MiTek®

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

Re: P240542-01
Roof - HR Lot 191

The truss drawing(s) referenced below 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.

Pages or sheets covered by this seal: I66262039 thru I66262091

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

Missouri COA: Engineering 001193

June 14,2024

Sevier, Scott ,Engineer

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.

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	A01	Half Hip Girder	1	2	I66262039 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. Fri Jun 14 12:32:29 Page: 1
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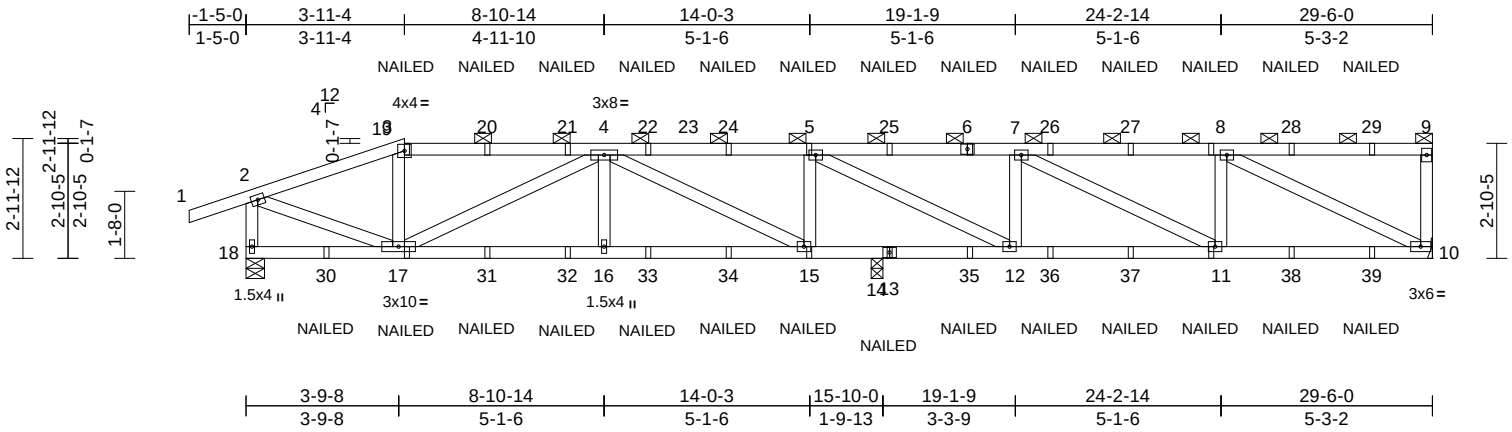

Scale = 1:57.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	0.19	15-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.33	15-16	>562	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 285 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 2x4 SPF No.3 *Except* 18-2:2x4 SP No.2

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

REACTIONS (size) 10= Mechanical, 14=0-3-8, 18=0-5-8
Max Horiz 18=124 (LC 9)
Max Uplift 10=-404 (LC 9), 14=-133 (LC 9), 18=-509 (LC 8)
Max Grav 10=1400 (LC 1), 14=576 (LC 1), 18=1592 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-1908/598, 3-4=-1765/591, 4-5=-3236/1035, 5-7=-3188/999, 7-8=-2329/719, 8-9=-70/70, 9-10=-201/122, 2-18=-1485/577
BOT CHORD 17-18=-213/170, 16-17=-1060/3328, 15-16=-1060/3328, 14-15=-1032/3236, 12-14=-1032/3236, 11-12=-1001/3188, 10-11=-731/2329
WEBS 2-17=-535/1837, 3-17=-1/303, 4-17=-1778/528, 4-16=0/427, 4-15=-113/32, 5-15=-426/234, 5-12=-53/40, 7-12=-41/127, 7-11=-962/316, 8-11=-73/682, 8-10=-2555/759

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 3-11-4, Exterior(2R) 3-11-4 to 11-0-2, Interior (1) 11-0-2 to 29-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 3x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Bearings are assumed to be: Joint 18 SP 1650F 1.5E crushing capacity of 565 psi, Joint 14 SP 1650F 1.5E crushing capacity of 565 psi.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 404 lb uplift at joint 10, 509 lb uplift at joint 18 and 133 lb uplift at joint 14.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-9=-70, 10-18=-20
Concentrated Loads (lb)
Vert: 3=-37 (B), 6=-37 (B), 13=-18 (B), 17=-18 (B), 15=-18 (B), 5=-37 (B), 11=-18 (B), 8=-37 (B), 20=-37 (B), 21=-37 (B), 22=-37 (B), 24=-37 (B), 25=-37 (B), 26=-37 (B), 27=-37 (B), 28=-37 (B), 29=-37 (B), 30=-116 (B), 31=-18 (B), 32=-18 (B), 33=-18 (B), 34=-18 (B), 35=-18 (B), 36=-18 (B), 37=-18 (B), 38=-18 (B), 39=-18 (B)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	A02	Hip	1	1	I66262040 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. Fri Jun 14 12:32:30 Page: 1
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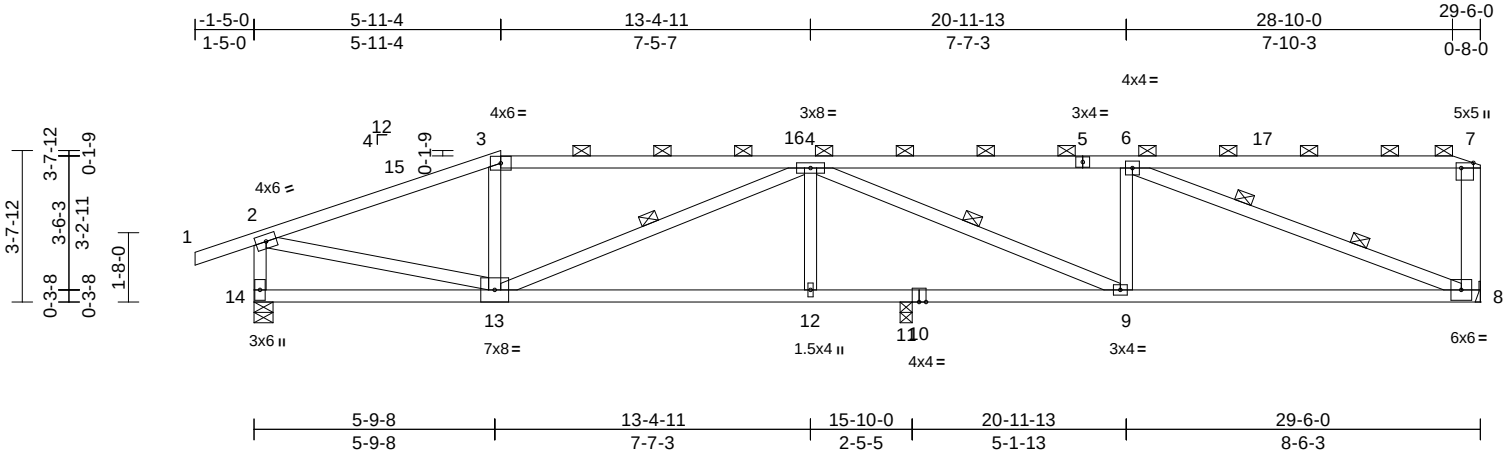

Scale = 1:55.4

Plate Offsets (X, Y): [7:0-1-8,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	0.95	Vert(LL)	-0.26	12-13	>725	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.50	12-13	>369	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 142 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E *Except* 1-3:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 10-14:2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except* 14-2:2x4 SP No.2, 8-7:2x6 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-14 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-14 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 6-9-2 oc bracing.
WEBS 1 Row at midpt 4-13, 4-9
WEBS 2 Rows at 1/3 pts 6-8

REACTIONS (size) 8= Mechanical, 11=0-3-8, 14=0-5-8
Max Horiz 14=155 (LC 9)
Max Uplift 8=-279 (LC 8), 11=-17 (LC 9), 14=-350 (LC 8)
Max Grav 8=1218 (LC 1), 11=168 (LC 1), 14=1345 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-1921/500, 2-14=-1310/481, 7-8=-295/176, 3-4=-1761/509, 4-6=-2241/569, 6-7=-138/98
BOT CHORD 13-14=-289/237, 12-13=-705/2654, 11-12=-705/2654, 9-11=-705/2654, 8-9=-571/2241
WEBS 3-13=0/272, 4-13=-1060/254, 4-12=-33/150, 4-9=-448/186, 6-9=0/392, 6-8=-2280/520, 2-13=-382/1716

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 5-11-4, Exterior(2R) 5-11-4 to 13-0-2, Interior (1) 13-0-2 to 29-3-4 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 14 SP 1650F 1.5E crushing capacity of 565 psi, Joint 11 SP 1650F 1.5E crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 279 lb uplift at joint 8, 350 lb uplift at joint 14 and 17 lb uplift at joint 11.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	A03	Roof Special	1	1	I66262041 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. Fri Jun 14 12:32:30 Page: 1
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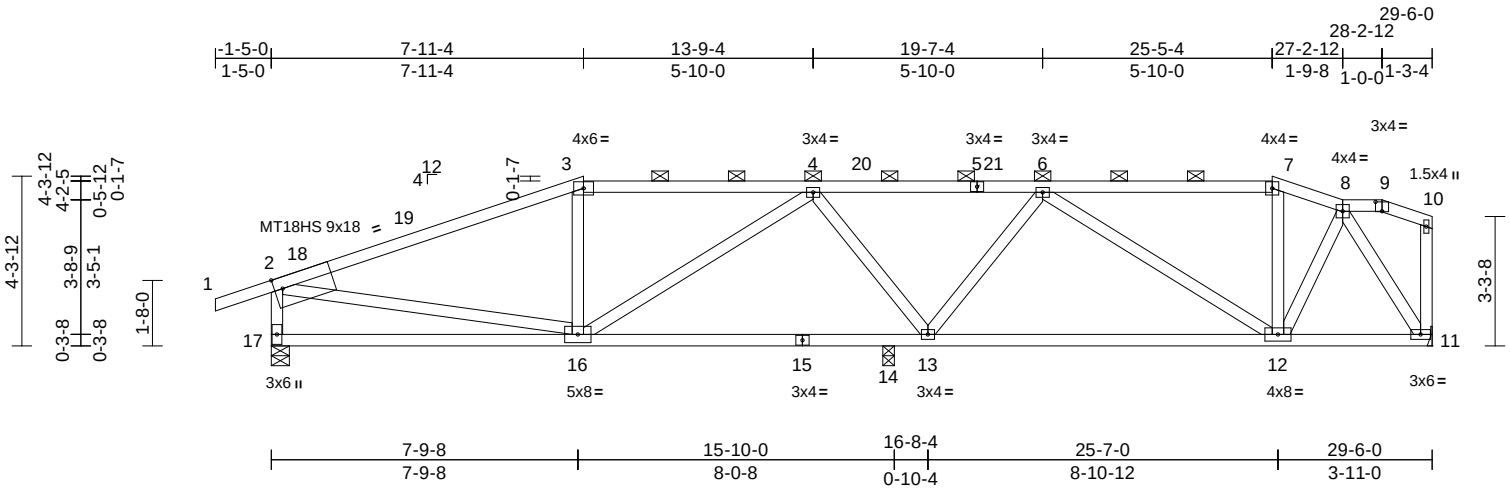

Scale = 1:58.6

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

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	0.83	Vert(LL)	0.22	14-16	>856	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.46	12-13	>356	180	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.05	11	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* 1-3:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 15-11:2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except* 17-2,11-10:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-5-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-6 max.): 3-7, 8-9.
BOT CHORD Rigid ceiling directly applied or 7-4-3 oc bracing.

REACTIONS (size) 11= Mechanical, 14=0-3-8, 17=0-5-8
Max Horiz 17=135 (LC 9)
Max Uplift 11=-259 (LC 9), 14=-39 (LC 8), 17=-335 (LC 8)
Max Grav 11=1065 (LC 1), 14=463 (LC 1), 17=1210 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-1659/478, 3-4=-1487/493, 4-6=-1545/526, 6-7=-933/327, 7-8=-979/323, 8-9=-69/92, 9-10=-80/93, 2-17=-1121/472, 10-11=-82/68
BOT CHORD 16-17=-354/335, 14-16=-605/1737, 13-14=-605/1737, 12-13=-574/1574, 11-12=-233/626
WEBS 3-16=0/193, 4-16=-441/170, 4-13=-332/166, 6-13=-80/85, 6-12=-801/308, 7-12=0/107, 8-12=-185/708, 8-11=-1182/352, 2-16=-267/1232

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 7-11-4, Exterior(2R) 7-11-4 to 15-0-2, Interior (1) 15-0-2 to 25-5-4, Exterior(2E) 25-5-4 to 27-2-12, Interior (1) 27-2-12 to 28-2-12, Exterior(2E) 28-2-12 to 29-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 17 SP No.2 crushing capacity of 565 psi, Joint 14 SP 1650F 1.5E crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 335 lb uplift at joint 17, 259 lb uplift at joint 11 and 39 lb uplift at joint 14.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

June 14,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/18/2024 8:50:09

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	A04	Hip	1	1	I66262042 Job Reference (optional)

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

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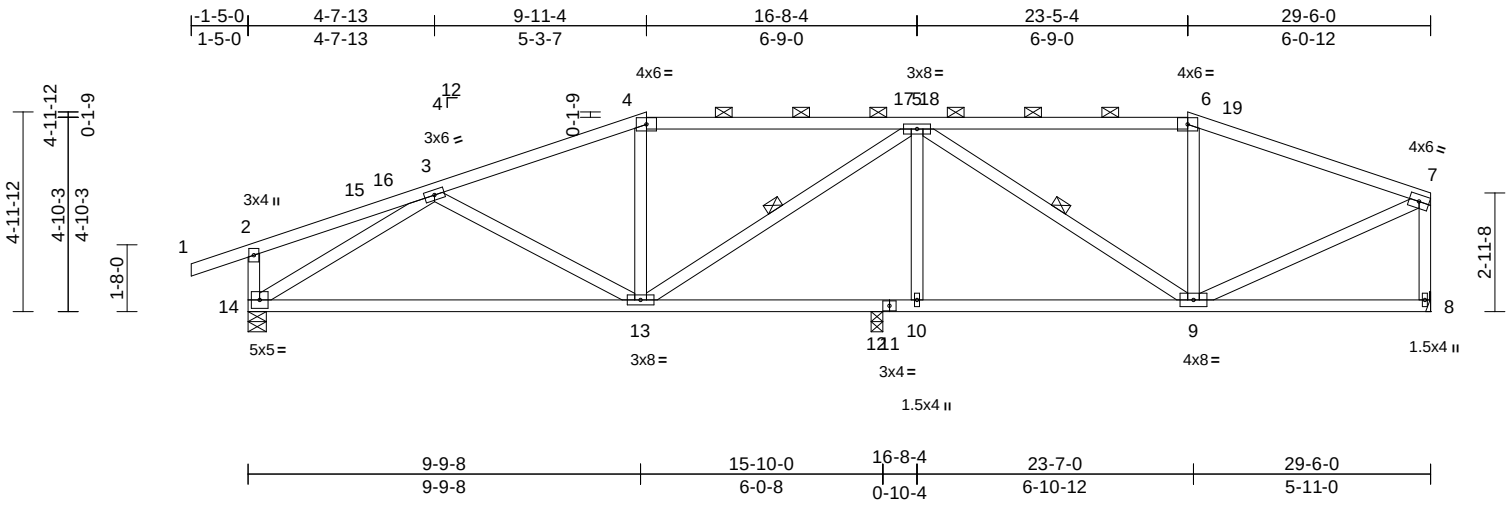

Scale = 1:57.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.24	13-14	>793	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.50	13-14	>375	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.90	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 149 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 11-14:2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 14-2,8-7:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-0-1 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-8 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 8-0-10 oc bracing.
WEBS 1 Row at midpt 5-13, 5-9

REACTIONS (size) 8= Mechanical, 12=0-3-8, 14=0-5-8
Max Horiz 14=105 (LC 11)
Max Uplift 8=-202 (LC 9), 12=-129 (LC 8), 14=-287 (LC 8)
Max Grav 8=1037 (LC 1), 12=515 (LC 1), 14=1185 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-168/69, 3-4=-1503/401, 4-5=-1376/408, 5-6=-1047/365, 6-7=-1157/337, 2-14=-300/220, 7-8=-1007/328
BOT CHORD 13-14=-505/1319, 12-13=-357/1305, 10-12=-357/1305, 9-10=-357/1305, 8-9=-61/69
WEBS 3-13=0/244, 4-13=0/217, 5-13=-122/116, 5-10=-428/248, 5-9=-408/98, 6-9=-91/151, 7-9=-271/1105, 3-14=-1449/416

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 9-11-4, Exterior(2R) 9-11-4 to 17-0-2, Interior (1) 17-0-2 to 23-5-4, Exterior(2E) 23-5-4 to 29-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 14 SP No.2 crushing capacity of 565 psi, Joint 12 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 202 lb uplift at joint 8, 287 lb uplift at joint 14 and 129 lb uplift at joint 12.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	A05	Hip	1	1	I66262043 Job Reference (optional)

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

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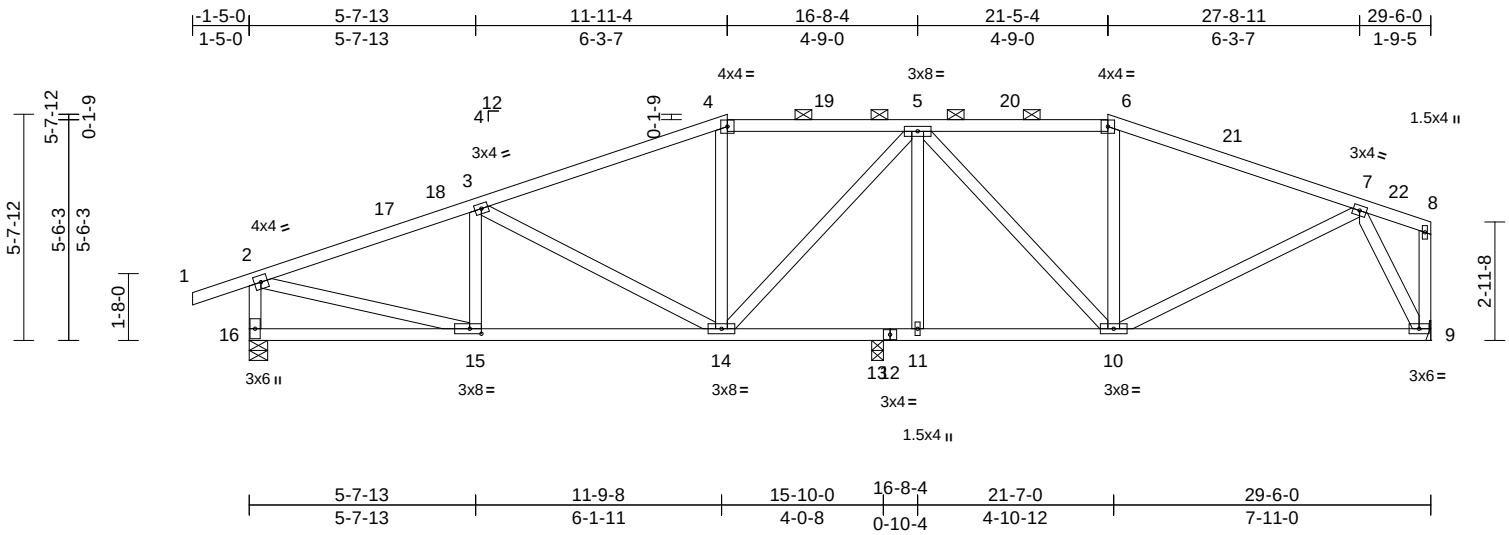


Scale = 1:57.5

Plate Offsets (X, Y): [15:0-3-8,0-1-8]

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	0.61	Vert(LL)	-0.11	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.19	10-11	>872	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 158 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 12-16:2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 16-2,9-8:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-9 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-15 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-3-6 oc bracing: 14-15.

