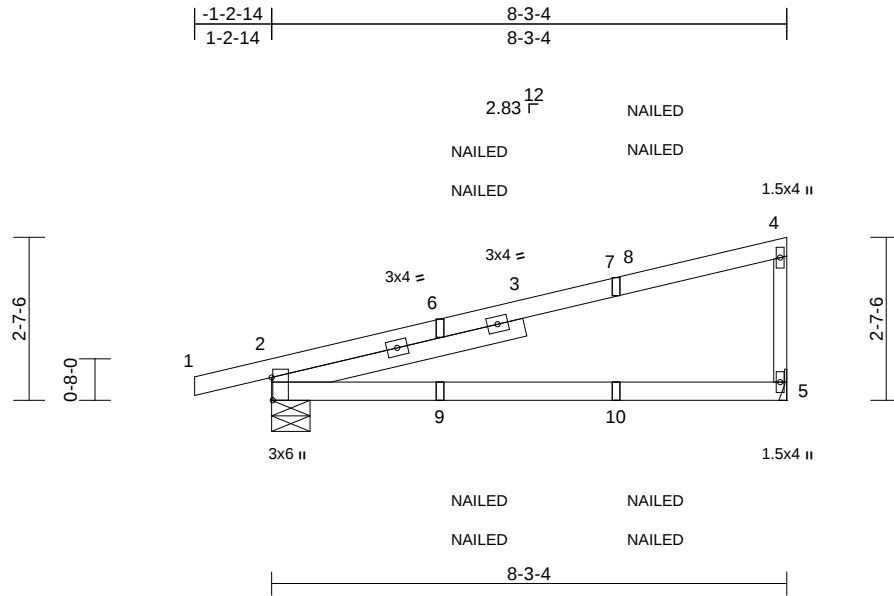


Plate Offsets (X, Y): [2:0-4-6,Edge]

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	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=-125/82, 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 and 149 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- 7) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
- 8) 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)



May 22, 2024

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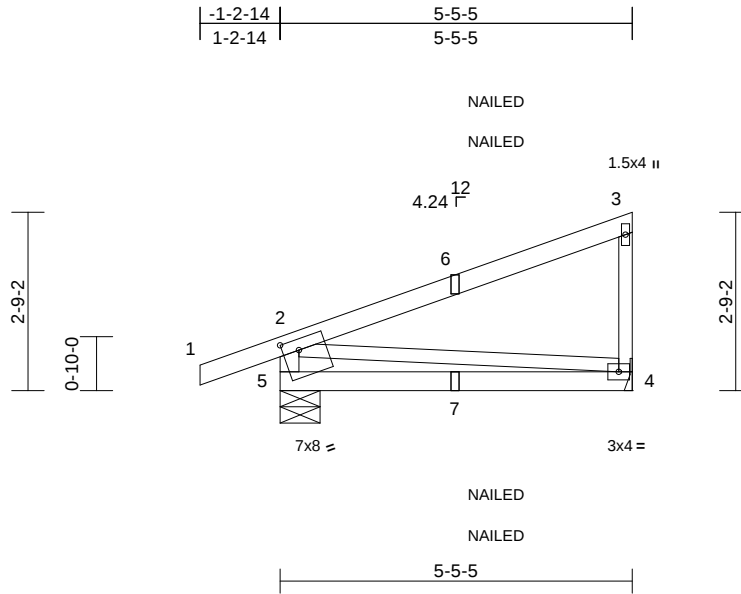
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	CG2	Diagonal Hip Girder	2	1	Job Reference (optional)	I65739533

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:05

Page: 1

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Scale = 1:35.6

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

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	0.62	Vert(LL)	-0.04	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.09	4-5	>714	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

LUMBER

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

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) 4= Mechanical, 5=0-7-6
Max Horiz 5=124 (LC 9)
Max Uplift 4=-76 (LC 12), 5=-130 (LC 8)
Max Grav 4=221 (LC 1), 5=343 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-291/370, 1-2=0/32, 2-3=-175/85,
3-4=-169/226

BOT CHORD 4-5=-286/134

WEBS 2-4=-95/253

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 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 130 lb uplift at
joint 5 and 76 lb uplift at joint 4.

- 6) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails
per NDS guidelines.
 - 8) 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, 4-5=-20



May 22, 2024

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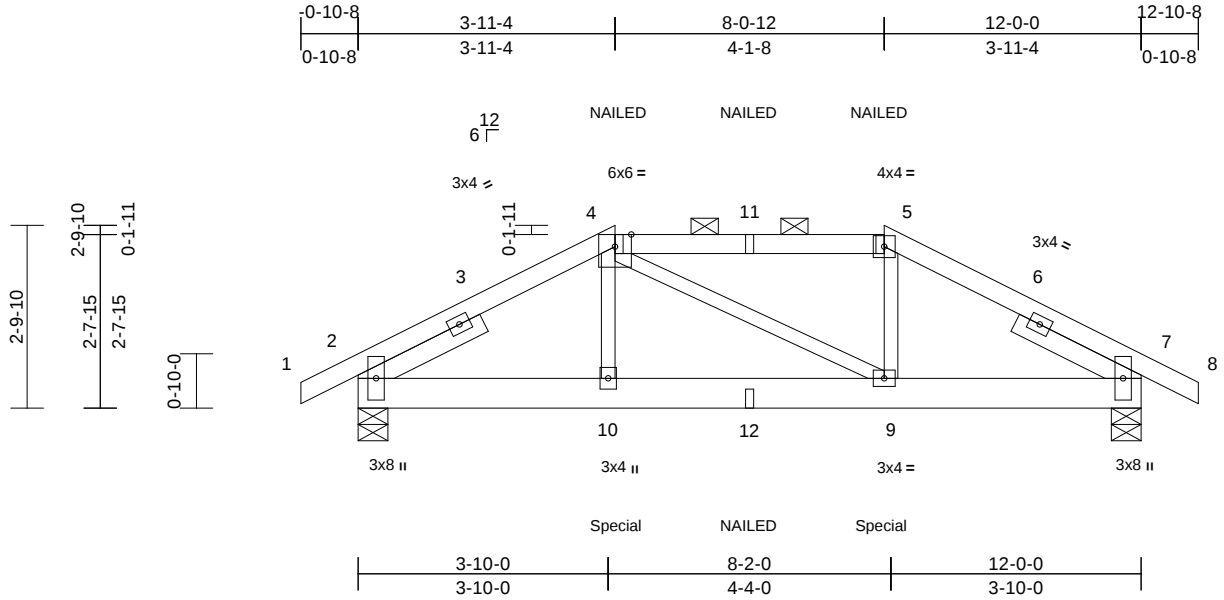
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	D1	Hip Girder	1	1	Job Reference (optional)	I65739534

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

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Page: 1



Scale = 1:35.3

Plate Offsets (X, Y): [2:0-4-9,0-1-13], [7:0-4-9,0-1-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	0.03	9-10	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.05	9-10	>999	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.01	7	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
										Weight: 57 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SPF No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 2-1-4, Right 2x4 SP No.2 -- 2-1-4

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-7-14 oc purlins, except 2-0-0 oc purlins (4-8-9 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	2=0-5-8, 7=0-5-8
Max Horiz	2=-44 (LC 34)
Max Uplift	2=-249 (LC 12), 7=-249 (LC 13)
Max Grav	2=897 (LC 1), 7=897 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/0, 2-4=-1330/509, 4-5=-1079/485, 5-7=-1328/506, 7-8=0/0
BOT CHORD	2-10=-353/1092, 9-10=-352/1080, 7-9=-350/1090
WEBS	4-10=-24/293, 4-9=-65/62, 5-9=-26/293

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 249 lb uplift at joint 2 and 249 lb uplift at joint 7.
- 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.
- 9) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 210 lb down and 82 lb up at 3-11-4, and 210 lb down and 82 lb up at 8-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-5=-70, 5-8=-70, 2-7=-20
Concentrated Loads (lb)
Vert: 4=-51 (B), 5=-51 (B), 10=-210 (B), 9=-210 (B), 11=-51 (B), 12=-18 (B)



May 22, 2024

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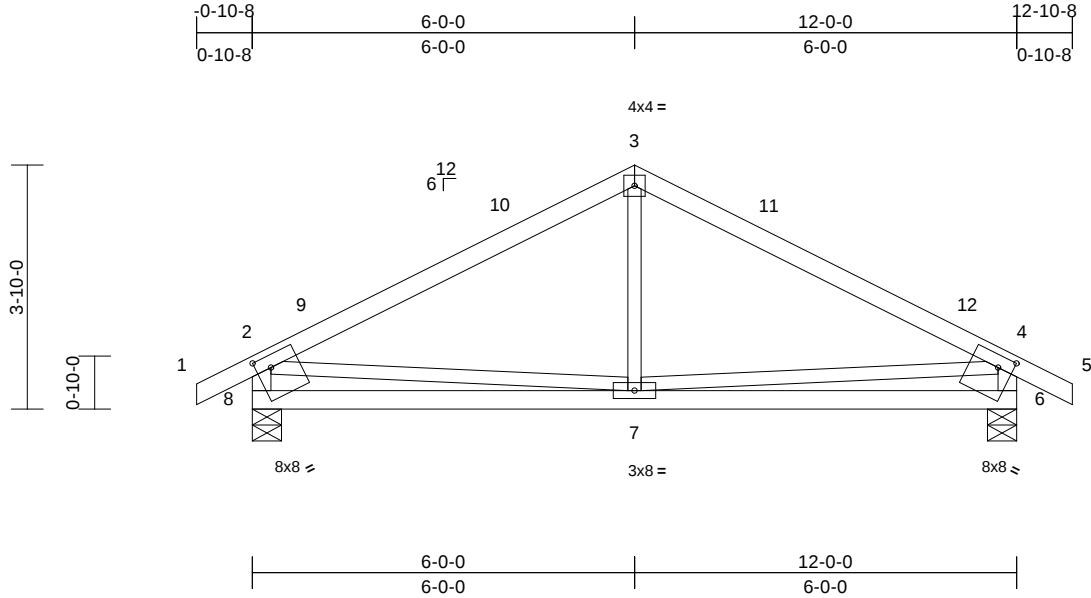
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	D2	Common	2	1	Job Reference (optional)	I65739535

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

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Page: 1

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Scale = 1:36.2

Plate Offsets (X, Y): [6:0-2-12,0-2-4], [8:0-2-12,0-2-4]

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	0.48	Vert(LL)	-0.03	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.05	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 54 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 8-2,6-4:2x4 SP No.2

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

LOAD CASE(S) Standard

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) 6=0-5-8, 8=0-5-8
Max Horiz 8=72 (LC 11)
Max Uplift 6=-105 (LC 13), 8=-105 (LC 12)
Max Grav 6=598 (LC 1), 8=598 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/32, 2-3=-632/261, 3-4=-632/262, 4-5=0/32, 2-8=-546/310, 4-6=-546/310
BOT CHORD 7-8=-304/356, 6-7=-254/356
WEBS 3-7=0/232, 2-7=-8/227, 4-7=-8/227

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 6-0-0, Exterior(2R) 6-0-0 to 11-0-0, Interior (1) 11-0-0 to 12-10-8 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 8 and 105 lb uplift at joint 6.



May 22,2024

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

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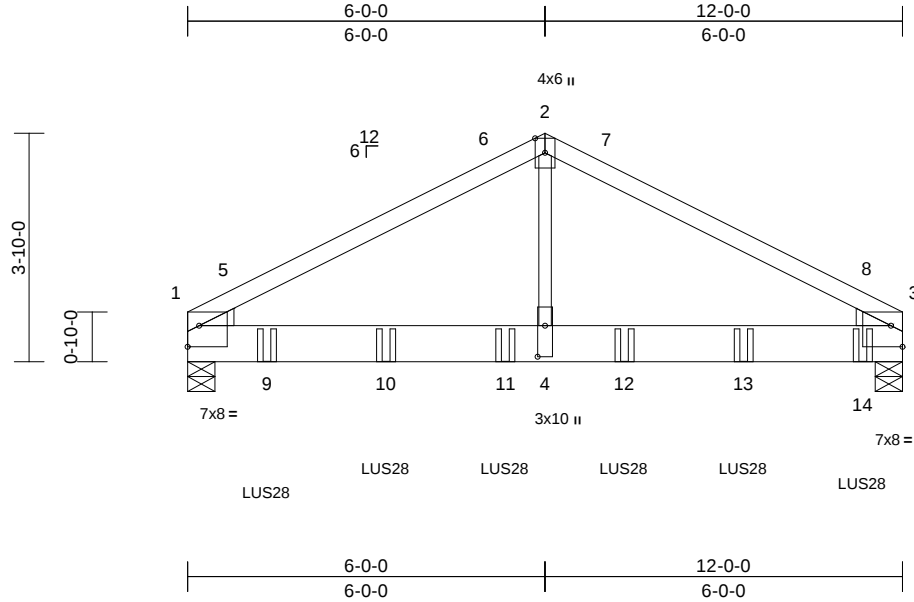
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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/27/2024 3:49:24

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	I65739536
P240547-01	D3	Common Girder	1	2	Job Reference (optional)	

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:05
ID:J3l3qxA?1FxbMh3A5DVAsNzZ?QC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?I

Page: 1



Scale = 1:38.7

Plate Offsets (X, Y): [1:Edge,0-4-4], [3:Edge,0-4-4], [4:0-6-4,0-1-8]

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	0.89	Vert(LL)	-0.06	1-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.10	1-4	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 123 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-6-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=0-5-8, 3=0-5-8
Max Horiz 1=64 (LC 12)
Max Uplift 1=-886 (LC 12), 3=-1026 (LC 13)
Max Grav 1=4411 (LC 1), 3=4896 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5327/1272, 2-3=-5327/1272
BOT CHORD 1-4=-989/4538, 3-4=-989/4538
WEBS 2-4=-963/4859

NOTES

- 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: 2x8 - 2 rows staggered at 0-5-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) 0-2-12 to 5-2-12,
Interior (1) 5-2-12 to 6-0-0, Exterior(2R) 6-0-0 to 11-0-0,
Interior (1) 11-0-0 to 11-9-4 zone; cantilever left and right
exposed; end vertical left and right exposed; C-C for
members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP 2400F 2.0E crushing
capacity of 805 psi.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 886 lb uplift at
joint 1 and 1026 lb uplift at joint 3.
- This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie LUS28 (6-SD9112 Girder, 4-
SD9212 Truss, Single Ply Girder) or equivalent spaced
at 2-0-0 oc max. starting at 1-4-0 from the left end to
11-4-0 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15,
Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 1-3=-20
Concentrated Loads (lb)
Vert: 9=-1376 (F), 10=-1376 (F), 11=-1378 (F),
12=-1378 (F), 13=-1378 (F), 14=-1383 (F)



May 22, 2024

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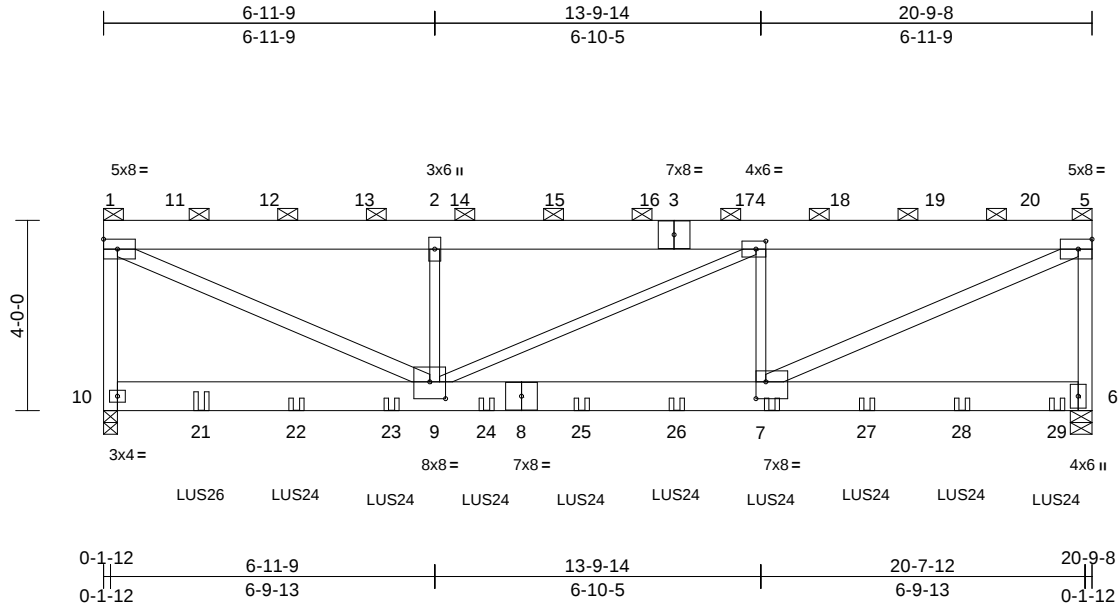
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	I65739537
P240547-01	GR1	Flat Girder	1	3	Job Reference (optional)	