REACTIONS (size) 9= Mechanical, 13=0-3-8, 16=0-5-8
Max Horiz 16=96 (LC 9)
Max Uplift 9=-206 (LC 9), 13=-105 (LC 8), 16=-290 (LC 8)
Max Grav 9=984 (LC 1), 13=615 (LC 1), 16=1139 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-1520/434, 3-4=-1249/407, 4-5=-1120/418, 5-6=-990/396, 6-7=-1112/376, 7-8=-79/60, 2-16=-1089/425, 8-9=-81/83
BOT CHORD 15-16=-189/196, 14-15=-501/1388, 13-14=-327/964, 11-13=-327/964, 10-11=-327/964, 9-10=-236/515
WEBS 3-15=-203/153, 3-14=-323/160, 4-14=-1/140, 5-14=-90/271, 5-10=-99/84, 6-10=-50/118, 7-10=-78/539, 2-15=-322/1361, 7-9=-1126/478, 5-11=-567/219

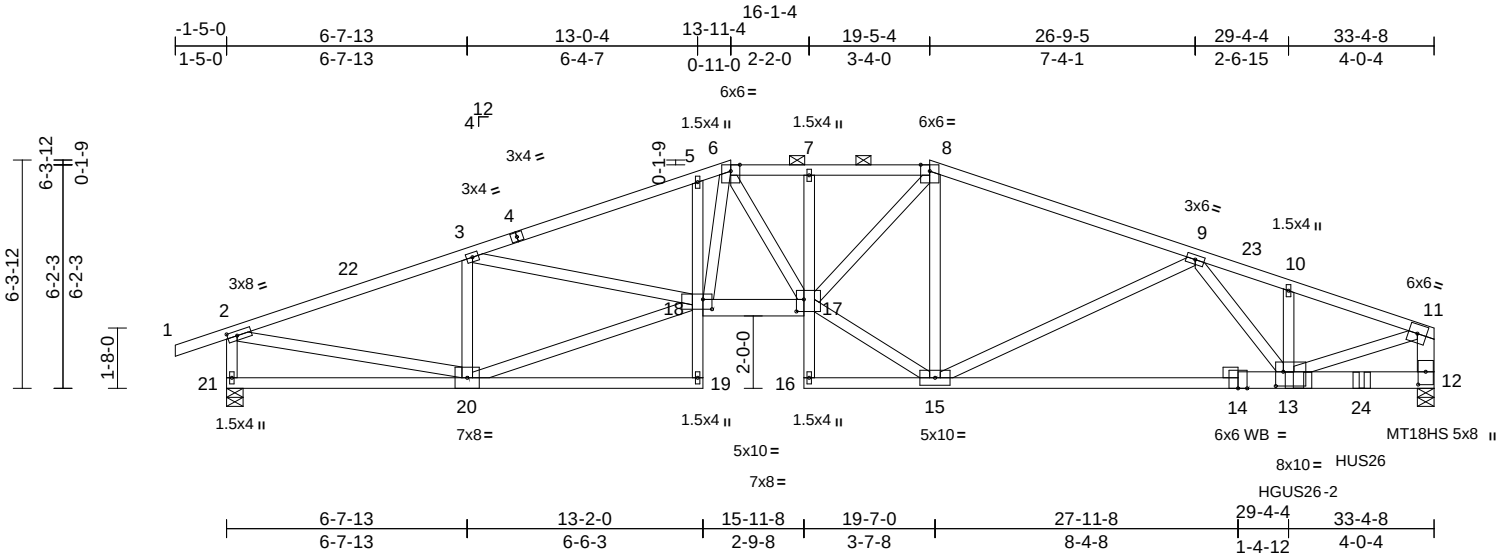
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 11-11-4, Exterior(2R) 11-11-4 to 19-0-2, Interior (1) 19-0-2 to 21-5-4, Exterior(2R) 21-5-4 to 28-6-2, Interior (1) 28-6-2 to 29-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 16 SP No.2 crushing capacity of 565 psi, Joint 13 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 290 lb uplift at joint 16, 206 lb uplift at joint 9 and 105 lb uplift at joint 13.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	A06	Hip Girder	1	2	I66262044 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. Fri Jun 14 12:32:31 Page: 1
ID:MsQg8KANpQHkbfiMarbCMpzeBcC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:63.7

Plate Offsets (X, Y): [2:0-3-3,0-1-8], [12:0-4-4,0-2-8], [13:0-2-8,0-4-12], [17:0-2-8,0-4-0], [18:0-3-0,0-3-4]

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	0.79	Vert(LL)	-0.19	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.36	13-15	>999	180	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.14	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 398 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 18-17,14-12:2x6 SPF No.2
WEBS 2x4 SPF No.3 *Except* 21-2,13-11:2x4 SP No.2, 12-11:2x6 SPF No.2
OTHERS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-5-10 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 16-17.

REACTIONS (size) 12=0-5-8, 21=0-5-8
Max Horiz 21=54 (LC 12)
Max Uplift 12=-1309 (LC 9), 21=-466 (LC 8)
Max Grav 12=5326 (LC 1), 21=2048 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-3285/881, 3-5=-5134/1434, 5-6=-4937/1451, 6-7=-5059/1437, 7-8=-5044/1434, 8-9=-3798/1069, 9-10=-7082/1848, 10-11=-7171/1819, 2-21=-1979/653, 11-12=-4698/1218
BOT CHORD 20-21=-126/184, 19-20=-22/126, 18-19=0/116, 5-18=-12/436, 17-18=-1193/4718, 16-17=-9/7, 7-17=-257/115, 15-16=-34/95, 13-15=-1453/5570, 12-13=-189/487
WEBS 6-17=-212/842, 8-15=-898/343, 11-13=-1619/6644, 3-20=-1463/511, 3-18=-432/1799, 6-18=-266/433, 15-17=-965/4030, 8-17=-619/2283, 9-15=-2358/748, 2-20=-714/2955, 9-13=-676/2171, 18-20=-844/3075, 10-13=-51/122

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 10-13 2x4 - 2 rows staggered at 0-2-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 13-11-4, Exterior(2E) 13-11-4 to 19-5-4, Exterior(2R) 19-5-4 to 26-9-5, Interior (1) 26-9-5 to 33-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Bearings are assumed to be: Joint 21 SP No.2 crushing capacity of 565 psi, Joint 12 SPF No.2 crushing capacity of 425 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 466 lb uplift at joint 21 and 1309 lb uplift at joint 12.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use Simpson Strong-Tie HGUS26-2 (20-16d Girder, 8-16d Truss) or equivalent at 29-7-9 from the left end to connect truss(es) to back face of bottom chord.
14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 31-4-8 from the left end to connect truss(es) to back face of bottom chord.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)

June 14,2024

Continued on page 2

Vert: 1-2=-70, 2-6=-70, 6-8=-70, 8-11=-70, 19-21=-20, 17-18=-20, 12-16=-20

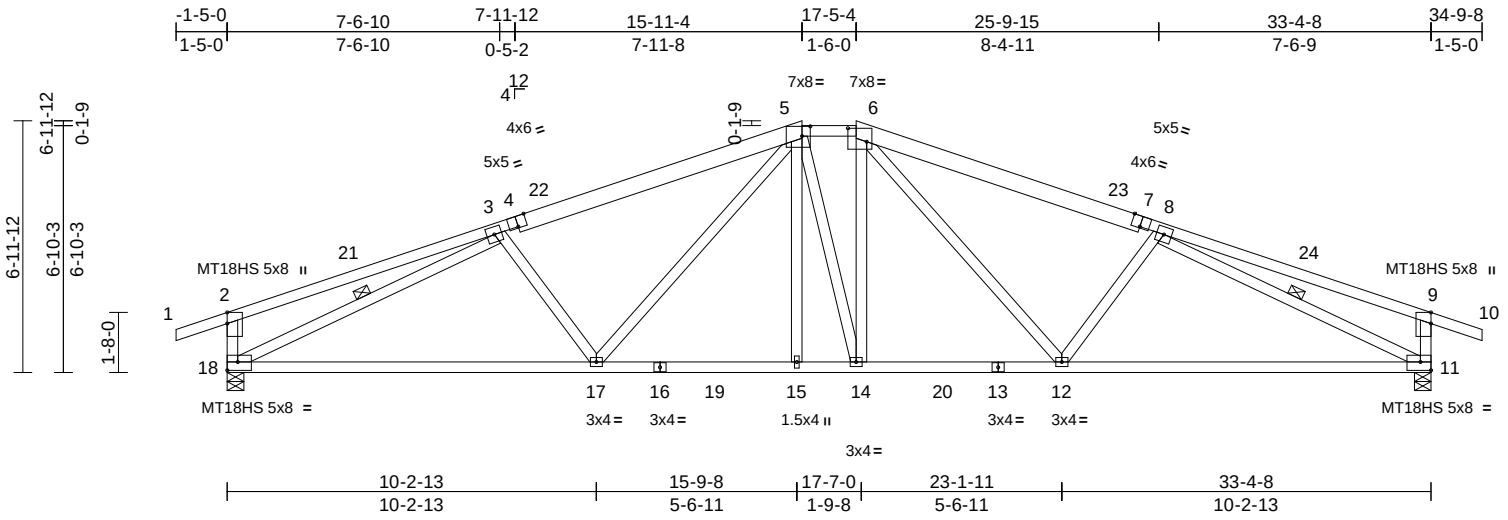
Concentrated Loads (lb)

Vert: 13=-3608 (B), 24=-687 (B)

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	A07	Hip	1	1	I66262045
					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. Fri Jun 14 12:32:31 ID:BYroY?fSOjJ2Pom2wEJb_EzeBba-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:63.9

Plate Offsets (X, Y): [2:0-3-11,Edge], [4:0-3-0,Edge], [5:0-2-12,0-3-4], [6:0-6-4,0-4-8], [7:0-3-0,Edge], [9:0-3-11,Edge], [11:Edge,0-2-12], [18:Edge,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.31	11-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.64	11-12	>619	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.94	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 184 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 5-4,6-7:2x6 SPF No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 16-13:2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 18-2,11-9:2x4 SP 2400F 2.0E

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-9-4 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 9-4-10 oc bracing.
WEBS 1 Row at midpt 3-18, 8-11

REACTIONS (size) 11=0-5-8, 18=0-5-8
Max Horiz 18=-56 (LC 17)
Max Uplift 11=-338 (LC 9), 18=-338 (LC 8)
Max Grav 11=1654 (LC 2), 18=1654 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 5-6=-2003/620, 2-18=-497/320, 9-11=-496/320, 1-2=0/35, 2-3=-415/174, 3-5=-2480/629, 6-8=-2480/635, 8-9=-415/174, 9-10=0/35
BOT CHORD 17-18=-538/2296, 15-17=-381/2004, 14-15=-382/2001, 12-14=-369/2005, 11-12=-489/2296
WEBS 5-15=0/136, 5-14=-273/277, 6-14=-214/316, 6-12=-95/492, 5-17=-95/494, 3-17=-197/224, 3-18=-2232/491, 8-12=-197/225, 8-11=-2232/497

NOTES

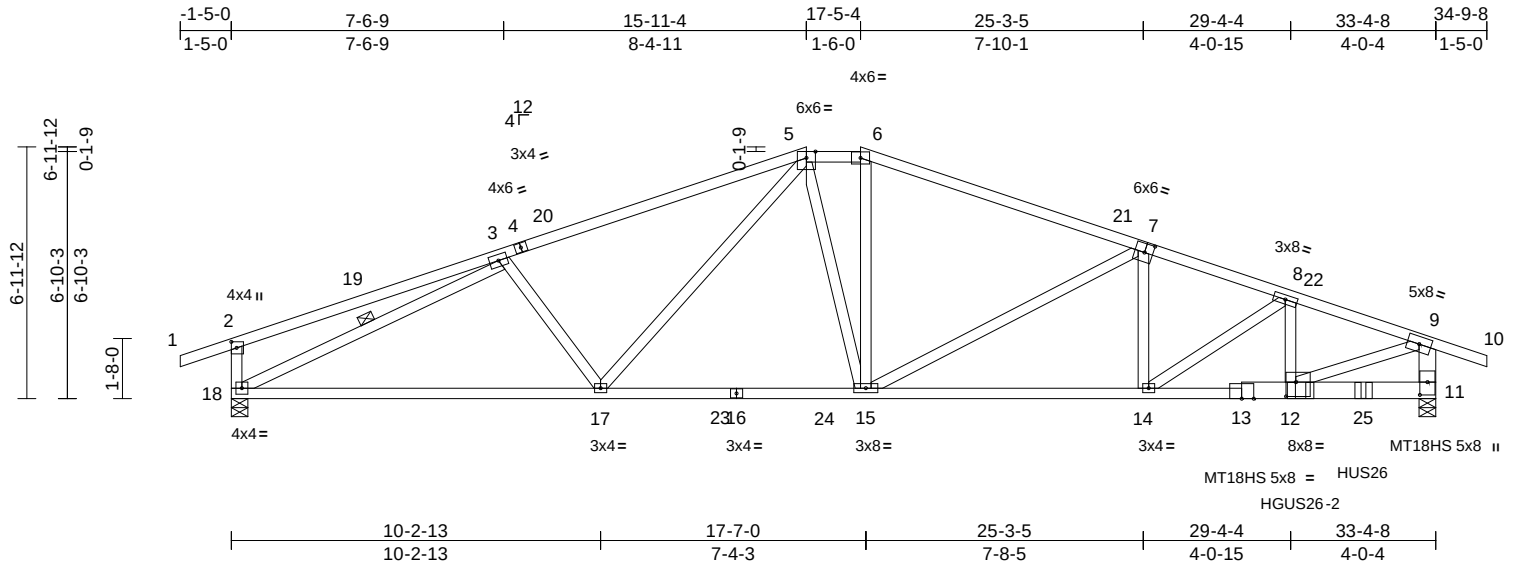
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 15-11-4, Exterior(2E) 15-11-4 to 17-5-4, Exterior(2R) 17-5-4 to 24-6-2, Interior (1) 24-6-2 to 34-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP 1650F 1.5E crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 338 lb uplift at joint 11 and 338 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	A08	Hip Girder	1	2	I66262046 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. Fri Jun 14 12:32:31 Page: 1
ID:BYroY?fSOjJ2Pom2wEJb_EzeBba-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:63.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.23	15-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.36	15-17	>999	180	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.10	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 355 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 4-5,6-7:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 13-11:2x6 SPF No.2
WEBS 2x4 SPF No.3 *Except* 18-2,12-9:2x4 SP No.2, 11-9:2x6 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-18

REACTIONS (size) 11=0-5-8, 18=0-5-8
Max Horiz 18=-58 (LC 17)
Max Uplift 11=-1252 (LC 9), 18=-441 (LC 8)
Max Grav 11=5770 (LC 1), 18=2111 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-399/181, 3-5=-3525/850, 5-6=-3246/888, 6-8=-5590/1277, 8-9=-7670/1679, 9-10=0/36, 2-18=-495/321, 9-11=-5135/1243
BOT CHORD 17-18=-723/3184, 15-17=-624/3103, 14-15=-1078/5297, 12-14=-1516/7216, 11-12=-119/492
WEBS 5-15=-220/893, 6-15=-155/890, 9-12=-1500/7144, 7-14=-247/1463, 8-14=-2453/597, 7-15=-2430/576, 5-17=-135/331, 8-12=-582/2009, 3-17=-80/340, 3-18=-3259/695

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 8-12 2x4 - 2 rows staggered at 0-2-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 15-11-4, Exterior(2E) 15-11-4 to 17-5-4, Exterior(2R) 17-5-4 to 24-6-2, Interior (1) 24-6-2 to 34-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Bearings are assumed to be: Joint 18 SP No.2 crushing capacity of 565 psi, Joint 11 SPF No.2 crushing capacity of 425 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1252 lb uplift at joint 11 and 441 lb uplift at joint 18.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use Simpson Strong-Tie HGUS26-2 (20-16d Girder, 8-16d Truss) or equivalent at 29-7-9 from the left end to connect truss(es) to front face of bottom chord.
14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 31-4-8 from the left end to connect truss(es) to front face of bottom chord.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)

June 14,2024

Continued on page 2

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

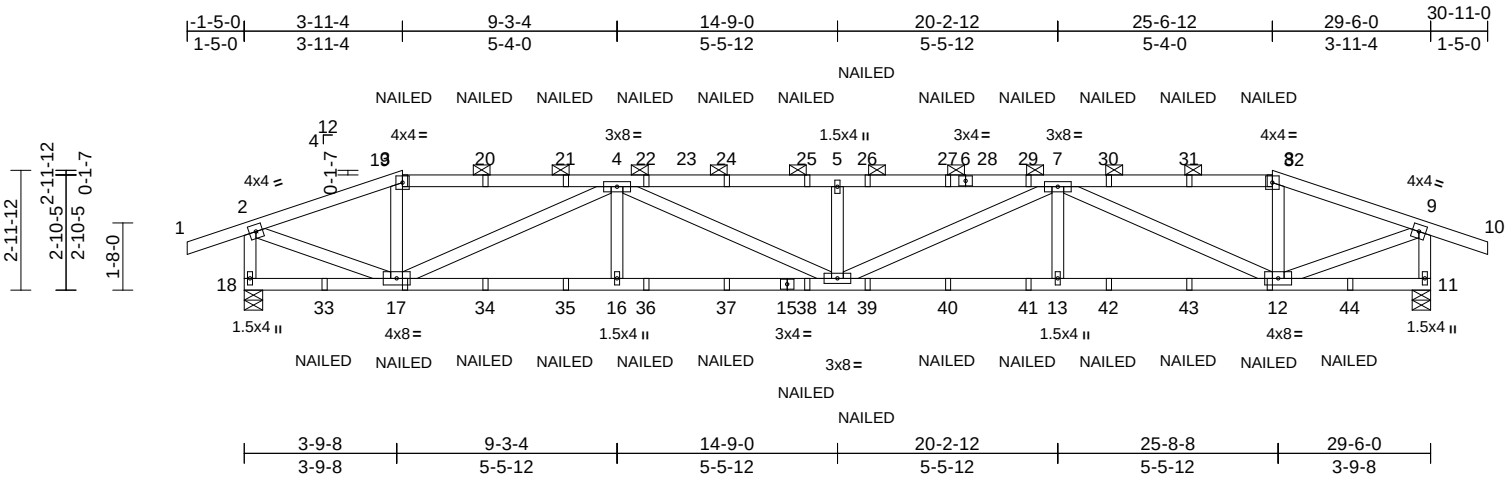
Vert: 1-2=-70, 2-5=-70, 5-6=-70, 6-9=-70, 9-10=-70, 11-18=-20

Concentrated Loads (lb)

Vert: 12=-4089 (F), 25=-581 (F)

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	B01	Hip Girder	1	2	I66262047 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. Fri Jun 14 12:32:32 Page: 1
ID:57e2QzG5EP7bJXy1aKBqV1zeC6L-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:57.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	0.20	14-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.37	14-16	>960	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 287 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 18-2,11-9:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-9 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 11=0-5-8, 18=0-5-8
Max Horiz 18=-34 (LC 10)
Max Uplift 11=-574 (LC 9), 18=-574 (LC 8)
Max Grav 11=1870 (LC 1), 18=1870 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2348/708, 3-4=-2179/696, 4-5=-5058/1504, 5-7=-5058/1504, 7-8=-2168/694, 8-9=-2341/707, 9-10=0/35, 2-18=-1781/651, 9-11=-1782/650
BOT CHORD 17-18=-74/106, 16-17=-1211/4308, 14-16=-1211/4308, 13-14=-1270/4371, 12-13=-1270/4371, 11-12=-35/63
WEBS 3-17=-25/401, 4-17=-2376/679, 4-16=0/294, 4-14=-245/843, 5-14=-490/273, 7-14=-208/774, 7-13=0/289, 7-12=-2457/716, 8-12=-47/443, 2-17=-650/2294, 9-12=-642/2279

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 3-11-4, Exterior(2R) 3-11-4 to 11-0-2, Interior (1) 11-0-2 to 25-6-12, Exterior(2E) 25-6-12 to 30-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 574 lb uplift at joint 18 and 574 lb uplift at joint 11.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.

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

Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-8=-70, 8-9=-70, 9-10=-70, 11-18=-20
Concentrated Loads (lb)
Vert: 8=-37 (F), 17=-18 (F), 12=-18 (F), 3=-37 (F), 20=-37 (F), 21=-37 (F), 22=-37 (F), 24=-37 (F), 25=-37 (F), 26=-37 (F), 27=-37 (F), 29=-37 (F), 30=-37 (F), 31=-37 (F), 33=-116 (F), 34=-18 (F), 35=-18 (F), 36=-18 (F), 37=-18 (F), 38=-18 (F), 39=-18 (F), 40=-18 (F), 41=-18 (F), 42=-18 (F), 43=-18 (F), 44=-116 (F)

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

June 14,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/18/2024 8:50:09

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	B02	Hip	1	1	I66262048 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. Fri Jun 14 12:32:32 Page: 1
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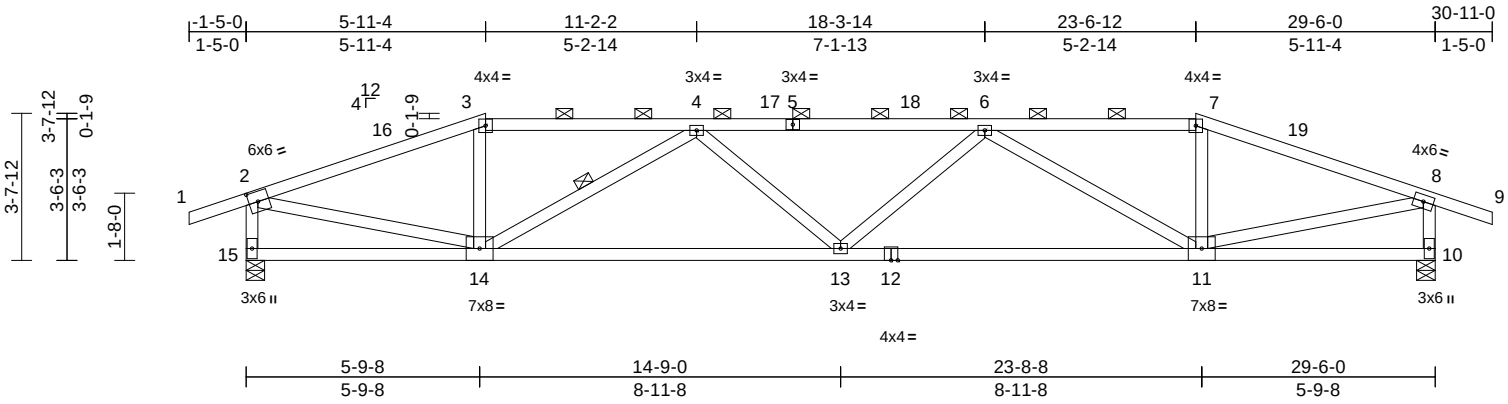

Scale = 1:57.2

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

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	1.00	Vert(LL)	-0.19	13-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.44	13-14	>788	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	1.00	Horz(CT)	0.08	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 *Except* 3-5:2x4 SP 2400F 2.0E, 5-7:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except* 15-2,10-8:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-5-6 oc purlins, except end verticals, and 2-0-0 oc purlins (2-4-4 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 8-3-6 oc bracing.
WEBS 1 Row at midpt 4-14

REACTIONS (size) 10=0-5-8, 15=0-5-8
Max Horiz 15=-25 (LC 10)
Max Uplift 10=-351 (LC 9), 15=-351 (LC 8)
Max Grav 10=1424 (LC 1), 15=1424 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2030/509, 3-4=-1852/511, 4-6=-2957/759, 6-7=-1856/522, 7-8=-2032/510, 8-9=0/35, 2-15=-1378/490, 8-10=-1376/489
BOT CHORD 14-15=-122/160, 13-14=-706/2887, 11-13=-721/2828, 10-11=-57/129
WEBS 3-14=-25/413, 4-14=-1275/391, 4-13=0/248, 6-13=0/276, 6-11=-1201/354, 7-11=-7/371, 2-14=-369/1786, 8-11=-373/1792

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 5-11-4, Exterior(2R) 5-11-4 to 13-0-2, Interior (1) 13-0-2 to 23-6-12, Exterior(2E) 23-6-12 to 30-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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 351 lb uplift at joint 10 and 351 lb uplift at joint 15.
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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	B03	Hip	1	1	I66262049
					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. Fri Jun 14 12:32:33 Page: 1
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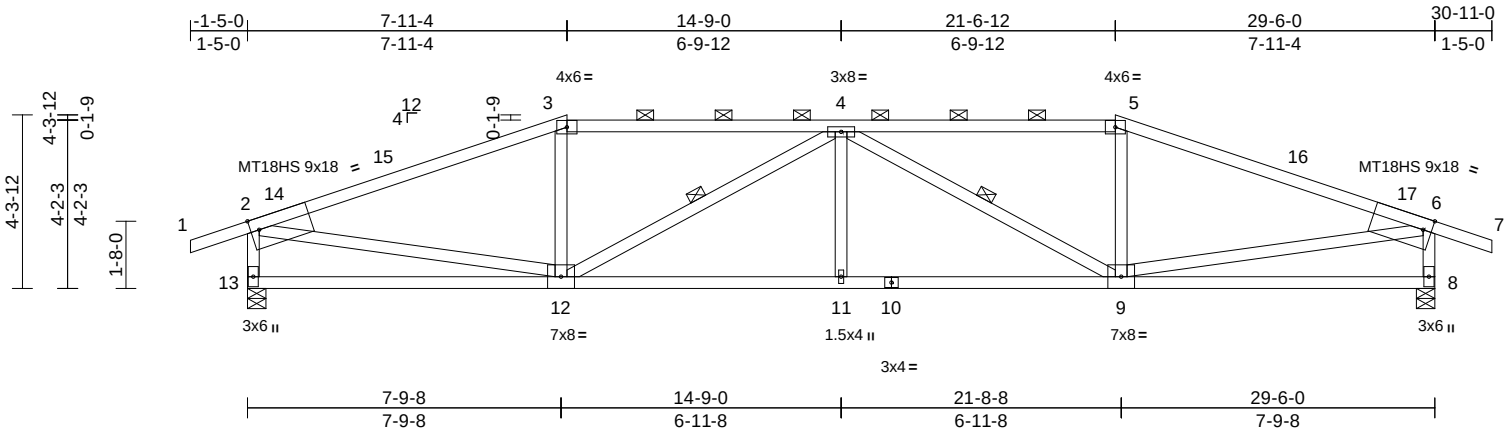

Scale = 1:57.2

Plate Offsets (X, Y): [2:0-2-8,Edge], [6:0-2-8,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	0.87	Vert(LL)	-0.16	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.29	9-11	>999	180	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 144 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E *Except* 3-5:2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 13-2,8-6:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-6 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 7-4-12 oc bracing.
WEBS 1 Row at midpt 4-12, 4-9

REACTIONS (size) 8=0-5-8, 13=0-5-8
Max Horiz 13=-15 (LC 10)
Max Uplift 8=-343 (LC 9), 13=-343 (LC 8)
Max Grav 8=1424 (LC 1), 13=1424 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2126/551, 3-4=-1929/572, 4-5=-1929/572, 5-6=-2126/552, 6-7=0/35, 2-13=-1348/507, 6-8=-1348/507
BOT CHORD 12-13=-185/265, 11-12=-612/2542, 9-11=-612/2542, 8-9=-104/265
WEBS 3-12=0/312, 4-12=-828/208, 4-11=0/258, 4-9=-828/208, 5-9=0/312, 2-12=-345/1696, 6-9=-347/1697

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 7-11-4, Exterior(2R) 7-11-4 to 14-9-0, Interior (1) 14-9-0 to 21-6-12, Exterior(2R) 21-6-12 to 28-7-10, Interior (1) 28-7-10 to 30-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 343 lb uplift at joint 8 and 343 lb uplift at joint 13.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	B04	Hip	1	1	I66262050 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. Fri Jun 14 12:32:33
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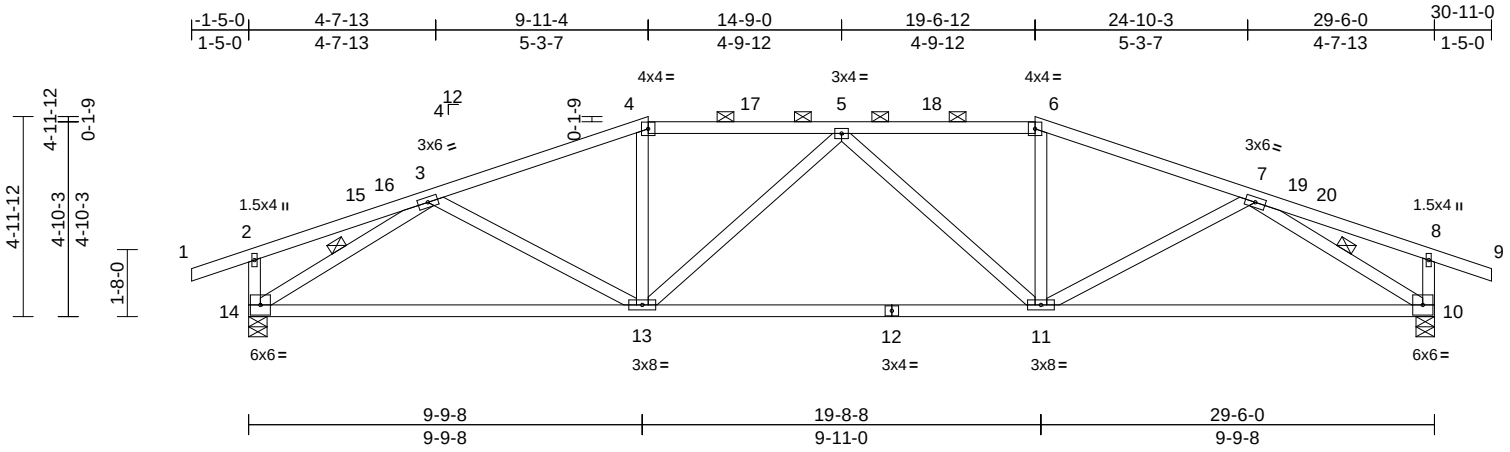
Page: 1



Scale = 1:57.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.30	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.67	11-13	>526	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 147 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E *Except* 12-14:2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except* 14-2,10-8:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-2-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-15 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 9-7-12 oc bracing.
WEBS 1 Row at midpt 3-14, 7-10

REACTIONS (size) 10=0-5-8, 14=0-5-8
Max Horiz 14=-19 (LC 13)
Max Uplift 10=-334 (LC 9), 14=-334 (LC 8)
Max Grav 10=1424 (LC 1), 14=1424 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-145/65, 3-4=-2051/579, 4-5=-1887/583, 5-6=-1902/576, 6-7=-2067/571, 7-8=-128/72, 8-9=0/35, 2-14=-283/213, 8-10=-278/216
BOT CHORD 13-14=-516/1679, 11-13=-531/2114, 10-11=-443/1688
WEBS 3-13=0/394, 4-13=-14/342, 5-13=-439/170, 5-11=-419/179, 6-11=-11/352, 7-11=0/401, 3-14=-1915/579, 7-10=-1941/567

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 9-11-4, Exterior(2R) 9-11-4 to 17-0-2, Interior (1) 17-0-2 to 19-6-12, Exterior(2R) 19-6-12 to 26-7-10, Interior (1) 26-7-10 to 30-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 14 SP 1650F 1.5E crushing capacity of 565 psi, Joint 10 SP 2400F 2.0E crushing capacity of 805 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 334 lb uplift at joint 14 and 334 lb uplift at joint 10.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

June 14,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/18/2024 8:50:09

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	B05	Hip	1	1	I66262051 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. Fri Jun 14 12:32:33 Page: 1
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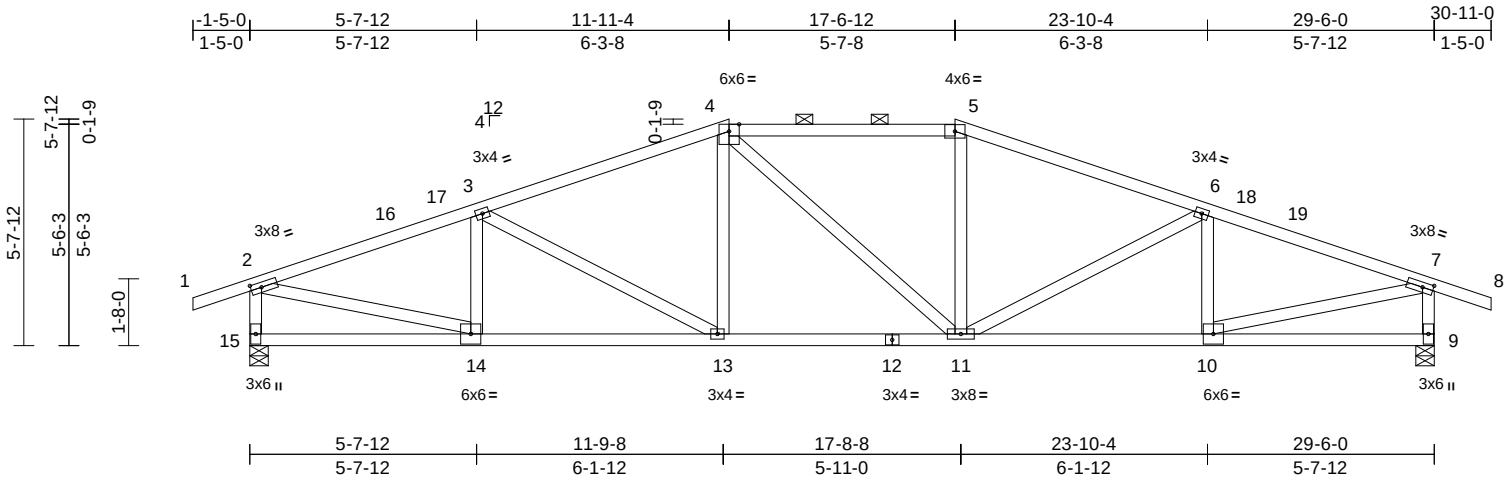

Scale = 1:57.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.10	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.21	11-13	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.81	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 152 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 15-2,9-7:2x4 SP No.2

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

REACTIONS (size) 9=0-5-8, 15=0-5-8
Max Horiz 15=-31 (LC 13)
Max Uplift 9=-322 (LC 9), 15=-322 (LC 8)
Max Grav 9=1424 (LC 1), 15=1424 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2016/571, 3-4=-1934/591, 4-5=-1769/620, 5-6=-1937/609, 6-7=-2015/589, 7-8=0/35, 2-15=-1367/500, 7-9=-1366/491
BOT CHORD 14-15=-68/138, 13-14=-503/1858, 11-13=-419/1767, 10-11=-434/1857, 9-10=-25/85
WEBS 3-14=-345/190, 3-13=-168/147, 4-13=0/265, 4-11=-184/192, 5-11=0/272, 6-11=-164/149, 6-10=-349/192, 2-14=-449/1831, 7-10=-466/1829

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 11-11-4, Exterior(2E) 11-11-4 to 17-6-12, Exterior(2R) 17-6-12 to 24-7-10, Interior (1) 24-7-10 to 30-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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 322 lb uplift at joint 15 and 322 lb uplift at joint 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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

June 14,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/18/2024 8:50:09

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	B06	Hip	1	1	I66262052 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. Fri Jun 14 12:32:33
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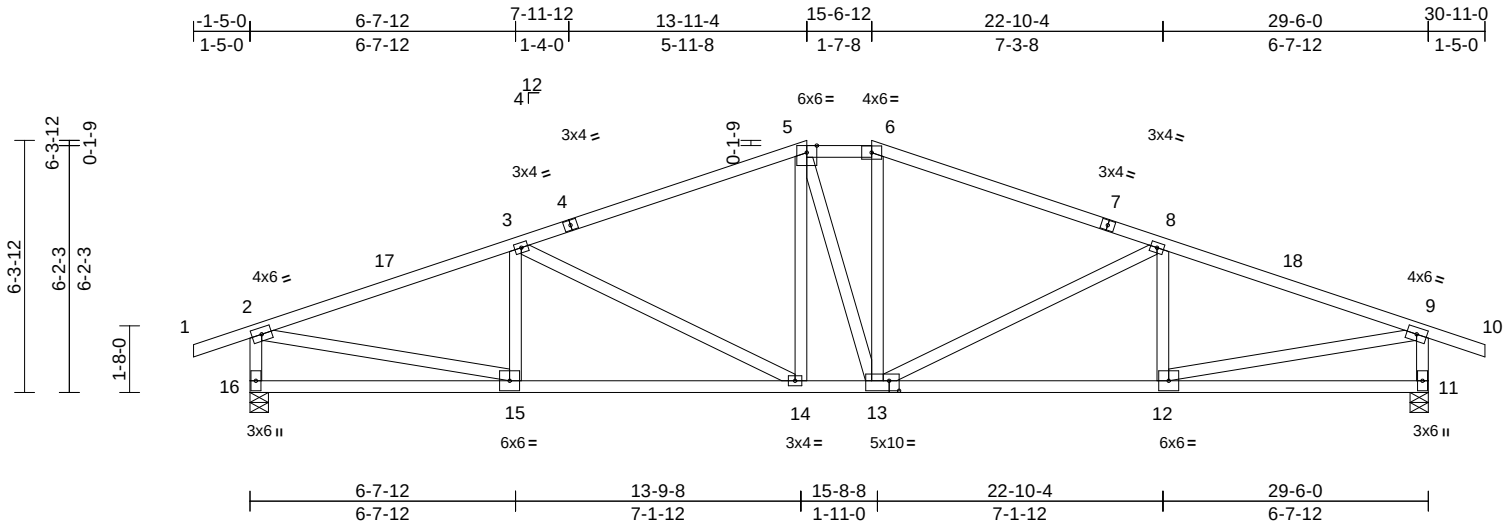


Scale = 1:57.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.12	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.28	12-13	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.05	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 157 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 4-5,6-7:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 16-2,11-9:2x4 SP No.2

BRACING

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

REACTIONS (size) 11=0-5-8, 16=0-5-8
Max Horiz 16=-44 (LC 17)
Max Uplift 11=-308 (LC 9), 16=-308 (LC 8)
Max Grav 11=1424 (LC 1), 16=1424 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/35, 2-3=-2104/554, 3-5=-1805/525, 5-6=-1616/552, 6-8=-1793/534, 8-9=-2109/556, 9-10=0/35, 2-16=-1360/483, 9-11=-1364/479
BOT CHORD 15-16=-86/166, 14-15=-481/1931, 12-14=-413/1937, 11-12=-46/125
WEBS 3-15=-255/182, 3-14=-426/183, 5-14=-11/343, 5-13=-267/198, 6-13=-48/321, 8-13=-443/172, 8-12=-241/190, 2-15=-415/1846, 9-12=-414/1854