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:06
ID:nGJR1HBdoZ3SzeMfx0POazZ?qb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoI7J4zJC?f

Page: 1



Scale = 1:48.5

Plate Offsets (X, Y): [4:0-2-8,0-2-0], [7:0-2-8,0-4-4], [9:0-4-0,0-4-4]

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	0.63	Vert(LL)	-0.14	7-9	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.24	7-9	>999	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.02	6	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 416 lb FT = 20%											

LUMBER

TOP CHORD 2x8 SPF No.2
BOT CHORD 2x8 SPF No.2
WEBS 2x3 SPF No.2 *Except* 10-1,5-6:2x4 SP
No.2, 9-1,7-5:2x4 SP 1650F 1.5E

BRACING

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 6=0-5-8, 10=0-3-8
Max Horiz 10=139 (LC 9)
Max Uplift 6=-2220 (LC 9), 10=-2114 (LC 8)
Max Grav 6=8064 (LC 1), 10=7692 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-7083/2154, 1-2=-11462/3402,
2-4=-11462/3402, 4-5=-11524/3422,
5-6=-7195/2182
BOT CHORD 9-10=-235/238, 7-9=-3478/11524,
6-7=-111/211
WEBS 1-9=-3739/12569, 2-9=-3945/1285,
4-9=-69/68, 4-7=-3960/1310,
5-7=-3761/12638

NOTES

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-8-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x3 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

- 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 10 SP No.2 crushing capacity of 565 psi, Joint 6 SPF No.2 crushing capacity of 425 psi.
- Bearing at joint(s) 6, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2220 lb uplift at joint 6 and 2114 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 2-0-11 from the left end to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 4-0-11 from the left end to 20-0-11 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 954 lb down and 259 lb up at 1-6-0, 954 lb down and 259 lb up at 3-6-0, 954 lb down and 259 lb up at 5-6-0, 954 lb down and 259 lb up at 7-6-0, 954 lb down and 259 lb up at 9-6-0, 954 lb down and 259 lb up at 11-6-0, 954 lb down and 259 lb up at 13-6-0, 954 lb down and 259 lb up at 15-6-0, and 954 lb down and 259 lb up at 17-6-0, and 954 lb down and 259 lb up at 19-6-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=-70, 6-10=-20
Concentrated Loads (lb)
Vert: 7=-437 (B), 11=-954, 12=-954, 13=-954, 14=-954, 15=-954, 16=-954, 17=-954, 18=-954, 19=-954, 20=-954, 21=-437 (B), 22=-437 (B), 23=-437 (B), 24=-437 (B), 25=-437 (B), 26=-437 (B), 27=-437 (B), 28=-437 (B), 29=-441 (B)



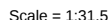
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:06 Page: 1
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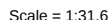


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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:06 Page: 1
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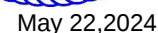
LUMBER	6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
TOP CHORD 2x4 SP No.2	LOAD CASE(S) Standard
BOT CHORD 2x4 SP No.2	
WEBS 2x4 SP No.2 *Except* 4-2x3x3 SPF No.2	

TOP CHORD	Structural wood sheathing directly applied or 1-10-3 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=47 (LC 12)
Max Uplift		3=-25 (LC 12), 4=-8 (LC 12), 5=-26 (LC 12)
Max Grav		3=38 (LC 1), 4=34 (LC 3), 5=169 (LC 1)

TOP CHORD 2-5=-152/110, 1-2=0/32, 2-3=-36/22
BOT CHORD 4-5=-113/29
WEBS 2-4=-31/120

- 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
5, 8 lb uplift at joint 4 and 25 lb uplift at joint 3.



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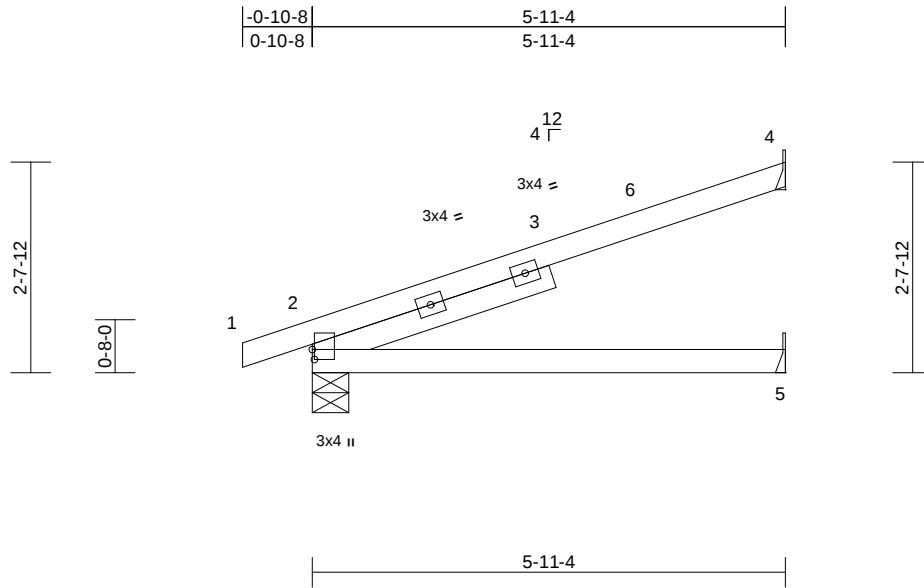
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	J3	Jack-Open	28	1	Job Reference (optional)	I65739540

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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

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

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 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 and 81 lb uplift at joint 2.



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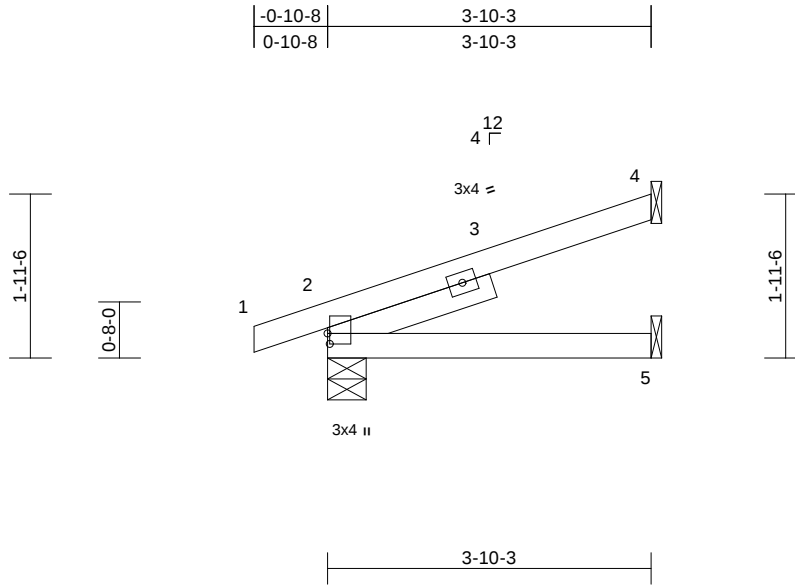
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	J4	Jack-Open	4	1	Job Reference (optional)	I65739541

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

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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

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

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 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 and 67 lb uplift at joint 2.



May 22,2024

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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	J5	Jack-Open	4	1	Job Reference (optional)	I65739542

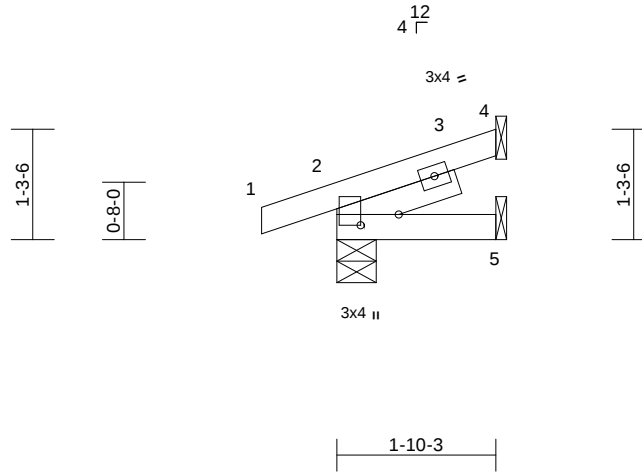
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:06

Page: 1

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-0-10-8	1-10-3
0-10-8	1-10-3



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

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

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 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 57 lb uplift at joint
2 and 35 lb uplift at joint 4.



May 22, 2024

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

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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	J6	Jack-Open	2	1	Job Reference (optional)	I65739543

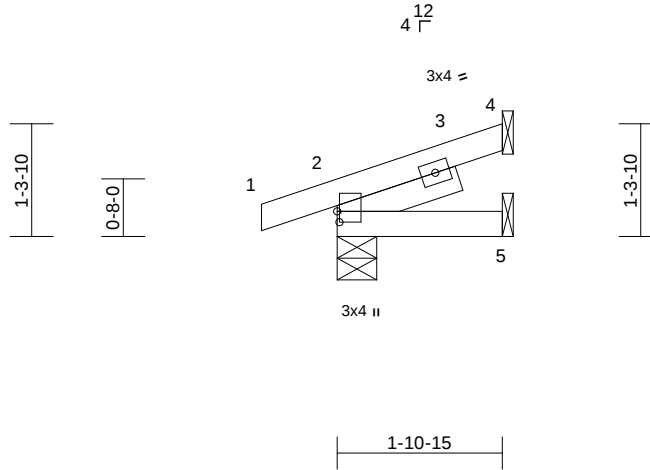
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:07

Page: 1

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-0-10-8	1-10-15
0-10-8	1-10-15



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

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

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-10-15 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=-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 57 lb uplift at joint
2 and 36 lb uplift at joint 4.



May 22,2024

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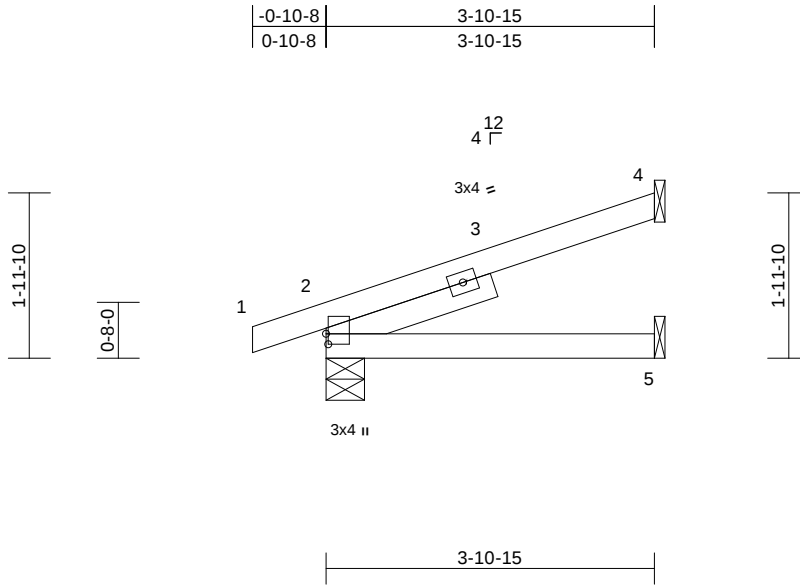
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06/27/2024 3:49:24

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	J7	Jack-Open	2	1	Job Reference (optional)	I65739544

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

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Page: 1



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	0.34	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 -- 2-1-0

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

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-10-15 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=69 (LC 12)
Max Uplift 2=-67 (LC 8), 4=-74 (LC 12)
Max Grav 2=241 (LC 1), 4=128 (LC 1), 5=77 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-75/32
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 and 67 lb uplift at joint 2.



May 22, 2024

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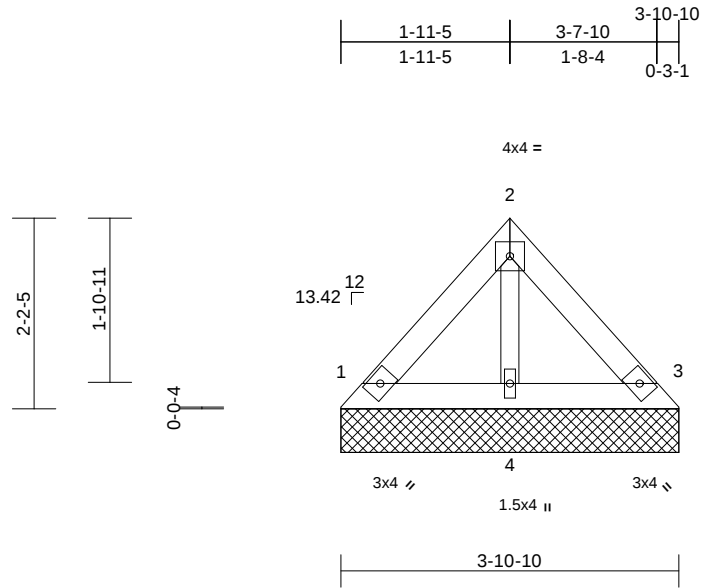
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	LG1	Lay-In Gable	1	1	Job Reference (optional)	I65739545

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Page: 1



Scale = 1:26.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.01	Horiz(TL)	0.00	3	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
OTHERS 2x3 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-11-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-10-10, 3=3-10-10, 4=3-10-10
Max Horiz 1=53 (LC 9)
Max Uplift 1=-28 (LC 13), 3=-24 (LC 13)
Max Grav 1=97 (LC 1), 3=97 (LC 1), 4=101 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-77/39, 2-3=-70/33
BOT CHORD 1-4=-17/39, 3-4=-17/39
WEBS 2-4=-60/17

NOTES

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

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 1 and 24 lb uplift at joint 3.
- 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