NOTES

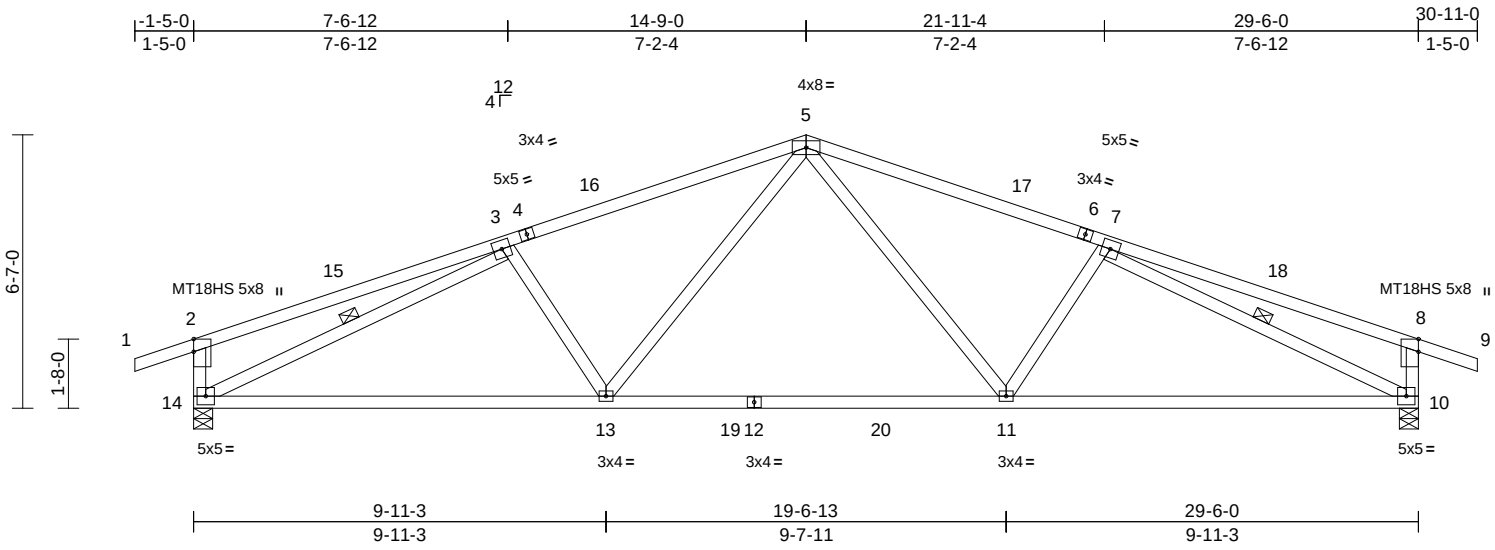
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 13-11-4, Exterior(2E) 13-11-4 to 15-6-12, Exterior(2R) 15-6-12 to 22-10-4, Interior (1) 22-10-4 to 30-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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 308 lb uplift at joint 11 and 308 lb uplift at joint 16.
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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	B07	Common	1	1	I66262053 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. Fri Jun 14 12:32:33 Page: 1
ID:6Gn1IGnNK1o3jpsI?c6SaCzeCHI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:55.5

Plate Offsets (X, Y): [2:0-3-11,Edge], [8:0-3-11,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	0.90	Vert(LL)	-0.59	11-13	>594	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.88	11-13	>400	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 144 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* 1-4,6-9:2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.3 *Except* 14-2,10-8:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-14, 7-10

REACTIONS (size) 10=0-5-8, 14=0-5-8
Max Horiz 14=-50 (LC 17)
Max Uplift 10=-302 (LC 9), 14=-302 (LC 8)
Max Grav 10=1468 (LC 2), 14=1468 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-363/193, 3-5=-2156/498, 5-7=-2129/502, 7-8=-371/190, 8-9=0/35, 2-14=-485/327, 8-10=-488/326
BOT CHORD 13-14=-404/2007, 11-13=-280/1637, 10-11=-383/1986
WEBS 5-11=-73/592, 7-11=-228/216, 5-13=-67/633, 3-13=-225/217, 3-14=-1995/336, 7-10=-1949/343

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2R) 14-9-0 to 19-9-0, Interior (1) 19-9-0 to 30-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 302 lb uplift at joint 14 and 302 lb uplift at joint 10.
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

June 14,2024

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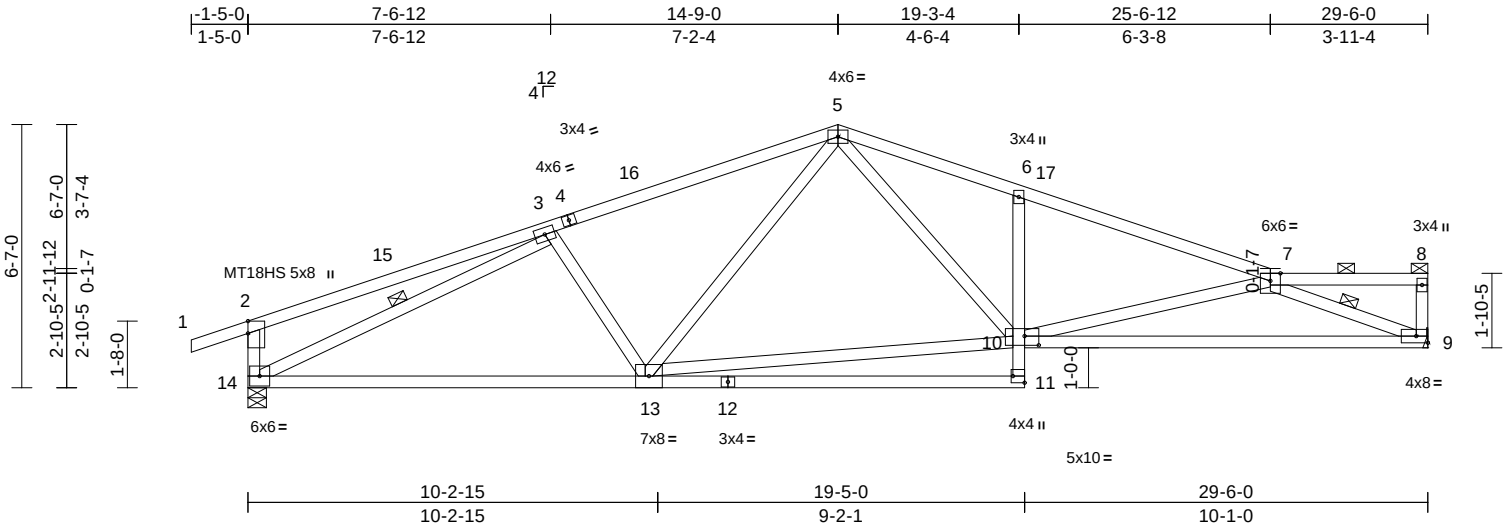
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	B08	Roof Special	1	1	I66262054 Job Reference (optional)

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. Fri Jun 14 12:32:33 Page: 1
ID:0mMEUz1XEfAcWAfckRlX3PzeC1V-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:57.6

Plate Offsets (X, Y): [2:0-3-11,Edge], [10:0-4-4,0-2-12], [11: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	0.99	Vert(LL)	-0.34	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.72	9-10	>489	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 153 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 4-5:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 12-11:2x4 SP No.2, 11-6:2x4 SPF No.3
WEBS 2x4 SPF No.3 *Except* 14-2:2x4 SP No.2

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

REACTIONS (size) 9= Mechanical, 14=0-5-8
Max Horiz 14=85 (LC 12)
Max Uplift 9=-233 (LC 9), 14=-299 (LC 8)
Max Grav 9=1311 (LC 1), 14=1427 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-374/181, 3-5=-1959/500, 5-6=-2488/685, 6-7=-2571/604, 7-8=-150/9, 8-9=-132/74, 2-14=-487/322
BOT CHORD 13-14=-515/1874, 11-13=-62/153, 10-11=0/163, 6-10=-401/228, 9-10=-740/2615
WEBS 3-13=-233/217, 5-13=-46/350, 10-13=-353/1505, 5-10=-246/1023, 7-10=-310/197, 7-9=-2733/805, 3-14=-1815/359

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2R) 14-9-0 to 19-9-0, Interior (1) 19-9-0 to 29-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 14 SP 1650F 1.5E crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 233 lb uplift at joint 9 and 299 lb uplift at joint 14.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

June 14,2024

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 191
P240542-01	B09	Roof Special	1	1	I66262055 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. Fri Jun 14 12:32:33 Page: 1
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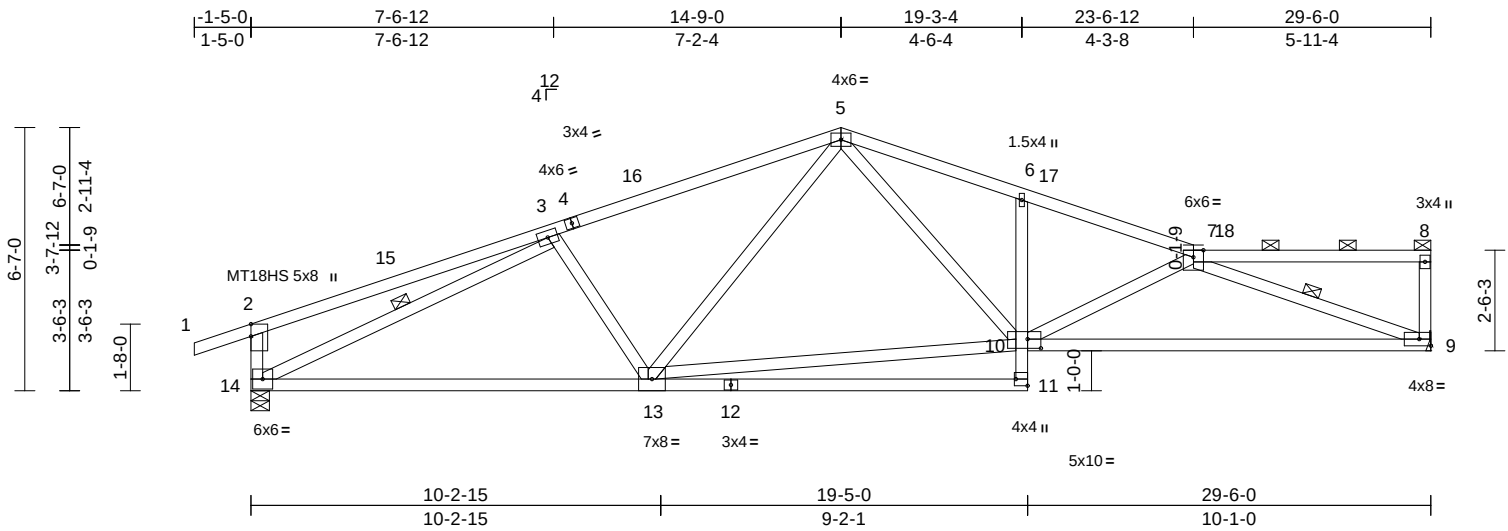

Scale = 1:57.6

Plate Offsets (X, Y): [2:0-3-11,Edge], [10:0-4-0,0-2-12], [11: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	0.90	Vert(LL)	-0.34	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.73	9-10	>481	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.81	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 154 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 4-5:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 12-11:2x4 SP No.2, 11-6:2x4 SPF No.3
WEBS 2x4 SPF No.3 *Except* 14-2:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 7-11-0 oc bracing.
WEBS 1 Row at midpt 7-9, 3-14

REACTIONS (size) 9= Mechanical, 14=0-5-8
Max Horiz 14=96 (LC 9)
Max Uplift 9=-237 (LC 9), 14=-297 (LC 8)
Max Grav 9=1311 (LC 1), 14=1427 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-375/181, 3-5=-1959/501, 5-6=-2464/675, 6-7=-2521/602, 7-8=-124/48, 8-9=-212/124, 2-14=-488/322
BOT CHORD 13-14=-557/1874, 11-13=-58/137, 10-11=0/163, 6-10=-290/177, 9-10=-758/2626
WEBS 3-13=-233/217, 5-13=-45/349, 10-13=-403/1525, 5-10=-232/993, 7-10=-350/191, 7-9=-2711/775, 3-14=-1814/359

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2R) 14-9-0 to 19-9-0, Interior (1) 19-9-0 to 29-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 14 SP 1650F 1.5E crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 237 lb uplift at joint 9 and 297 lb uplift at joint 14.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
June 14,2024

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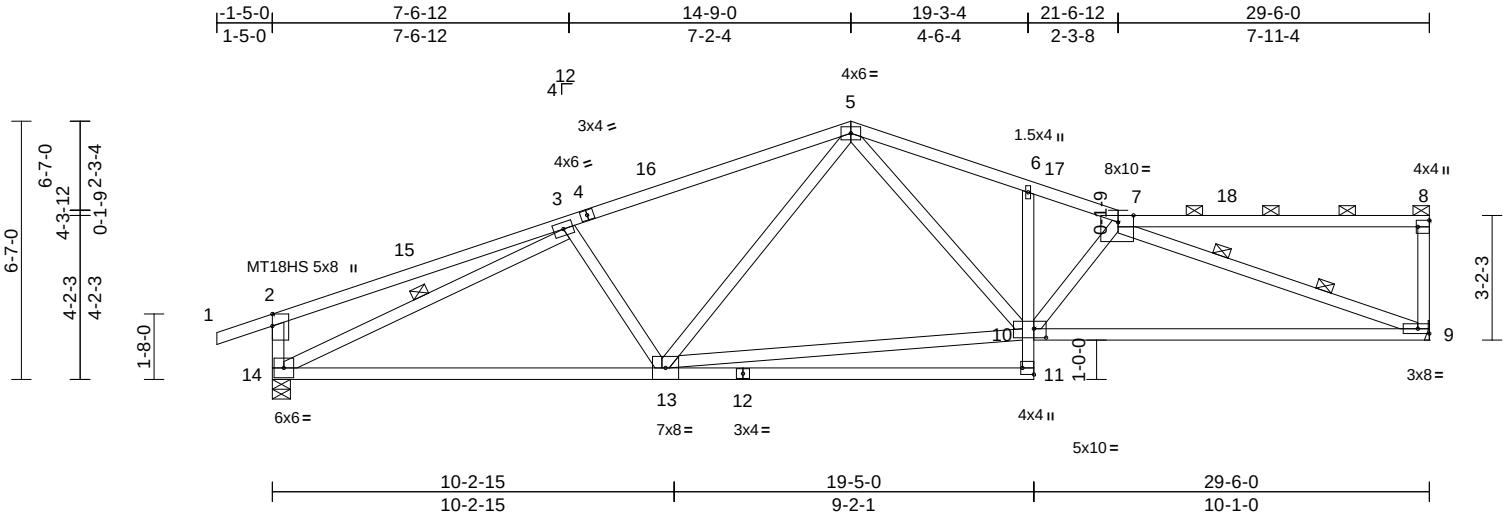
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	B10	Roof Special	1	1	I66262056 Job Reference (optional)

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. Fri Jun 14 12:32:34 Page: 1
ID:OQRODo8J0QDn?4XEUhOZfIzeC_m-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:58.7

Plate Offsets (X, Y): [2:0-3-11,Edge], [7:0-4-12,Edge], [8:Edge,0-3-8], [10:0-3-12,0-2-12], [11: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	0.90	Vert(LL)	-0.35	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.74	9-10	>474	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 156 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 4-5:2x4 SP 2400F 2.0E, 7-8:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 12-11:2x4 SP No.2, 11-6:2x4 SPF No.3
WEBS 2x4 SPF No.3 *Except* 14-2:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-3-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 8-0-8 oc bracing.
WEBS 1 Row at midpt 3-14
WEBS 2 Rows at 1/3 pts 7-9

REACTIONS (size) 9= Mechanical, 14=0-5-8
Max Horiz 14=137 (LC 9)
Max Uplift 9=-242 (LC 9), 14=-294 (LC 8)
Max Grav 9=1311 (LC 1), 14=1427 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-375/181, 3-5=-1959/502, 5-6=-2451/670, 6-7=-2509/611, 7-8=-133/77, 8-9=-277/160, 2-14=-488/322
BOT CHORD 13-14=-593/1874, 11-13=-57/128, 10-11=0/163, 6-10=-131/108, 9-10=-730/2558
WEBS 3-13=-232/217, 5-13=-44/348, 10-13=-441/1535, 5-10=-225/977, 7-10=-395/197, 7-9=-2622/714, 3-14=-1814/360

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2R) 14-9-0 to 19-9-0, Interior (1) 19-9-0 to 29-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 14 SP 1650F 1.5E crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 242 lb uplift at joint 9 and 294 lb uplift at joint 14.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

June 14,2024

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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	B11	Roof Special	1	1	I66262057 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. Fri Jun 14 12:32:34 Page: 1
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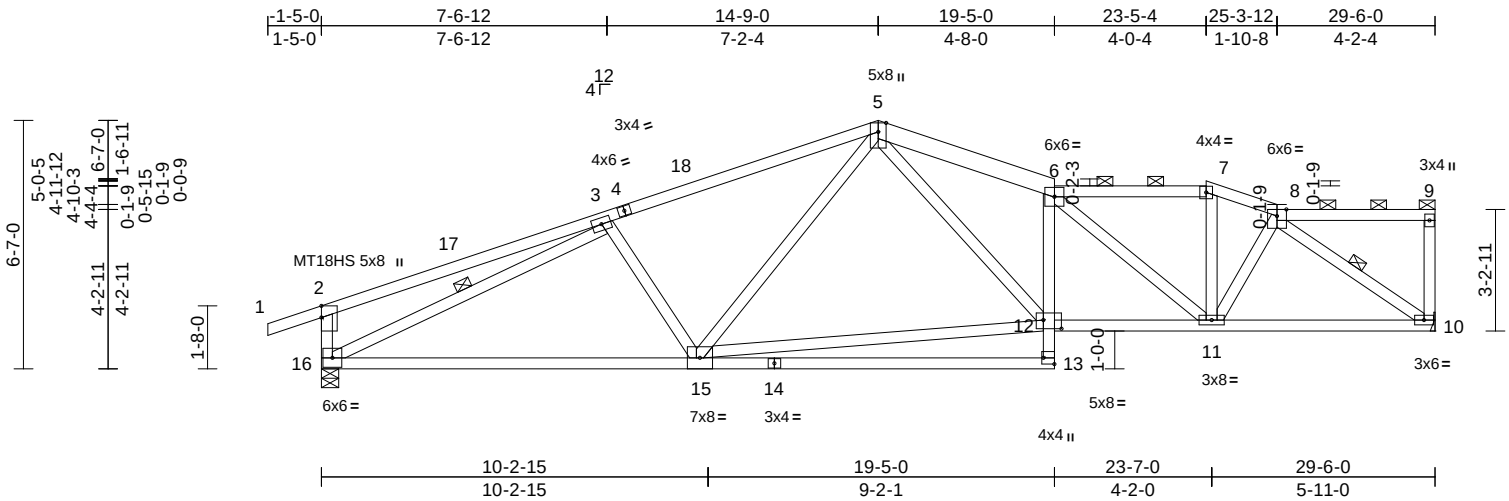

Scale = 1:61

Plate Offsets (X, Y): [2:0-3-11,Edge], [12:0-5-12,0-2-12], [13: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	0.91	Vert(LL)	-0.24	15-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.49	15-16	>715	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.90	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 163 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 4-5:2x4 SP 2400F 2.0E, 5-6:2x6 SPF No.2
BOT CHORD 2x4 SP No.2 *Except* 13-6:2x4 SPF No.3, 14-16:2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except* 16-2:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-1-10 max.): 6-7, 8-9.
BOT CHORD Rigid ceiling directly applied or 6-11-14 oc bracing.
WEBS 1 Row at midpt 8-10, 3-16

REACTIONS (size) 10= Mechanical, 16=0-5-8
Max Horiz 16=140 (LC 9)
Max Uplift 10=-243 (LC 9), 16=-293 (LC 8)
Max Grav 10=1311 (LC 1), 16=1427 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-378/183, 3-5=-1962/529, 5-6=-2510/740, 6-7=-1712/486, 7-8=-1837/500, 8-9=-81/71, 9-10=-147/84, 2-16=-490/324
BOT CHORD 15-16=-612/1872, 13-15=-20/215, 12-13=0/163, 6-12=-546/240, 11-12=-710/2394, 10-11=-480/1528
WEBS 3-15=-215/211, 5-15=-31/339, 12-15=-516/1460, 5-12=-272/1028, 6-11=-901/265, 7-11=-60/367, 8-11=-63/397, 8-10=-1867/539, 3-16=-1808/384

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2E) 14-9-0 to 19-5-0, Interior (1) 19-5-0 to 23-5-4, Exterior(2E) 23-5-4 to 25-3-12, Interior (1) 25-3-12 to 29-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 16 SP 1650F 1.5E crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 243 lb uplift at joint 10 and 293 lb uplift at joint 16.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
June 14,2024

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.sbcscomponents.com)

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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/18/2024 8:50:10

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	B12	Roof Special	1	1	I66262058 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. Fri Jun 14 12:32:34
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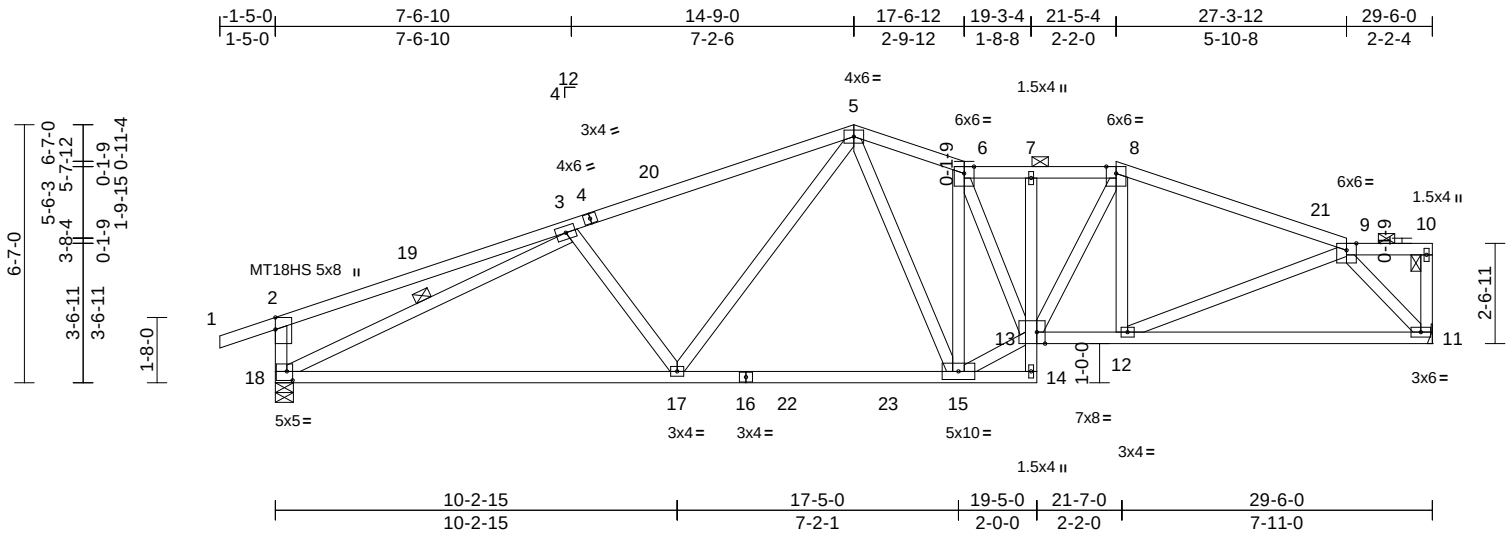

Scale = 1:58.7

Plate Offsets (X, Y): [2:0-3-11,Edge], [13:0-2-8,Edge], [18:0-1-12,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.31	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.63	17-18	>560	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 166 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 4-5:2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP No.2 *Except* 16-18:2x4 SP 1650F 1.5E

WEBS 2x4 SPF No.3 *Except* 18-2:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-7-9 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-9 max.): 6-8, 9-10.