May 22,2024

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

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

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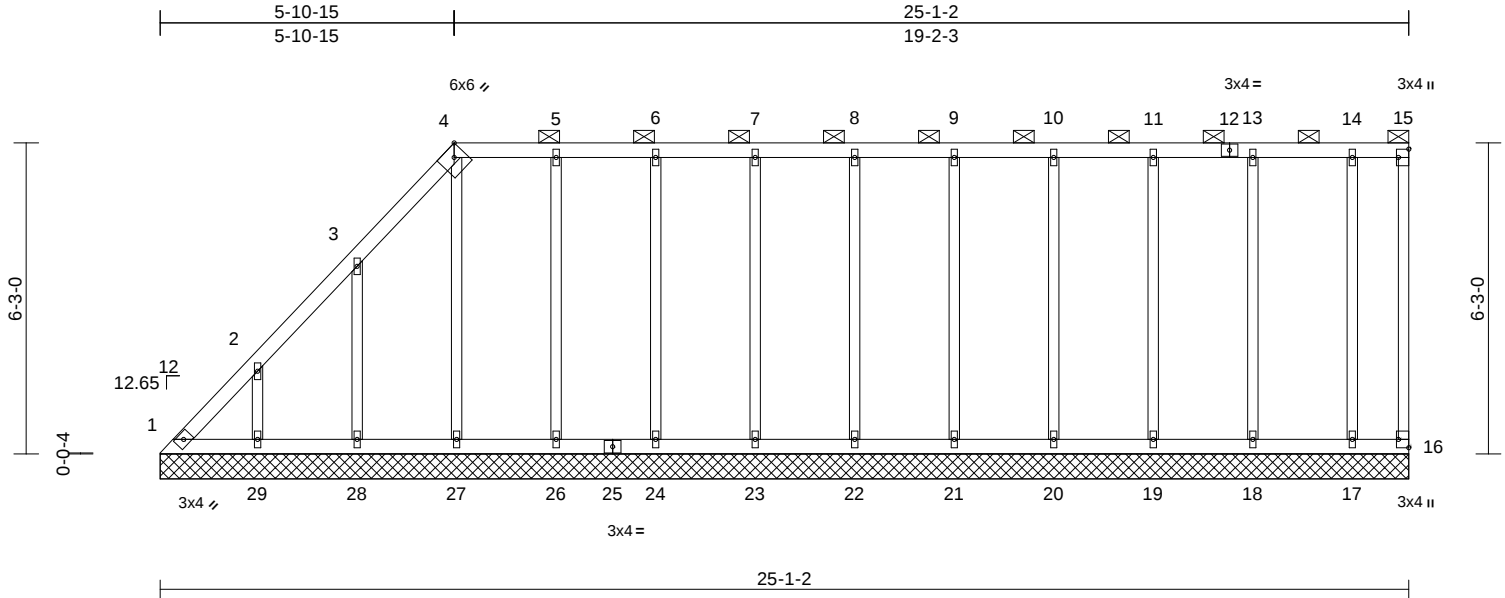
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	I65739546
P240547-01	LG2	Lay-In Gable	1	1	Job Reference (optional)	

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Scale = 1:46.3

Plate Offsets (X, Y): [4:0-2-9, Edge], [15: Edge, 0-2-8], [16: 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)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horiz(TL)	0.00	16	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 133 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.): 4-15.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)
1=25-1-2, 16=25-1-2, 17=25-1-2, 18=25-1-2, 19=25-1-2, 20=25-1-2, 21=25-1-2, 22=25-1-2, 23=25-1-2, 24=25-1-2, 26=25-1-2, 27=25-1-2, 28=25-1-2, 29=25-1-2
Max Horiz 1=254 (LC 9)
Max Uplift 1=-86 (LC 10), 16=-14 (LC 9), 17=-44 (LC 8), 18=-47 (LC 9), 19=-41 (LC 8), 20=-40 (LC 9), 21=-39 (LC 8), 22=-39 (LC 9), 23=-40 (LC 9), 24=-40 (LC 8), 26=-47 (LC 9), 27=-95 (LC 9), 28=-144 (LC 12), 29=-137 (LC 12)
Max Grav 1=193 (LC 9), 16=29 (LC 1), 17=147 (LC 1), 18=188 (LC 1), 19=179 (LC 1), 20=180 (LC 1), 21=180 (LC 1), 22=180 (LC 1), 23=180 (LC 1), 24=178 (LC 1), 26=190 (LC 1), 27=167 (LC 19), 28=216 (LC 19), 29=206 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-402/398, 2-3=-299/303, 3-4=-179/192, 4-5=-121/131, 5-6=-121/132, 6-7=-121/132, 7-8=-121/132, 8-9=-121/132, 9-10=-121/132, 10-11=-121/132, 11-13=-121/132, 13-14=-121/132, 14-15=-121/132, 15-16=-93/90
BOT CHORD 1-29=-121/132, 28-29=-121/132, 27-28=-121/132, 26-27=-121/132, 24-26=-121/132, 23-24=-121/132, 22-23=-121/132, 21-22=-121/132, 20-21=-121/132, 19-20=-121/132, 18-19=-121/132, 17-18=-121/132, 16-17=-121/132
WEBS 2-29=-176/155, 3-28=-192/170, 4-27=-223/165, 5-26=-150/71, 6-24=-138/64, 7-23=-140/64, 8-22=-140/63, 9-21=-140/63, 10-20=-140/63, 11-19=-139/63, 13-18=-146/66, 14-17=-144/91

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-1 to 5-4-1, Interior (1) 5-4-1 to 5-11-2, Exterior(2R) 5-11-2 to 13-0-0, Interior (1) 13-0-0 to 25-0-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 0-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 1, 14 lb uplift at joint 16, 137 lb uplift at joint 29, 144 lb uplift at joint 28, 95 lb uplift at joint 27, 47 lb uplift at joint 26, 40 lb uplift at joint 24, 40 lb uplift at joint 23, 39 lb uplift at joint 22, 39 lb uplift at joint 21, 40 lb uplift at joint 20, 41 lb uplift at joint 19, 47 lb uplift at joint 18 and 44 lb uplift at joint 17.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 22, 2024

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

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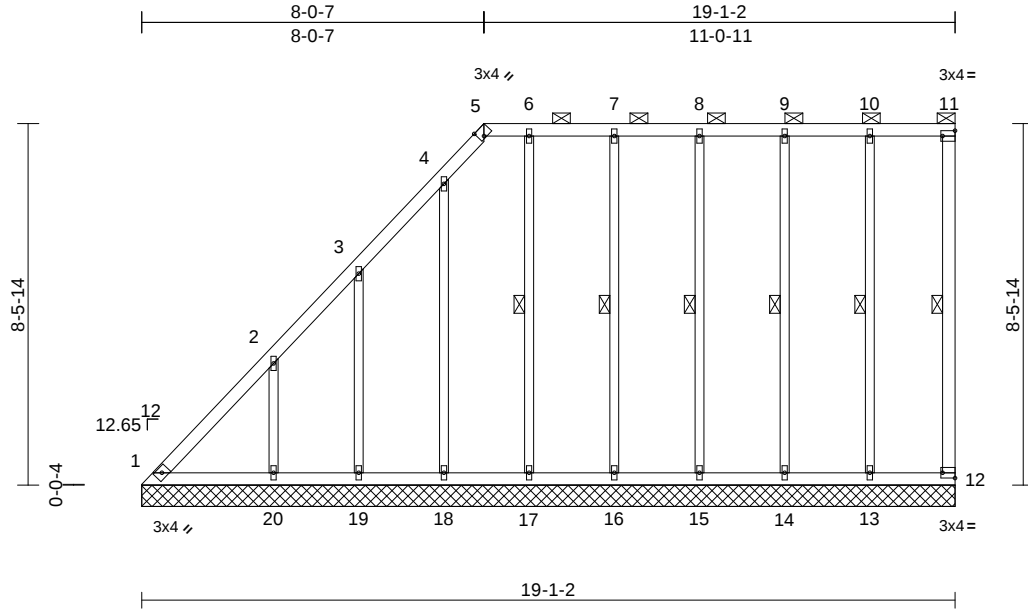
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	LG3	Lay-In Gable	1	1	Job Reference (optional)	I65739547

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:07

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Scale = 1:54.1

Plate Offsets (X, Y): [5:0-1-7,Edge], [11:Edge,0-1-8], [12:Edge,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	0.53	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 117 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-11.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 11-12, 6-17, 7-16, 8-15, 9-14, 10-13

REACTIONS

(size)	1=19-1-2, 12=19-1-2, 13=19-1-2, 14=19-1-2, 15=19-1-2, 16=19-1-2, 17=19-1-2, 18=19-1-2, 19=19-1-2, 20=19-1-2
Max Horiz	1=349 (LC 9)
Max Uplift	1=-101 (LC 10), 12=-21 (LC 9), 13=-50 (LC 8), 14=-47 (LC 9), 15=-41 (LC 8), 16=-54 (LC 8), 17=-90 (LC 9), 18=-103 (LC 9), 19=-133 (LC 12), 20=-192 (LC 12)
Max Grav	1=258 (LC 9), 12=71 (LC 1), 13=186 (LC 26), 14=181 (LC 1), 15=180 (LC 1), 16=182 (LC 26), 17=180 (LC 1), 18=221 (LC 19), 19=175 (LC 19), 20=296 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-546/545, 2-3=-388/388, 3-4=-292/309, 4-5=-182/181, 5-6=-160/174, 6-7=-160/174, 7-8=-160/174, 8-9=-160/174, 9-10=-160/174, 10-11=-160/174, 11-12=-121/105