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

WEBS 1 Row at midpt 3-18

REACTIONS (size) 11= Mechanical, 18=0-5-8
Max Horiz 18=98 (LC 9)
Max Uplift 11=-238 (LC 9), 18=-293 (LC 8)
Max Grav 11=1367 (LC 2), 18=1463 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/35, 2-3=-387/172, 3-5=-2063/522, 5-6=-1957/577, 6-7=-2116/584, 7-8=-2125/587, 8-9=-2063/507, 9-10=-73/39, 10-11=-29/14, 2-18=-488/319

BOT CHORD 17-18=-584/1937, 15-17=-445/1609, 14-15=-31/149, 13-14=-18/13, 7-13=-189/86, 12-13=-488/1907, 11-12=-344/1109

WEBS 3-17=-237/216, 5-17=-76/543, 5-15=-150/652, 6-15=-1270/391, 13-15=-524/1959, 6-13=-199/652, 8-13=-180/481, 8-12=-108/147, 9-12=-150/861, 9-11=-1617/493, 3-18=-1855/395

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2E) 14-9-0 to 17-6-12, Interior (1) 17-6-12 to 21-5-4, Exterior(2R) 21-5-4 to 26-5-4, Interior (1) 26-5-4 to 29-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearings are assumed to be: Joint 18 SP 1650F 1.5E crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 238 lb uplift at joint 11 and 293 lb uplift at joint 18.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

June 14,2024

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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/18/2024 8:50:10

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	B13	Roof Special	1	1	I66262059 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. Fri Jun 14 12:32:34 Page: 1
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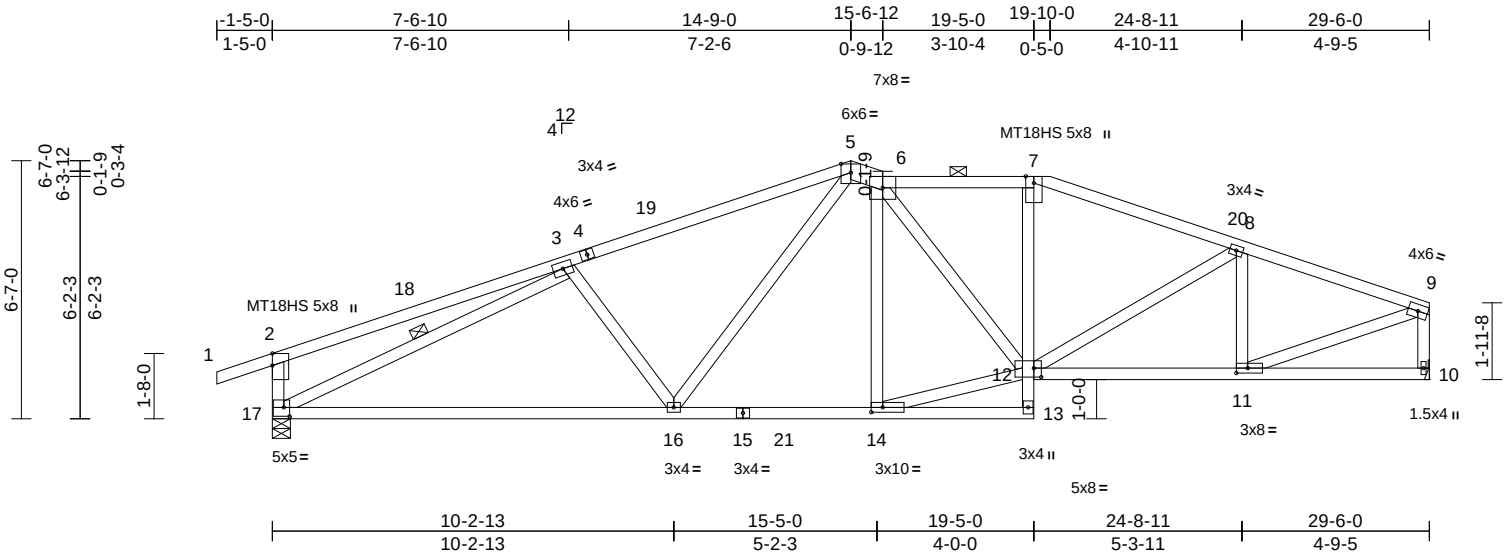

Scale = 1:58.7

Plate Offsets (X, Y): [2:0-3-11,Edge], [11:0-3-8,0-1-8], [12:0-2-4,0-2-12], [14:0-3-8,0-1-8], [17:0-1-12,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.31	16-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.63	16-17	>558	180	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 159 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E *Except* 5-6:2x6 SPF No.2, 7-9,4-1:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 13-7:2x4 SPF No.3, 15-17:2x4 SP 1650F 1.5E
WEBS 2x4 SPF No.3 *Except* 17-2,10-9:2x4 SP No.2

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

REACTIONS (size) 10= Mechanical, 17=0-5-8
Max Horiz 17=85 (LC 12)
Max Uplift 10=-234 (LC 9), 17=-293 (LC 8)
Max Grav 10=1366 (LC 2), 17=1461 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-397/173, 3-5=-2064/546, 5-6=-1533/512, 6-7=-1842/561, 7-8=-1981/567, 8-9=-1832/480, 2-17=-494/319, 9-10=-1294/388
BOT CHORD 16-17=-550/1927, 14-16=-427/1648, 13-14=-17/80, 12-13=0/115, 7-12=-32/327, 11-12=-457/1703, 10-11=-47/61
WEBS 6-12=-93/424, 8-12=-30/191, 3-17=-1835/402, 9-11=-437/1758, 3-16=-216/212, 5-16=-74/496, 6-14=-361/142, 12-14=-427/1628, 8-11=-474/224

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 14-9-0, Exterior(2E) 14-9-0 to 15-6-12, Interior (1) 15-6-12 to 19-5-0, Exterior(2R) 19-5-0 to 24-5-0, Interior (1) 24-5-0 to 29-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearings are assumed to be: Joint 17 SP 1650F 1.5E crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 234 lb uplift at joint 10 and 293 lb uplift at joint 17.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	C01	Roof Special Girder	1	1	I66262060 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. Fri Jun 14 12:32:34 Page: 1
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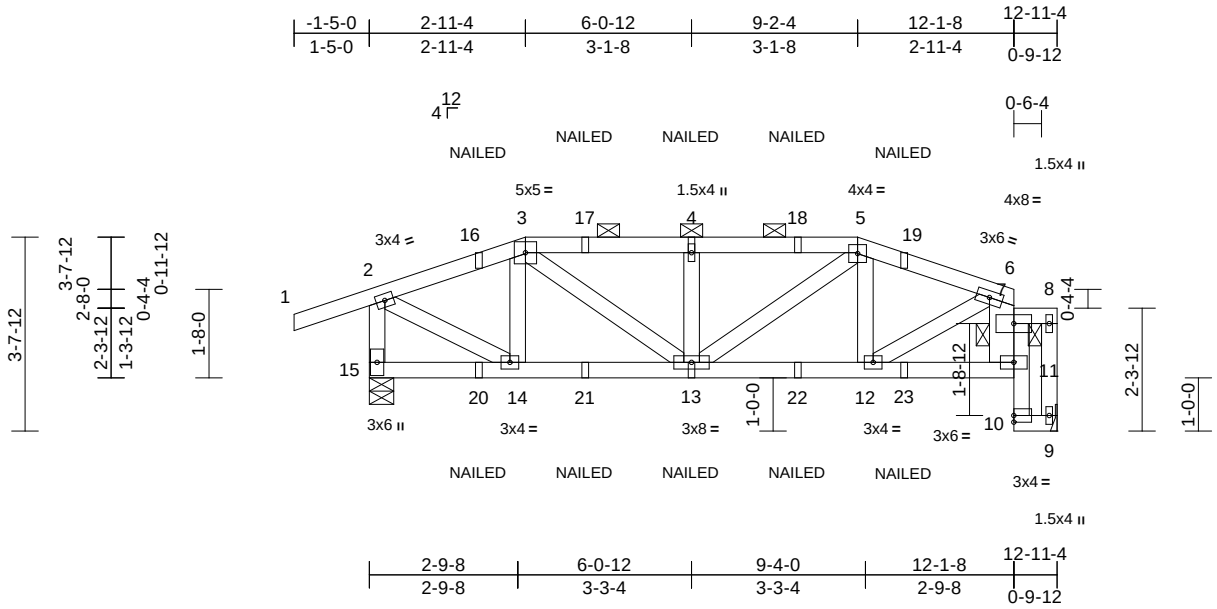

Scale = 1:43.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	0.03	12-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.05	12-13	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 70 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 7-10:2x4 SPF No.3
WEBS 2x4 SPF No.3 *Except* 15-2:2x4 SP No.2, 6-11:2x6 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.): 3-5, 7-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
6-0-0 oc bracing: 6-7

REACTIONS (size) 9= Mechanical, 15=0-5-8
Max Horiz 15=33 (LC 9)
Max Uplift 9=-197 (LC 9), 15=-277 (LC 8)
Max Grav 9=601 (LC 1), 15=729 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-608/375, 3-4=-818/541, 4-5=-818/541, 5-6=-741/436, 7-8=0/0, 2-15=-696/508
BOT CHORD 14-15=-86/40, 13-14=-341/553, 12-13=-380/679, 11-12=-219/369, 10-11=-264/154, 7-11=-342/227, 6-7=-493/309, 9-10=0/0
WEBS 8-9=-327/183, 3-14=-194/156, 4-13=-245/217, 3-13=-196/346, 5-12=-73/97, 5-13=-135/215, 2-14=-334/609, 6-12=-198/350

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 2-11-4, Exterior(2R) 2-11-4 to 7-11-4, Interior (1) 7-11-4 to 9-2-4, Exterior(2E) 9-2-4 to 11-10-12, Interior (1) 11-10-12 to 12-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 15 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 277 lb uplift at joint 15 and 197 lb uplift at joint 9.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 7-8=-70, 11-15=-20, 9-10=-20
Concentrated Loads (lb)
Vert: 4=-1 (F), 13=-3 (F), 17=-1 (F), 18=-1 (F), 20=-35 (F), 21=-3 (F), 22=-3 (F), 23=-35 (F)

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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	C02	Roof Special Girder	1	2	I66262061 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. Fri Jun 14 12:32:35 Page: 1
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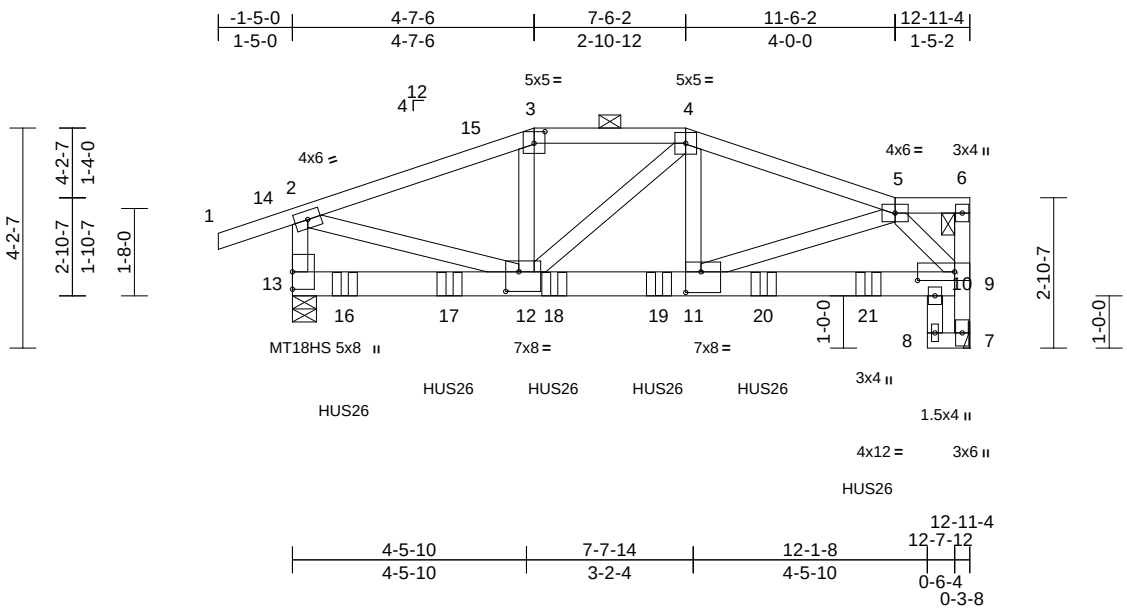


Scale = 1:44

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

Loading	(psf)	Spacing	1-10-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.07	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.13	10-11	>999	180	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	NO	WB	0.58	Horz(CT)	0.08	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 149 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2 *Except* 10-8:2x4 SPF No.3, 8-7:2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 6-7,13-2,12-2:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-13 oc purlins, except end verticals, and 2-0-0 oc purlins (5-7-11 max.): 3-4, 5-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 7= Mechanical, 13=0-5-8
Max Horiz 13=82 (LC 11)
Max Uplift 7=-795 (LC 9), 13=-967 (LC 8)
Max Grav 7=4107 (LC 1), 13=4796 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-5297/1217, 3-4=-4891/1180, 4-5=-5747/1326, 5-6=-651/129, 7-9=-3919/892, 6-9=-147/26, 2-13=-3347/945
BOT CHORD 12-13=-282/435, 11-12=-1240/5319, 10-11=-756/3030, 9-10=-766/3116, 8-10=-178/52, 7-8=-89/21
WEBS 3-12=-275/1545, 4-11=-345/2007, 5-11=-536/2588, 5-9=-3684/968, 2-12=-1014/4742, 4-12=-802/147

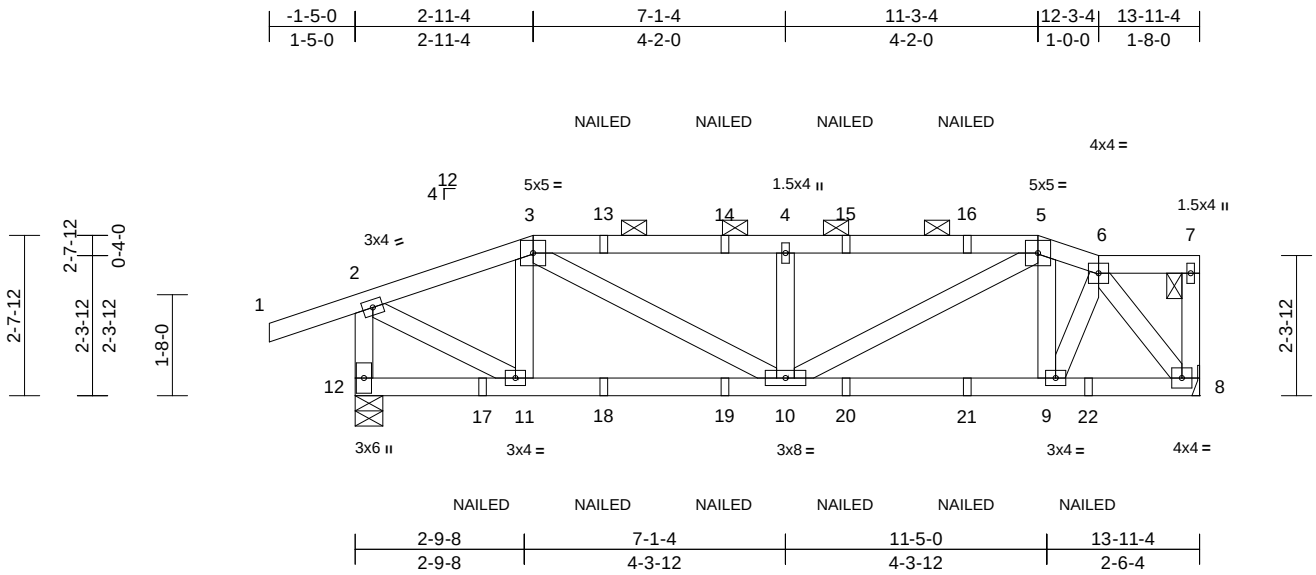
NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-8-0 oc, 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 4-7-6, Exterior(2E) 4-7-6 to 11-6-2, Interior (1) 11-6-2 to 12-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Bearings are assumed to be: Joint 13 SPF No.2 crushing capacity of 425 psi.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 795 lb uplift at joint 7 and 967 lb uplift at joint 13.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-0-0 from the left end to 11-0-0 to connect truss(es) to back face of bottom chord.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-64, 2-3=-64, 3-4=-64, 4-5=-64, 5-6=-64, 10-13=-18, 7-8=-18
Concentrated Loads (lb)
Vert: 16=-1294 (B), 17=-1293 (B), 18=-1293 (B), 19=-1293 (B), 20=-1293 (B), 21=-1293 (B)

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	C03	Roof Special Girder	1	1	I66262062 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. Fri Jun 14 12:32:35 Page: 1
ID:JltgWHgfhNn71UYudwH0V2z7HsQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:38

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	0.30	Vert(LL)	0.03	10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.04	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.32	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 73 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 12-2:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-7-0 max.): 3-5, 6-7.
BOT CHORD Rigid ceiling directly applied or 8-11-3 oc bracing.