BOT CHORD	1-20=-160/175, 19-20=-160/175, 18-19=-160/175, 17-18=-160/175, 16-17=-160/175, 15-16=-160/175, 14-15=-160/175, 13-14=-160/175, 12-13=-160/175
WEBS	2-20=-255/213, 3-19=-189/159, 4-18=-259/199, 6-17=-199/133, 7-16=-142/79, 8-15=-140/65, 9-14=-141/71, 10-13=-180/113

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-1 to 5-1-6, Interior (1) 5-1-6 to 8-0-10, Exterior(2R) 8-0-10 to 15-1-6, Interior (1) 15-1-6 to 18-11-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 0-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 1, 21 lb uplift at joint 12, 192 lb uplift at joint 20, 133 lb uplift at joint 19, 103 lb uplift at joint 18, 90 lb uplift at joint 17, 54 lb uplift at joint 16, 41 lb uplift at joint 15, 47 lb uplift at joint 14 and 50 lb uplift at joint 13.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 22, 2024

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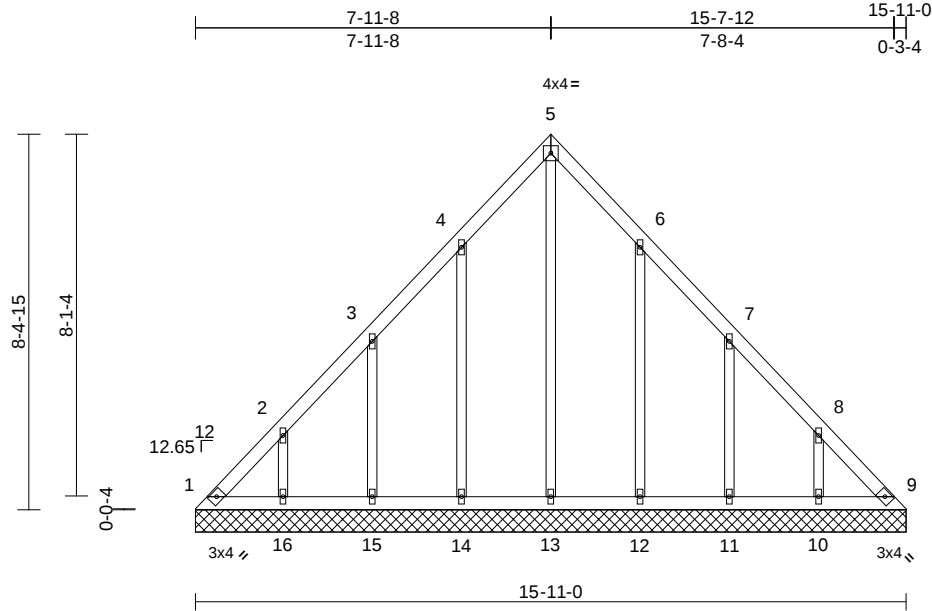
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	LG4	Lay-In Gable	1	1	Job Reference (optional)	I65739548

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

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Scale = 1:51.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horiz(TL)	0.01	9	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S						Weight: 81 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=15-11-0, 9=15-11-0, 10=15-11-0, 11=15-11-0, 12=15-11-0, 13=15-11-0, 14=15-11-0, 15=15-11-0, 16=15-11-0
Max Horiz 1=-228 (LC 8)
Max Uplift 1=-92 (LC 10), 9=-58 (LC 11), 10=-137 (LC 13), 11=-140 (LC 13), 12=-134 (LC 13), 14=-137 (LC 12), 15=-139 (LC 12), 16=-137 (LC 12)
Max Grav 1=211 (LC 12), 9=188 (LC 13), 10=209 (LC 20), 11=206 (LC 20), 12=214 (LC 20), 13=177 (LC 13), 14=216 (LC 19), 15=205 (LC 19), 16=209 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-309/190, 2-3=-183/140, 3-4=-143/100, 4-5=-162/158, 5-6=-162/150, 6-7=-107/58, 7-8=-155/93, 8-9=-278/190
BOT CHORD 1-16=-146/219, 15-16=-146/219, 14-15=-147/219, 13-14=-147/219, 12-13=-147/219, 11-12=-147/219, 10-11=-146/219, 9-10=-146/219
WEBS 5-13=-153/104, 4-14=-187/160, 3-15=-195/164, 2-16=-185/154, 6-12=-187/158, 7-11=-195/165, 8-10=-185/154

NOTES

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-1 to 5-4-1, Interior (1) 5-4-1 to 7-11-12, Exterior(2R) 7-11-12 to 12-11-12, Interior (1) 12-11-12 to 15-7-7 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 1, 58 lb uplift at joint 9, 137 lb uplift at joint 14, 139 lb uplift at joint 15, 137 lb uplift at joint 16, 134 lb uplift at joint 12, 140 lb uplift at joint 11 and 137 lb uplift at joint 10.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 22, 2024

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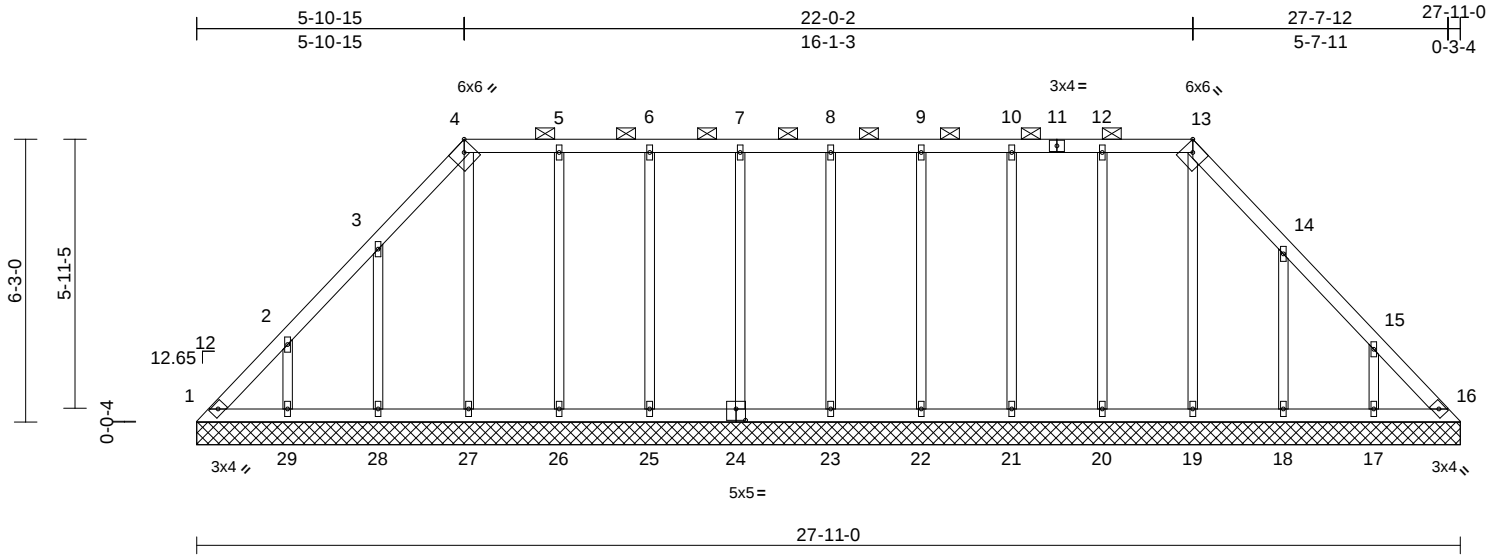
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	I65739549
P240547-01	LG5	Lay-In Gable	1	1	Job Reference (optional)	

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Page: 1



Scale = 1:50.9

Plate Offsets (X, Y): [4:0-2-9,Edge], [13:0-2-9,Edge], [24:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.01	16	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 140 lb FT = 20%											