REACTIONS (size) 8= Mechanical, 12=0-5-8
Max Horiz 12=94 (LC 11)
Max Uplift 8=-263 (LC 9), 12=-327 (LC 8)
Max Grav 8=707 (LC 1), 12=825 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-719/402, 3-4=-1015/591, 4-5=-1015/591, 5-6=-653/368, 6-7=-48/52, 7-8=-63/47, 2-12=-783/525
BOT CHORD 11-12=-171/119, 10-11=-438/660, 9-10=-388/635, 8-9=-290/469
WEBS 3-11=-194/154, 3-10=-203/429, 4-10=-331/259, 5-10=-254/459, 5-9=-223/186, 6-9=-222/404, 6-8=-758/423, 2-11=-371/730

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 2-11-4, Exterior(2R) 2-11-4 to 7-11-4, Interior (1) 7-11-4 to 11-3-4, Exterior(2E) 11-3-4 to 12-3-4, Interior (1) 12-3-4 to 13-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 12 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 263 lb uplift at joint 8 and 327 lb uplift at joint 12.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

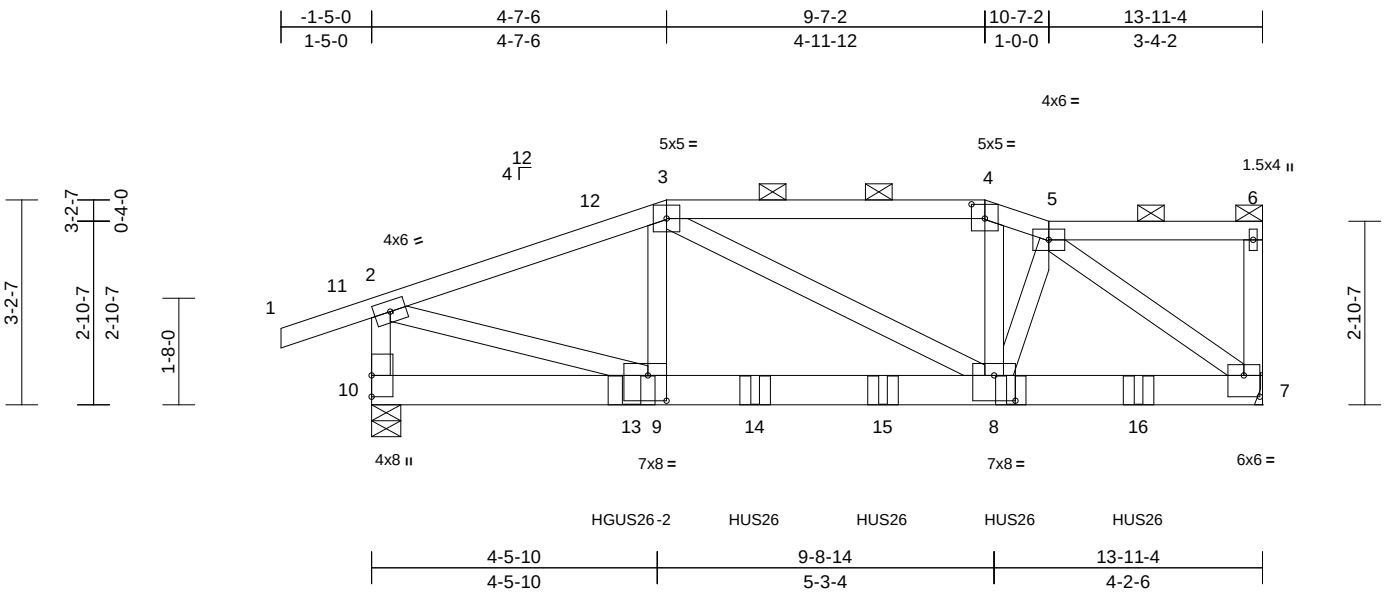
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 8-12=-20
Concentrated Loads (lb)
Vert: 13=-1 (B), 14=-1 (B), 15=-1 (B), 16=-1 (B), 17=-89 (B), 18=-3 (B), 19=-3 (B), 20=-3 (B), 21=-3 (B), 22=-89 (B)

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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	C04	Roof Special Girder	1	2	I66262063 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. Fri Jun 14 12:32:35 Page: 1
ID:hcNYYgARUTPXvY1juzV5XCz7HqU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:36

Plate Offsets (X, Y): [4:0-2-8,0-2-11], [7:0-3-0,0-4-0], [8:0-4-0,0-4-12], [9:0-3-8,0-4-12]

Loading	(psf)	Spacing	1-10-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.09	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.16	8-9	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 155 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3 *Except* 10-2,9-2:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-0 max.): 3-4, 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7= Mechanical, 10=0-5-8
Max Horiz 10=108 (LC 9)
Max Uplift 7=-859 (LC 9), 10=-846 (LC 8)
Max Grav 7=3627 (LC 1), 10=3212 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-4959/1445, 3-4=-4554/1300, 4-5=-4847/1352, 5-6=-69/66, 6-7=-133/92, 2-10=-3222/1080
BOT CHORD 9-10=-263/184, 8-9=-1445/4585, 7-8=-1188/4076
WEBS 3-9=-346/1328, 3-8=-92/145, 4-8=-289/1245, 5-8=-436/1741, 5-7=-5088/1436, 2-9=-1293/4741

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-8-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 4-8 2x4 - 2 rows staggered at 0-7-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 4-7-6, Exterior(2E) 4-7-6 to 10-7-2, Interior (1) 10-7-2 to 13-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Bearings are assumed to be: Joint 10 SPF No.2 crushing capacity of 425 psi.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 859 lb uplift at joint 7 and 846 lb uplift at joint 10.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use Simpson Strong-Tie HGUS26-2 (20-10d Girder, 6-10d Truss) or equivalent at 4-0-13 from the left end to connect truss(es) to front face of bottom chord.
14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 6-0-0 from the left end to 12-0-0 to connect truss(es) to front face of bottom chord.

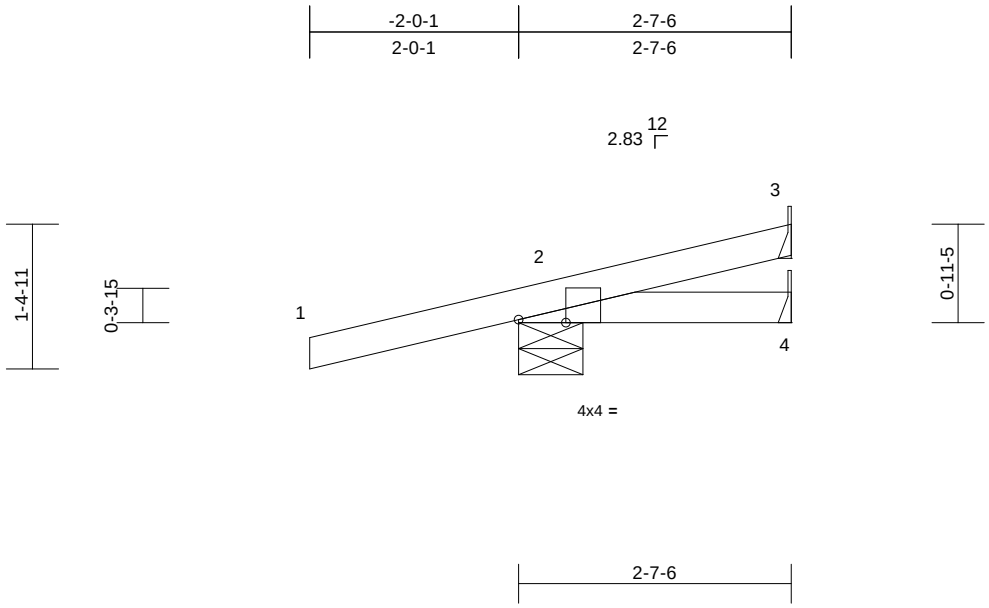
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-64, 2-3=-64, 3-4=-64, 4-5=-64, 5-6=-64, 7-10=-18
Concentrated Loads (lb)
Vert: 8=-1019 (F), 13=-1381 (F), 14=-1200 (F), 15=-1047 (F), 16=-966 (F)

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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	CJ1	Jack-Open	3	1	I66262064 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. Fri Jun 14 12:32:35 Page: 1
ID:arBBSFcIbmGJfU5Z_G5kznzeD92-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:22.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	0.00	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	2-4	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-7-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-7-6, 3= Mechanical, 4= Mechanical
Max Horiz 2=53 (LC 8)
Max Uplift 2=-182 (LC 8), 3=-8 (LC 13)
Max Grav 2=346 (LC 1), 3=18 (LC 8), 4=45 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-44/17
BOT CHORD 2-4=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 3 and 182 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.

LOAD CASE(S) Standard

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	CJ02	Jack-Open	2	1	I66262065
					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. Fri Jun 14 12:32:35 Page: 1
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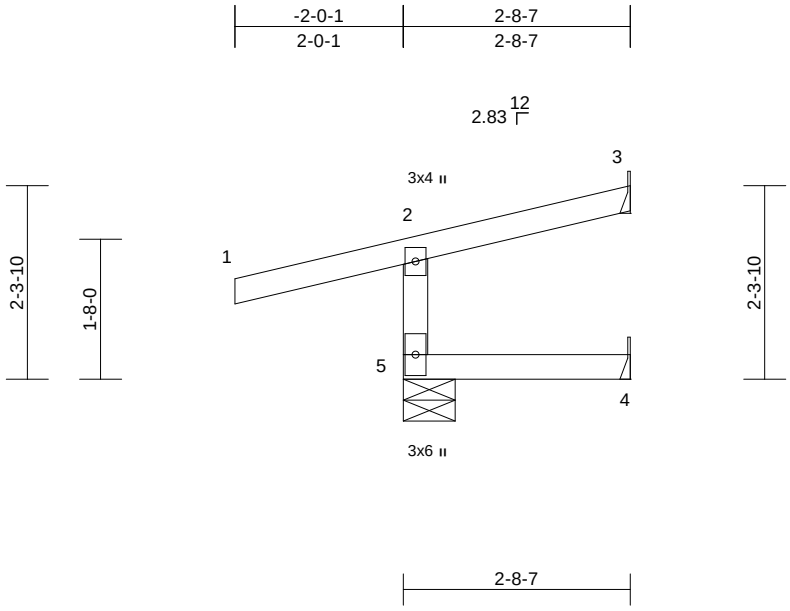

Scale = 1:27.4

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	0.54	Vert(LL)	0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 13 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-8-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-7-6
Max Horiz 5=60 (LC 9)
Max Uplift 3=-30 (LC 12), 5=-142 (LC 8)
Max Grav 3=35 (LC 1), 4=44 (LC 3), 5=328 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-290/415, 1-2=0/35, 2-3=-32/16
BOT CHORD 4-5=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 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 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 142 lb uplift at joint 5 and 30 lb uplift at joint 3.
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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	CJ03	Jack-Open	2	1	I66262066 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. Fri Jun 14 12:32:35 Page: 1
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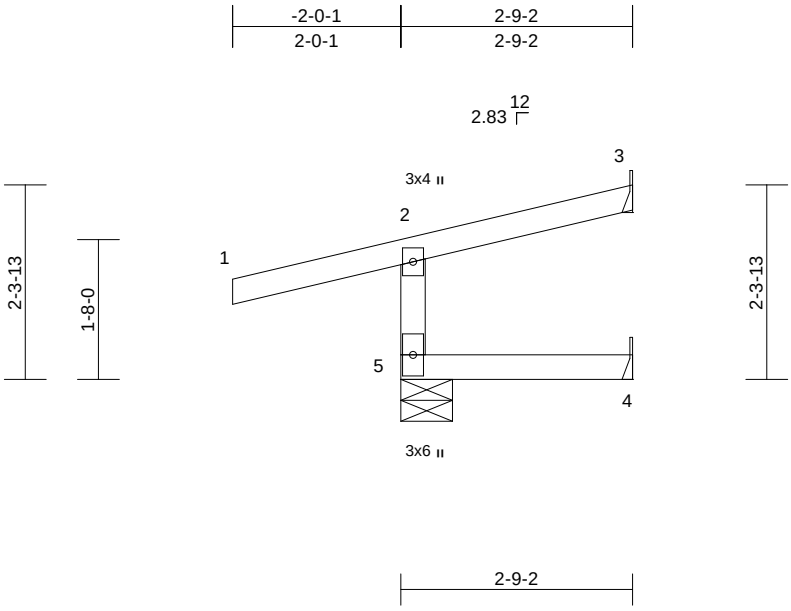

Scale = 1:27.5

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	0.54	Vert(LL)	0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 13 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-9-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-7-6
Max Horiz 5=60 (LC 9)
Max Uplift 3=-31 (LC 12), 5=-142 (LC 8)
Max Grav 3=39 (LC 1), 4=45 (LC 3), 5=329 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-291/416, 1-2=0/35, 2-3=-32/16
BOT CHORD 4-5=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 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 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 142 lb uplift at joint 5 and 31 lb uplift at joint 3.
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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	CJ04	Jack-Open	3	1	I66262067
					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. Fri Jun 14 12:32:36 Page: 1
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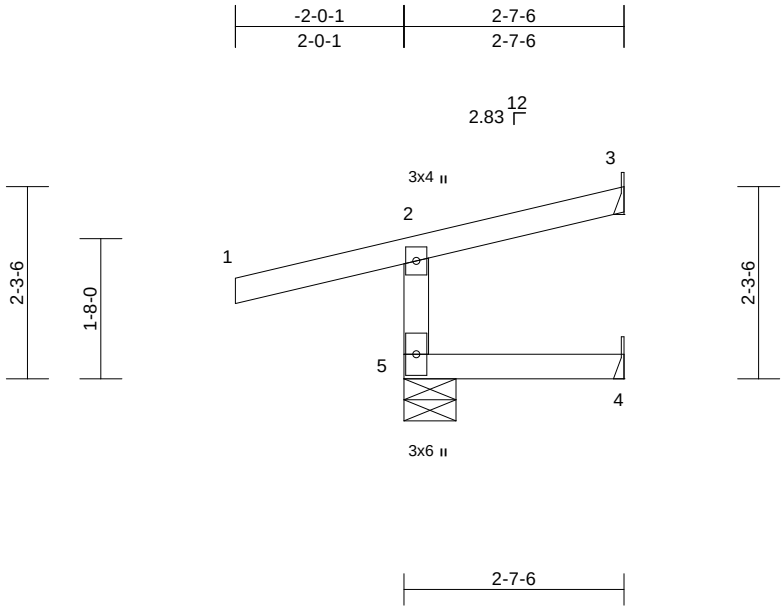


Scale = 1:27.4

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	0.54	Vert(LL)	0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 12 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-7-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-7-6
Max Horiz 5=59 (LC 9)
Max Uplift 3=-28 (LC 12), 5=-143 (LC 8)
Max Grav 3=30 (LC 1), 4=42 (LC 3), 5=326 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-289/414, 1-2=0/35, 2-3=-32/16
BOT CHORD 4-5=0/0

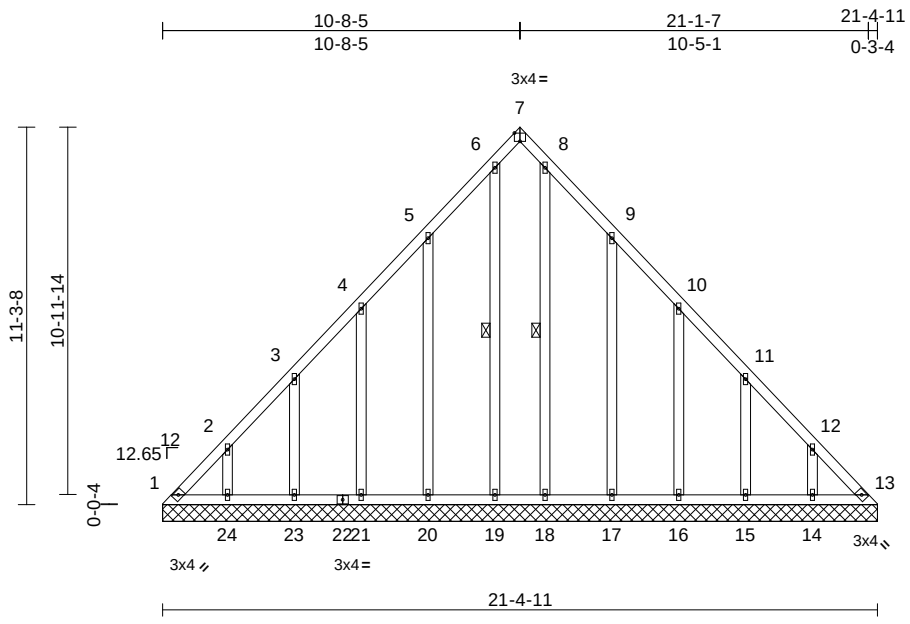
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 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 143 lb uplift at joint 5 and 28 lb uplift at joint 3.
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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	HG1	Lay-In Gable	1	1	I66262068 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. Fri Jun 14 12:32:36 Page: 1
ID:4aaBILsmFzqQEJMVaBas7szeC6t-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:68.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.27	Horiz(TL)	0.01	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 142 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SPF No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-19, 8-18

REACTIONS (size) 1=21-4-11, 13=21-4-11, 14=21-4-11, 15=21-4-11, 16=21-4-11, 17=21-4-11, 18=21-4-11, 19=21-4-11, 20=21-4-11, 21=21-4-11, 23=21-4-11, 24=21-4-11
Max Horiz 1=-310 (LC 8)
Max Uplift 1=-148 (LC 10), 13=-109 (LC 11), 14=-137 (LC 13), 15=-137 (LC 13), 16=-133 (LC 13), 17=-164 (LC 13), 19=-18 (LC 9), 20=-160 (LC 12), 21=-132 (LC 12), 23=-137 (LC 12), 24=-137 (LC 12)
Max Grav 1=342 (LC 12), 13=317 (LC 13), 14=208 (LC 20), 15=207 (LC 20), 16=204 (LC 20), 17=219 (LC 20), 18=141 (LC 21), 19=163 (LC 19), 20=213 (LC 19), 21=207 (LC 19), 23=206 (LC 19), 24=208 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-489/327, 2-3=-363/226, 3-4=-228/166, 4-5=-141/117, 5-6=-132/155, 6-7=-102/97, 7-8=-102/94, 8-9=-132/123, 9-10=-102/65, 10-11=-193/121, 11-12=-328/226, 12-13=-454/327
BOT CHORD 1-24=-239/340, 23-24=-239/340, 21-23=-239/340, 20-21=-239/340, 19-20=-239/340, 18-19=-239/340, 17-18=-239/340, 16-17=-239/340, 15-16=-239/340, 14-15=-239/340, 13-14=-239/340
WEBS 2-24=-178/154, 3-23=-185/162, 4-21=-179/157, 5-20=-209/185, 6-19=-129/38, 8-18=-107/2, 9-17=-209/188, 10-16=-179/156, 11-15=-185/162, 12-14=-178/154

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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 10-8-9, Exterior(2R) 10-8-9 to 15-5-9, Interior (1) 15-5-9 to 21-1-1 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 0-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 148 lb uplift at joint 1, 109 lb uplift at joint 13, 137 lb uplift at joint 24, 137 lb uplift at joint 23, 132 lb uplift at joint 21, 160 lb uplift at joint 20, 18 lb uplift at joint 19, 164 lb uplift at joint 17, 133 lb uplift at joint 16, 137 lb uplift at joint 15 and 137 lb uplift at joint 14.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	HG2	Lay-In Gable	1	1	I66262069 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. Fri Jun 14 12:32:36 Page: 1
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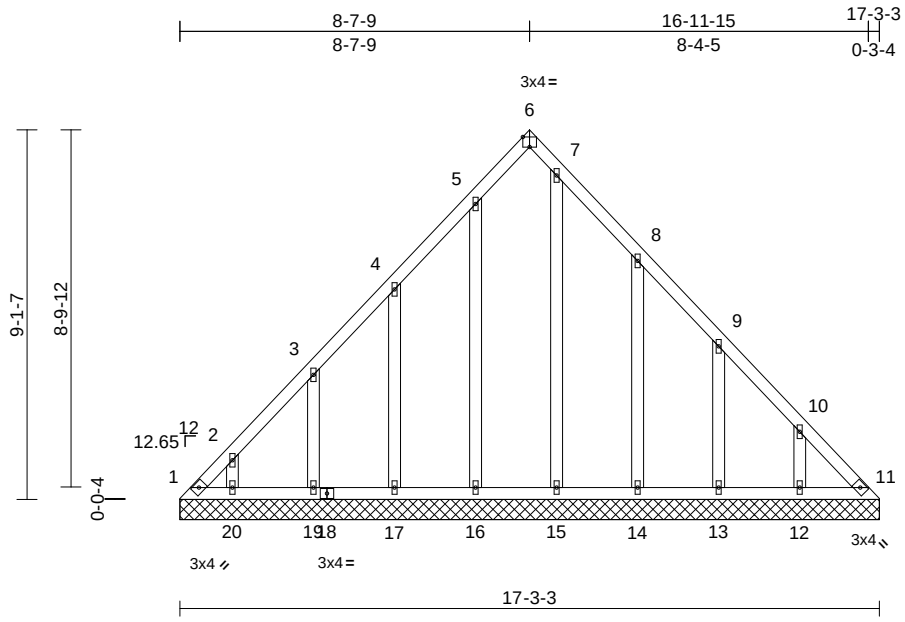