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)
1=27-11-0, 16=27-11-0,
17=27-11-0, 18=27-11-0,
19=27-11-0, 20=27-11-0,
21=27-11-0, 22=27-11-0,
23=27-11-0, 24=27-11-0,
25=27-11-0, 26=27-11-0,
27=27-11-0, 28=27-11-0,
29=27-11-0
Max Horiz 1=-168 (LC 8)
Max Uplift 1=-70 (LC 10), 16=-23 (LC 11),
17=-135 (LC 13), 18=-146 (LC 13),
20=-45 (LC 9), 21=-40 (LC 8),
22=-40 (LC 9), 23=-39 (LC 9),
24=-39 (LC 8), 25=-40 (LC 8),
26=-44 (LC 8), 27=-30 (LC 9),
28=-140 (LC 12), 29=-140 (LC 12)
Max Grav 1=142 (LC 21), 16=115 (LC 22),
17=204 (LC 20), 18=218 (LC 20),
19=147 (LC 26), 20=189 (LC 25),
21=179 (LC 1), 22=180 (LC 26),
23=181 (LC 25), 24=180 (LC 26),
25=176 (LC 1), 26=194 (LC 26),
27=163 (LC 22), 28=212 (LC 19),
29=211 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-203/160, 2-3=-138/113, 3-4=-135/151,
4-5=-113/124, 5-6=-113/124, 6-7=-113/124,
7-8=-115/124, 8-9=-115/124, 9-10=-115/124,
10-12=-115/124, 12-13=-115/124,
13-14=-136/126, 14-15=-86/44,
15-16=-158/96
BOT CHORD 1-29=-80/137, 28-29=-80/137,
27-28=-80/137, 26-27=-80/136,
25-26=-80/136, 23-25=-80/136,
22-23=-78/135, 21-22=-78/135,
20-21=-78/135, 19-20=-78/135,
18-19=-78/135, 17-18=-78/135,
16-17=-78/135
WEBS 13-19=-106/5, 12-20=-149/69,
10-21=-139/64, 9-22=-140/63, 8-23=-140/63,
7-24=-140/63, 6-25=-138/63, 5-26=-154/68,
4-27=-123/54, 3-28=-180/166,
2-29=-177/158, 14-18=-188/171,
15-17=-171/153

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-1 to 5-4-1, Interior (1) 5-4-1 to 5-11-2, Exterior(2R) 5-11-2 to 13-0-0, Interior (1) 13-0-0 to 22-0-5, Exterior(2E) 22-0-5 to 27-7-7 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 1, 23 lb uplift at joint 16, 45 lb uplift at joint 20, 40 lb uplift at joint 21, 40 lb uplift at joint 22, 39 lb uplift at joint 23, 39 lb uplift at joint 24, 40 lb uplift at joint 25, 44 lb uplift at joint 26, 30 lb uplift at joint 27, 140 lb uplift at joint 28, 140 lb uplift at joint 29, 146 lb uplift at joint 18 and 135 lb uplift at joint 17.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 22, 2024

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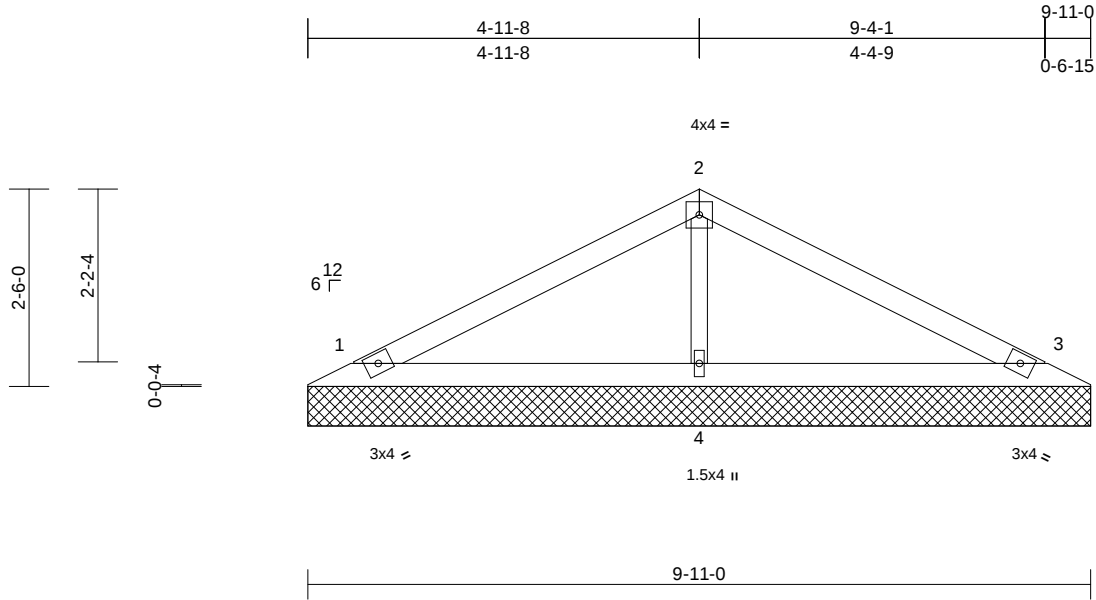
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	I65739550
P240547-01	V1	Valley	1	1	Job Reference (optional)	

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Scale = 1:29.2

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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 31 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=9-11-0, 3=9-11-0, 4=9-11-0
Max Horiz 1=-41 (LC 13)
Max Uplift 1=-44 (LC 12), 3=-51 (LC 13),
4=-33 (LC 12)
Max Grav 1=185 (LC 25), 3=185 (LC 26),
4=417 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-113/71, 2-3=-113/79
BOT CHORD 1-4=-3/48, 3-4=-3/48
WEBS 2-4=-285/204

NOTES

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

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 1, 51 lb uplift at joint 3 and 33 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 22, 2024

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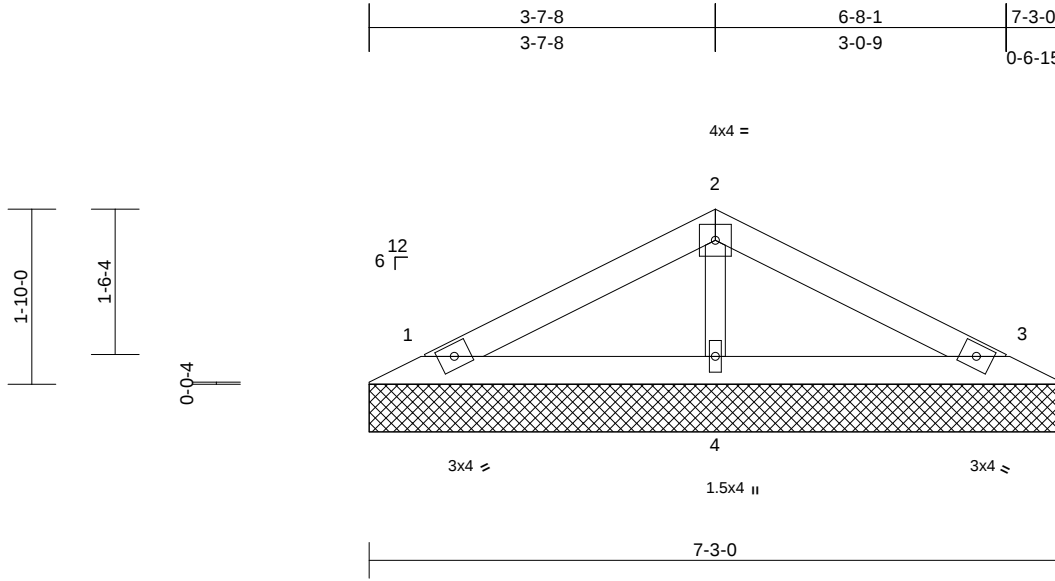
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	I65739551
P240547-01	V2	Valley	1	1	Job Reference (optional)	