Scale = 1:56.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.16	Horiz(TL)	0.01	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 101 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SPF No.3

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=17-3-3, 11=17-3-3, 12=17-3-3, 13=17-3-3, 14=17-3-3, 15=17-3-3, 16=17-3-3, 17=17-3-3, 19=17-3-3, 20=17-3-3
Max Horiz 1=-248 (LC 8)
Max Uplift 1=-129 (LC 10), 11=-85 (LC 11), 12=-139 (LC 13), 13=-131 (LC 13), 14=-165 (LC 13), 16=-71 (LC 12), 17=-152 (LC 12), 19=-138 (LC 12), 20=-116 (LC 12)
Max Grav 1=305 (LC 12), 11=269 (LC 13), 12=210 (LC 20), 13=204 (LC 20), 14=218 (LC 20), 15=143 (LC 1), 16=191 (LC 19), 17=210 (LC 19), 19=209 (LC 19), 20=178 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-426/305, 2-3=-320/219, 3-4=-186/115, 4-5=-116/68, 5-6=-90/77, 6-7=-69/53, 7-8=-89/69, 8-9=-135/80, 9-10=-260/181, 10-11=-388/286
BOT CHORD 1-20=-212/295, 19-20=-212/295, 17-19=-212/295, 16-17=-212/295, 15-16=-212/295, 14-15=-212/295, 13-14=-212/295, 12-13=-212/295, 11-12=-212/295
WEBS 2-20=-158/134, 3-19=-190/162, 4-17=-206/176, 5-16=-151/95, 7-15=-103/3, 8-14=-214/188, 9-13=-185/157, 10-12=-185/157

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-1 to 5-3-13, Interior (1) 5-3-13 to 8-7-13, Exterior(2R) 8-7-13 to 13-7-13, Interior (1) 13-7-13 to 16-11-9 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 0-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 1, 85 lb uplift at joint 11, 116 lb uplift at joint 20, 138 lb uplift at joint 19, 152 lb uplift at joint 17, 71 lb uplift at joint 16, 165 lb uplift at joint 14, 131 lb uplift at joint 13 and 139 lb uplift at joint 12.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	HG3	Lay-In Gable	1	1	I66262070 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 E Apr 26 2024 Print: 8.630 E Apr 26 2024 MiTek Industries, Inc. Fri Jun 14 14:30:43 Page: 1
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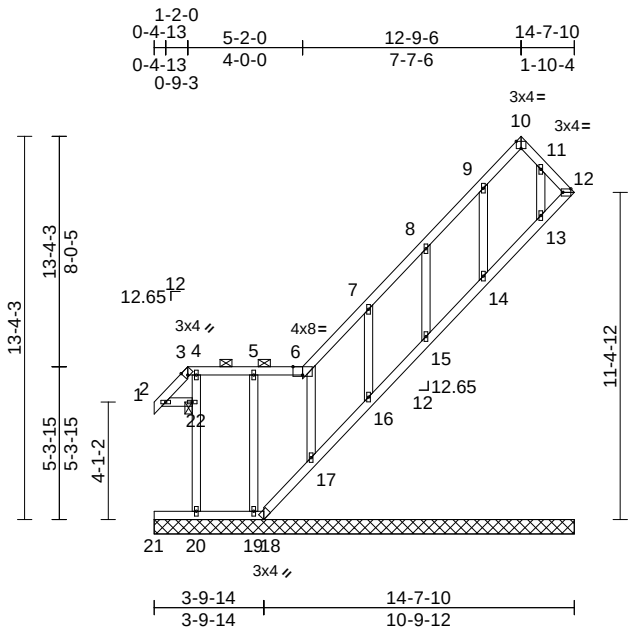

Scale = 1:80.3

Plate Offsets (X, Y): [3:0-1-7,Edge], [6:0-4-0,Edge], [10:Edge,0-3-0], [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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.18	Horiz(TL)	0.01	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 88 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 22

REACTIONS All bearings 14-7-10.
(lb) - Max Horiz 1=361 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s) 12, 14, 17, 19 except 1=-124 (LC 10), 15=-144 (LC 12), 16=-151 (LC 12), 20=-373 (LC 12)
Max Grav All reactions 250 (lb) or less at joint (s) 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 except 1=292 (LC 12)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-460/333, 2-3=-442/334, 3-4=-285/209, 4-5=-300/220, 5-6=-301/221, 6-7=-349/270
WEBS 20-22=-356/396, 4-22=-356/396

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 5-2-0, Interior (1) 5-2-0 to 12-9-6, Exterior(2E) 12-9-6 to 14-5-3 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 0-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 19, 17, 14 except (jt=lb) 1=124, 20=372, 16=151, 15=144.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 12, 17, 16, 15, 14, 13.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

June 14,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/18/2024 8:50:10

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	HG4	Lay-In Gable	1	1	I66262071 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. Fri Jun 14 12:32:36 Page: 1
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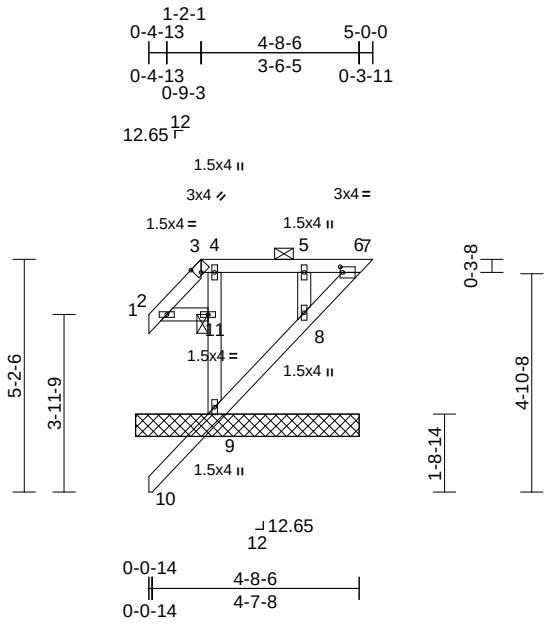

Scale = 1:51.4

Plate Offsets (X, Y): [3:0-1-7,Edge], [6:0-0-10,0-1-8]

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 25 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except 2-0-0 oc purlins: 3-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 11

REACTIONS (size) 1=4-11-14, 6=4-11-14, 8=4-11-14, 9=4-11-14, 10=4-11-14
Max Horiz 1=57 (LC 12)
Max Uplift 6=-13 (LC 9), 8=-42 (LC 8), 9=-43 (LC 12)
Max Grav 1=40 (LC 1), 6=38 (LC 1), 8=172 (LC 26), 9=170 (LC 1), 10=20 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-49/35, 2-3=-43/44, 3-4=-4/3, 4-5=-1/1, 5-6=-3/2, 6-7=0/1
BOT CHORD 9-10=-10/27, 8-9=-29/29, 6-8=-24/8
WEBS 9-11=-147/96, 4-11=-147/96, 5-8=-135/63, 2-11=-3/4

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 0-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Bearing at joint(s) 10, 6, 9, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 6, 43 lb uplift at joint 9 and 42 lb uplift at joint 8.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 10, 6, 9, 8.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) 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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	HG5	Lay-In Gable	1	1	I66262072 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. Fri Jun 14 12:32:36 Page: 1
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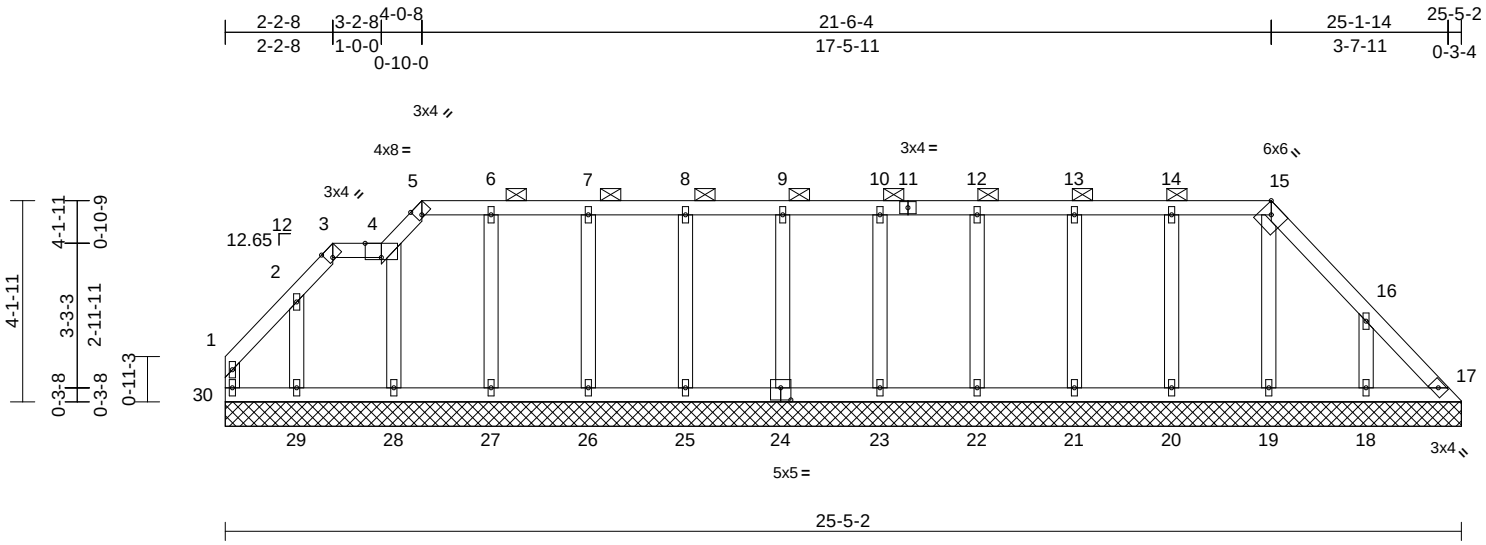


Scale = 1:47.4

Plate Offsets (X, Y): [3:0-1-7,Edge], [4:0-4-0,Edge], [5:0-1-7,Edge], [15:0-2-9,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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.06	Horiz(TL)	0.00	17	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 125 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4, 5-15.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 17=25-5-2, 18=25-5-2, 19=25-5-2, 20=25-5-2, 21=25-5-2, 22=25-5-2, 23=25-5-2, 24=25-5-2, 25=25-5-2, 26=25-5-2, 27=25-5-2, 28=25-5-2, 29=25-5-2, 30=25-5-2
Max Horiz 30=-122 (LC 8)
Max Uplift 17=-32 (LC 9), 18=-148 (LC 13), 19=-26 (LC 8), 20=-46 (LC 9), 21=-38 (LC 8), 22=-40 (LC 8), 23=-39 (LC 9), 24=-42 (LC 8), 25=-37 (LC 9), 26=-42 (LC 8), 27=-33 (LC 9), 28=-26 (LC 12), 29=-116 (LC 12), 30=-40 (LC 8)
Max Grav 17=99 (LC 19), 18=219 (LC 20), 19=150 (LC 26), 20=193 (LC 25), 21=177 (LC 1), 22=177 (LC 25), 23=193 (LC 1), 24=166 (LC 26), 25=187 (LC 25), 26=176 (LC 26), 27=192 (LC 25), 28=173 (LC 25), 29=161 (LC 19), 30=108 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-30=-82/31, 1-2=-94/55, 2-3=-82/61, 3-4=-64/55, 4-5=-96/79, 5-6=-85/84, 6-7=-85/84, 7-8=-85/84, 8-9=-85/84, 9-10=-86/85, 10-12=-86/85, 12-13=-86/85, 13-14=-86/85, 14-15=-86/85, 15-16=-95/85, 16-17=-103/92
BOT CHORD 29-30=-64/95, 28-29=-64/95, 27-28=-64/97, 26-27=-64/97, 25-26=-64/97, 23-25=-64/97, 22-23=-64/97, 21-22=-64/97, 20-21=-64/97, 19-20=-64/97, 18-19=-64/96, 17-18=-64/96
WEBS 2-29=-114/114, 4-28=-131/55, 6-27=-152/56, 7-26=-137/65, 8-25=-142/64, 9-24=-135/61, 10-23=-147/66, 12-22=-139/63, 13-21=-137/62, 14-20=-153/70, 15-19=-111/50, 16-18=-186/167

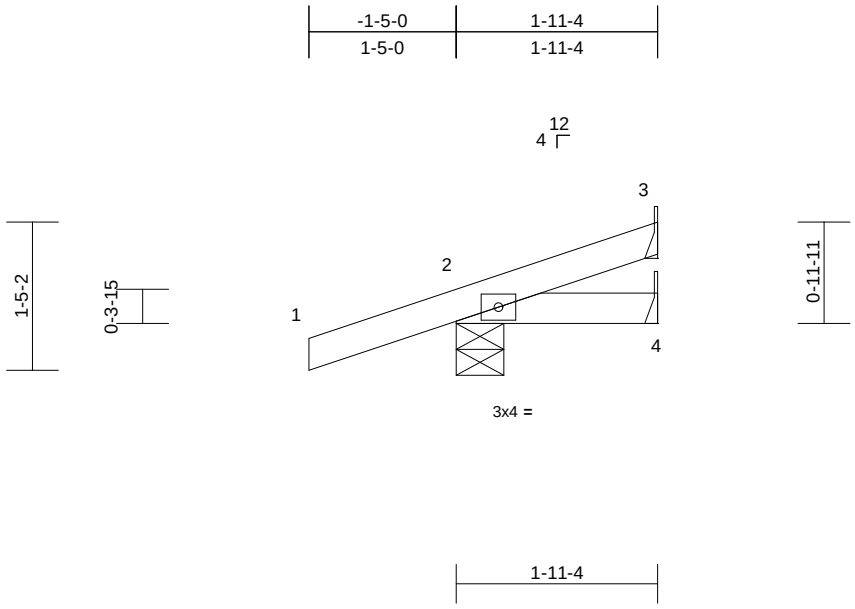
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-2-8, Interior (1) 3-2-8 to 4-0-8, Exterior(2R) 4-0-8 to 9-0-8, Interior (1) 9-0-8 to 21-6-4, Exterior(2E) 21-6-4 to 25-1-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 0-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 30, 32 lb uplift at joint 17, 116 lb uplift at joint 29, 26 lb uplift at joint 28, 33 lb uplift at joint 27, 42 lb uplift at joint 26, 37 lb uplift at joint 25, 42 lb uplift at joint 24, 39 lb uplift at joint 23, 40 lb uplift at joint 22, 38 lb uplift at joint 21, 46 lb uplift at joint 20, 26 lb uplift at joint 19 and 148 lb uplift at joint 18.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J01	Jack-Open	1	1	I66262073 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. Fri Jun 14 12:32:36 Page: 1
ID:6mrTrCbDvjIiI7jv04wNqEzeCPI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:22.2

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	0.20	Vert(LL)	0.00	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	2-4	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=55 (LC 8)
Max Uplift 2=-110 (LC 8), 3=-19 (LC 12)
Max Grav 2=227 (LC 1), 3=26 (LC 1), 4=38 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-35/17
BOT CHORD 2-4=0/0

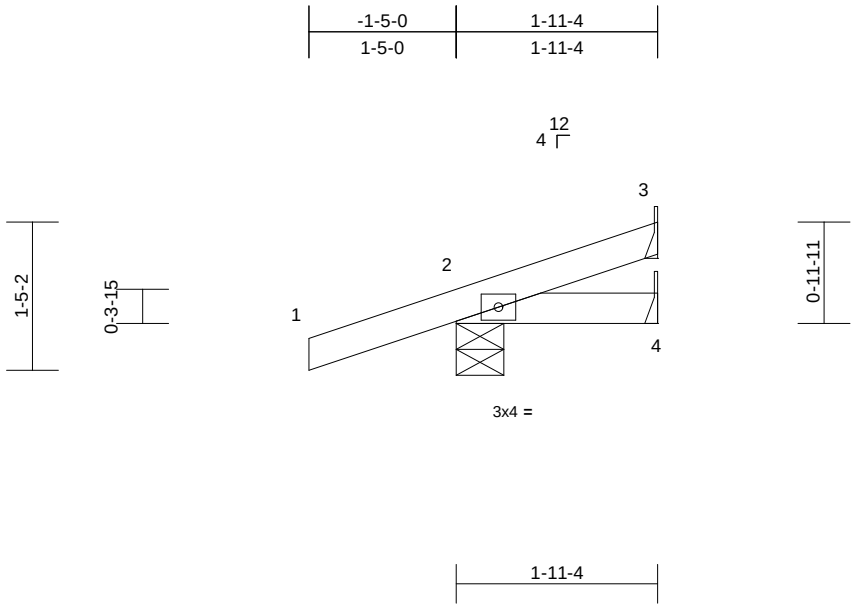
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 2 and 19 lb uplift at joint 3.
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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J02	Jack-Open	1	1	I66262074 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. Fri Jun 14 12:32:37 Page: 1
ID:6mrTrCbDvjIiI7jv04wNqEzeCPI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:22.2

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	0.20	Vert(LL)	0.00	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	2-4	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=55 (LC 8)
Max Uplift 2=-110 (LC 8), 3=-19 (LC 12)
Max Grav 2=227 (LC 1), 3=26 (LC 1), 4=38 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-35/17
BOT CHORD 2-4=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 2 and 19 lb uplift at joint 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

June 14,2024

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.sbcscomponents.com)

MiTek®
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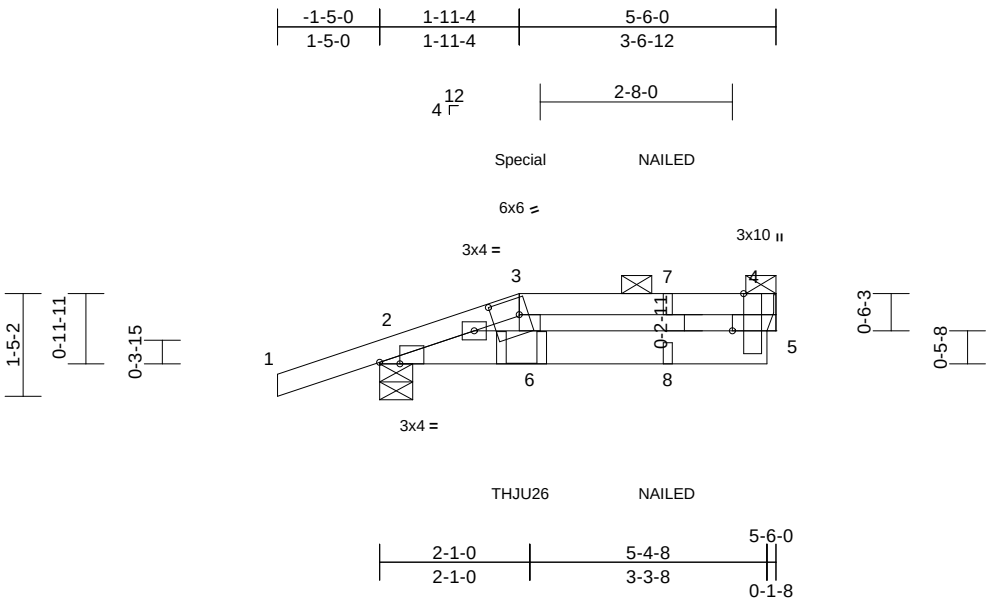
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/18/2024 8:50:10