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:08

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Scale = 1:24.1

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	0.20	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P						Weight: 22 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=7-3-0, 3=7-3-0, 4=7-3-0
Max Horiz 1=-29 (LC 17)
Max Uplift 1=-37 (LC 12), 3=-42 (LC 13), 4=-9 (LC 12)
Max Grav 1=143 (LC 1), 3=143 (LC 1), 4=261 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-69/53, 2-3=-69/60
BOT CHORD 1-4=-1/31, 3-4=-1/31
WEBS 2-4=-185/154

NOTES

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

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 1, 42 lb uplift at joint 3 and 9 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 22, 2024

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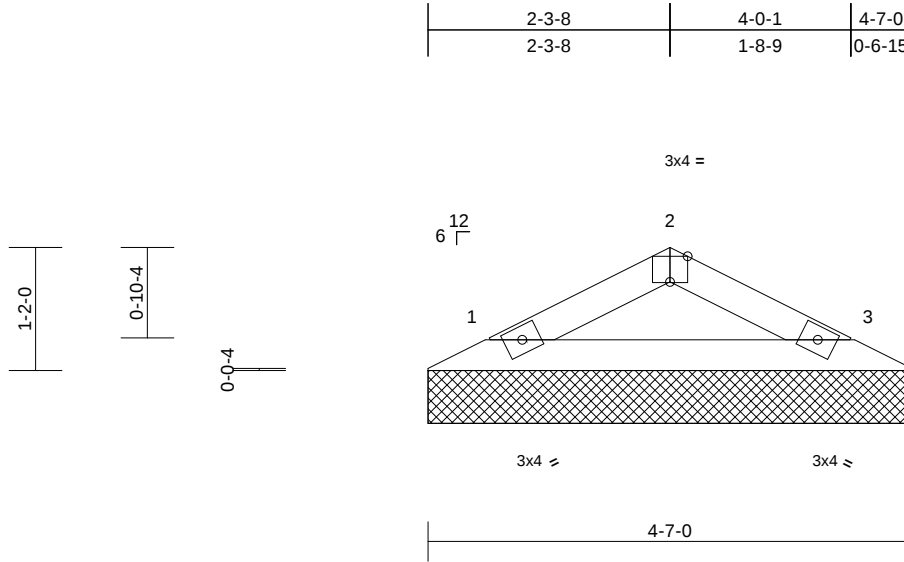
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	
P240547-01	V3	Valley	1	1	Job Reference (optional)	I65739552

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:08
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Page: 1



Scale = 1:21.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-8-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-7-0, 3=4-7-0
Max Horiz 1=16 (LC 16)
Max Uplift 1=-23 (LC 12), 3=-23 (LC 13)
Max Grav 1=153 (LC 1), 3=153 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-154/137, 2-3=-154/146
BOT CHORD 1-3=-94/118

NOTES

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

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 1 and 23 lb uplift at joint 3.
- 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



May 22, 2024

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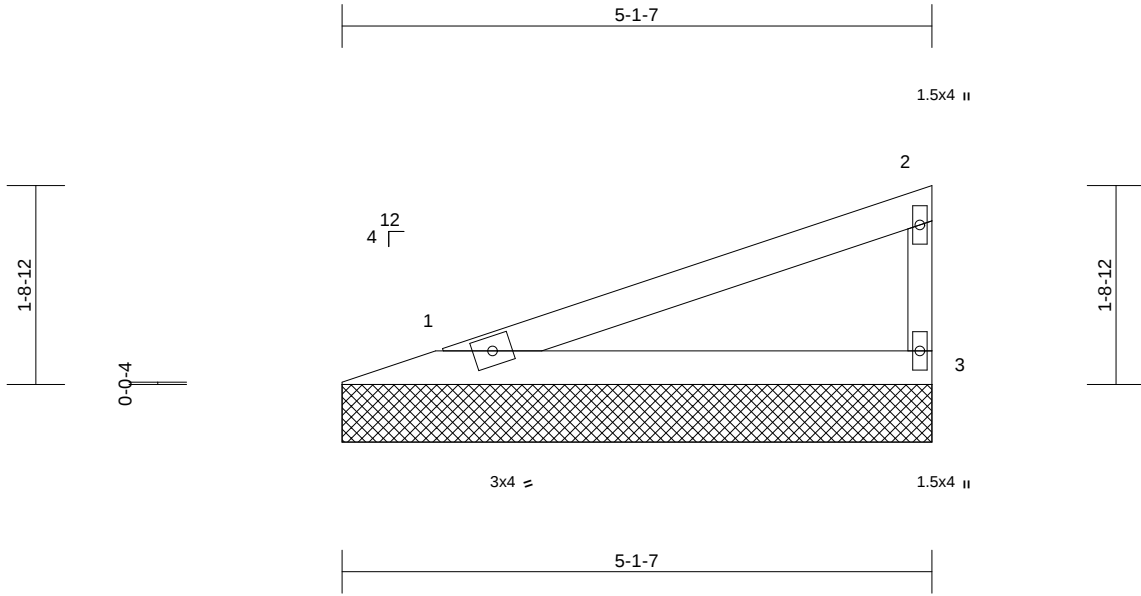
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 78	165739553
P240547-01	V4	Valley	1	1	Job Reference (optional)	

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 14:58:08
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Page: 1



Scale = 1:20

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	0.38	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	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
WEBS 2x3 SPF No.2

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

LOAD CASE(S) Standard

BRACING

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

REACTIONS (size) 1=5-1-7, 3=5-1-7

Max Horiz 1=66 (LC 9)
Max Uplift 1=-36 (LC 8), 3=-46 (LC 12)
Max Grav 1=186 (LC 1), 3=186 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-93/57, 2-3=-145/189
BOT CHORD 1-3=-29/31

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 4-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 1 and 46 lb uplift at joint 3.



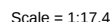
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LUMBER

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

LOAD CASE(S) Standard

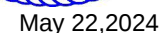
BRACING

REACTIONS	(size)	1=3-1-7, 3=3-1-7
Max Horiz		1=35 (LC 9)
Max Uplift		1=-18 (LC 8), 3=-
Max Grav		1=96 (LC 1), 3=9

FORCES

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) zone; cantilever left
and right exposed ; end vertical left and right
exposed; C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss
only. For studs exposed to wind (normal to the face),
see Standard Industry Gable End Details as applicable,
or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 4-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 6) All bearings are assumed to be SP No.2 crushing
capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 18 lb uplift at joint
1 and 24 lb uplift at joint 3.

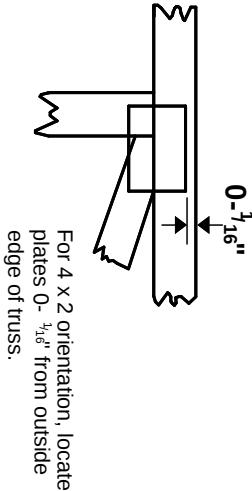
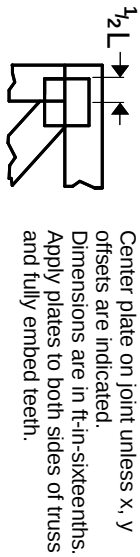


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Symbols

PLATE LOCATION AND ORIENTATION



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

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

PLATE SIZE

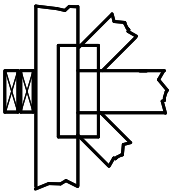
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

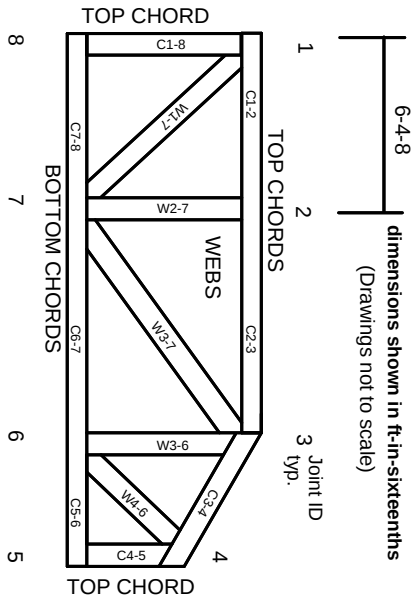
BEARING



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

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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