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J03	Half Hip Girder	2	1	I66262075 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. Fri Jun 14 12:32:37 Page: 1
ID:6mrTrCbDvjIiI7jv04wNqEzeCPI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:32

Plate Offsets (X, Y): [2:0-3-6,Edge], [3:0-4-8,0-2-12], [4:0-6-3,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	0.26	Vert(LL)	0.00	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	6	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 21 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x8 SPF No.2 *Except* 6-3:2x4 SPF No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 5= Mechanical
Max Horiz 2=43 (LC 30)
Max Uplift 2=-114 (LC 8), 5=-33 (LC 9)
Max Grav 2=340 (LC 1), 5=197 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-222/48, 3-4=-174/49, 4-5=-124/141
BOT CHORD 2-6=-84/189, 5-6=-66/176
WEBS 3-6=-60/77

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) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 2 SPF No.2 crushing capacity of 425 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 2 and 33 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Use Simpson Strong-Tie THJU26 (SGL & SGL SHORT RC 1-PLY) or equivalent at 1-11-10 from the left end to connect truss(es) to back face of bottom chord.
11) N/A
12) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 165 lb down and 104 lb up at 1-11-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 3=30 (B), 6=-2 (B), 8=-2 (B)

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J04	Half Hip	1	1	I66262076 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. Fri Jun 14 12:32:37 Page: 1
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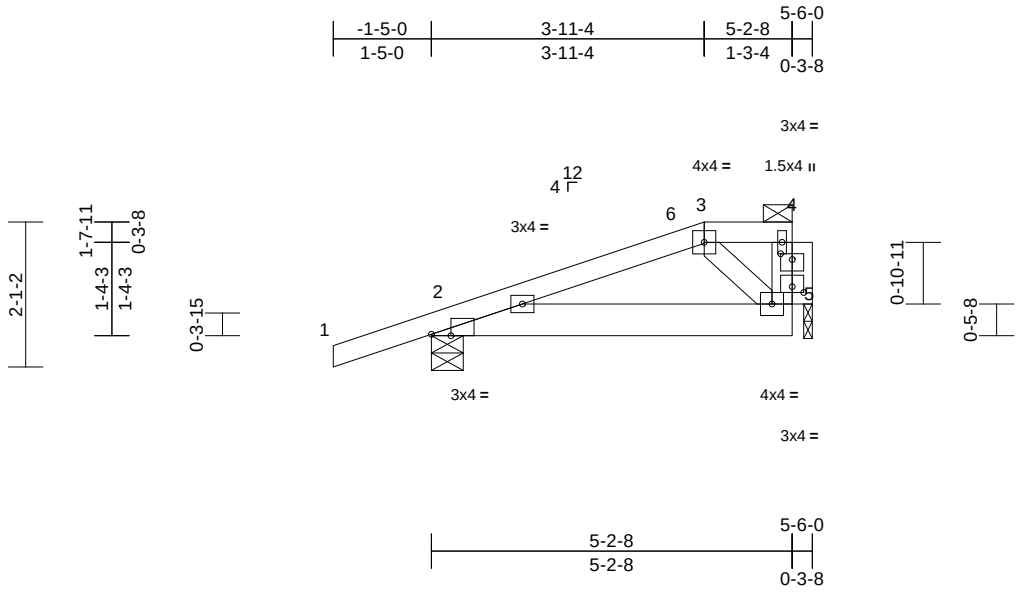

Scale = 1:33.3

Plate Offsets (X, Y): [2:0-3-6,Edge], [4:0-2-0,0-1-0], [5:0-2-0,0-1-0]

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	0.27	Vert(LL)	-0.01	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	2-5	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3
OTHERS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 5=0-1-8
Max Horiz 2=73 (LC 9)
Max Uplift 2=-136 (LC 8), 5=-38 (LC 8)
Max Grav 2=358 (LC 1), 5=205 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-168/122, 3-4=-26/28, 4-5=-44/53
BOT CHORD 2-5=-162/126
WEBS 3-5=-157/203

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) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 3-11-4, Exterior(2E) 3-11-4 to 5-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 2 SPF No.2 crushing capacity of 425 psi, Joint 5 SP No.2 crushing capacity of 565 psi.
6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 136 lb uplift at joint 2 and 38 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J05	Monopitch	4	1	I66262077 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. Fri Jun 14 12:32:37 Page: 1
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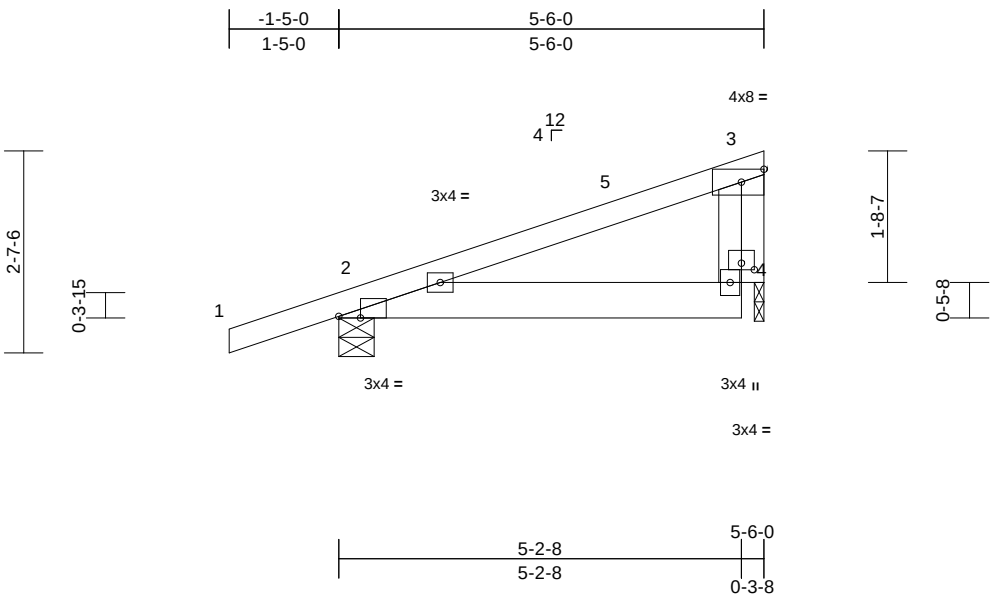

Scale = 1:29.8

Plate Offsets (X, Y): [2:0-3-6,Edge], [4:0-2-0,0-1-0]

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	0.55	Vert(LL)	-0.01	2-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	2-4	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	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 2x6 SPF No.2
WEBS 2x4 SPF No.3
OTHERS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 4=0-1-8
Max Horiz 2=92 (LC 9)
Max Uplift 2=-133 (LC 8), 4=-47 (LC 12)
Max Grav 2=358 (LC 1), 4=205 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-114/69, 3-4=-155/226
BOT CHORD 2-4=-35/38

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) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 5-2-8 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: Joint 2 SPF No.2 crushing capacity of 425 psi, Joint 4 SP No.2 crushing capacity of 565 psi.
5) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 133 lb uplift at joint 2 and 47 lb uplift at joint 4.
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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J06	Half Hip	1	1	I66262078 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. Fri Jun 14 12:32:37 Page: 1
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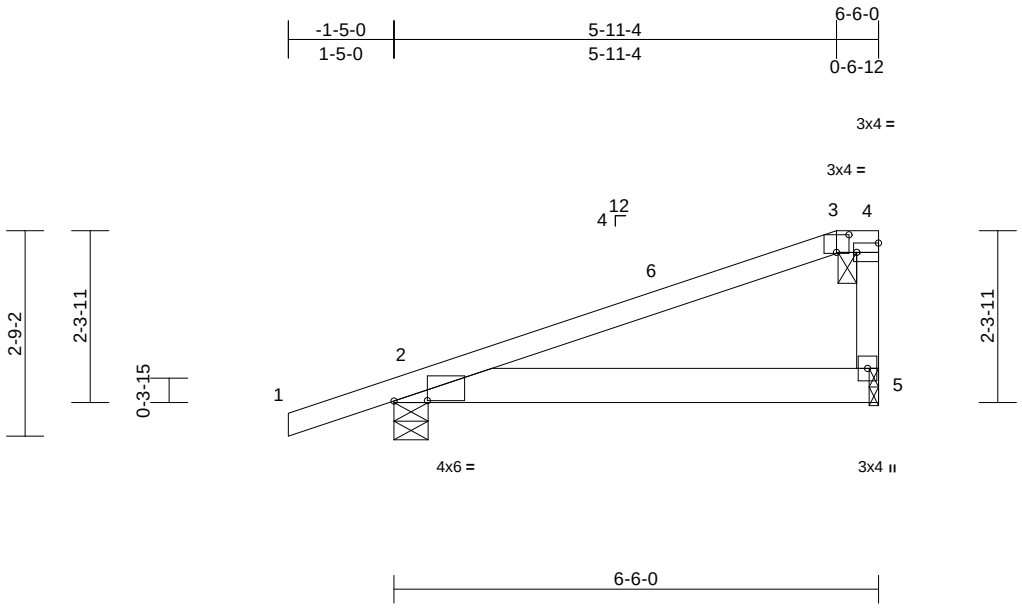

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Plate Offsets (X, Y): [2:0-5-6,0-0-1], [3:0-2-0,0-2-13], [4:Edge,0-1-8]

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	0.52	Vert(LL)	-0.02	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.04	2-5	>999	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-R							Weight: 26 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

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

REACTIONS (size) 2=0-5-8, 5=0-1-8
Max Horiz 2=104 (LC 9)
Max Uplift 2=-141 (LC 8), 5=-55 (LC 8)
Max Grav 2=406 (LC 1), 5=260 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-168/65, 3-4=-107/114, 4-5=-172/213
BOT CHORD 2-5=-117/112

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) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 5-11-4, Exterior(2E) 5-11-4 to 6-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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 at joint(s) 5.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 2 and 55 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J07	Half Hip	1	1	I66262079 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. Fri Jun 14 12:32:37 Page: 1
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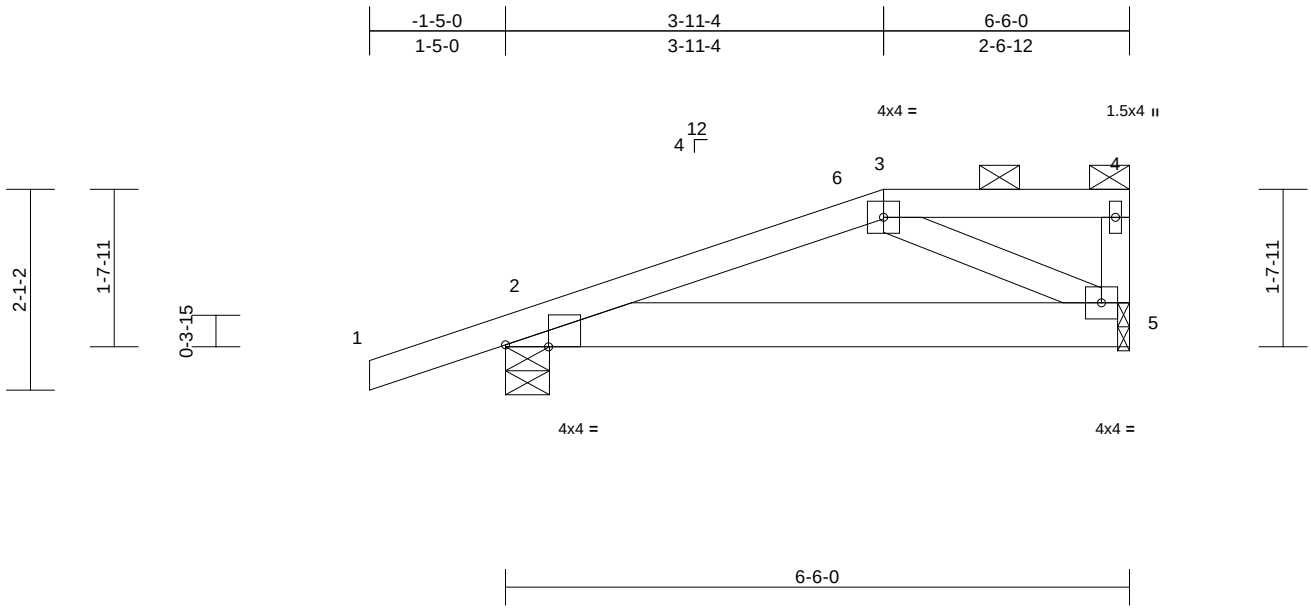

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Plate Offsets (X, Y): [2:0-5-6,Edge]

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	0.28	Vert(LL)	-0.02	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.04	2-5	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 28 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

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

REACTIONS (size) 2=0-5-8, 5=0-1-8
Max Horiz 2=73 (LC 9)
Max Uplift 2=-145 (LC 8), 5=-51 (LC 8)
Max Grav 2=406 (LC 1), 5=260 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-281/245, 3-4=-26/28, 4-5=-85/97
BOT CHORD 2-5=-286/219
WEBS 3-5=-247/302

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) -1-5-0 to 3-7-0, Interior (1) 3-7-0 to 3-11-4, Exterior(2E) 3-11-4 to 6-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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 at joint(s) 5.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 145 lb uplift at joint 2 and 51 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J08	Jack-Closed	3	1	I66262080 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. Fri Jun 14 12:32:37 Page: 1
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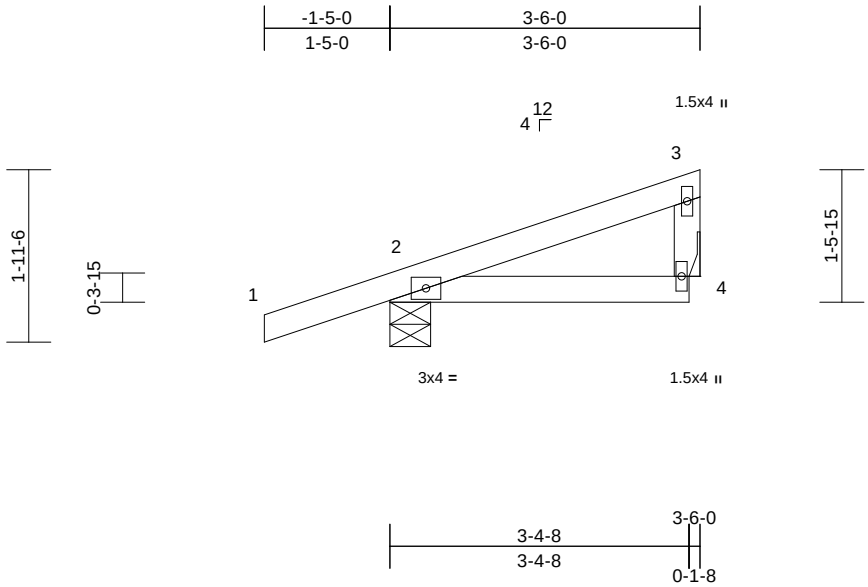

Scale = 1:26

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.01	2-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	2-4	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 14 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3

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

REACTIONS (size) 2=0-5-8, 4= Mechanical
Max Horiz 2=65 (LC 9)
Max Uplift 2=-124 (LC 8), 4=-23 (LC 12)
Max Grav 2=286 (LC 1), 4=110 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-70/48, 3-4=-95/122
BOT CHORD 2-4=-24/26

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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 2 and 23 lb uplift at joint 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J09	Jack-Closed	1	1	I66262081 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. Fri Jun 14 12:32:37 Page: 1
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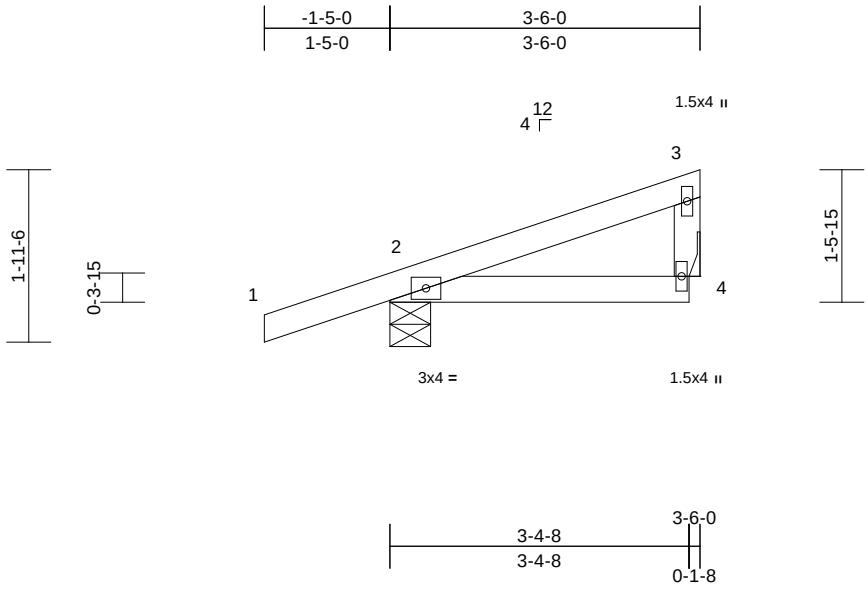

Scale = 1:26

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.01	2-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	2-4	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 14 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3

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

REACTIONS (size) 2=0-5-8, 4= Mechanical
Max Horiz 2=65 (LC 9)
Max Uplift 2=-124 (LC 8), 4=-23 (LC 12)
Max Grav 2=286 (LC 1), 4=110 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-70/48, 3-4=-95/122
BOT CHORD 2-4=-24/26

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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 2 and 23 lb uplift at joint 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J10	Half Hip Girder	1	1	I66262082 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. Fri Jun 14 12:32:37 Page: 1
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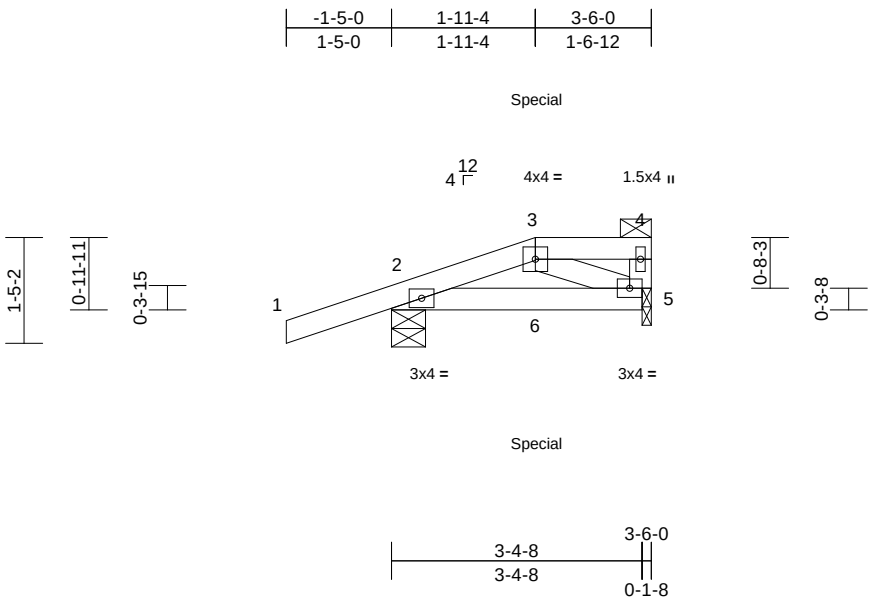

Scale = 1:31

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.01	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	2-5	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	5	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 2x4 SPF No.3

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

REACTIONS (size) 2=0-5-8, 5=0-1-8
Max Horiz 2=43 (LC 9)
Max Uplift 2=-111 (LC 8), 5=-8 (LC 9)
Max Grav 2=274 (LC 1), 5=99 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-126/59, 3-4=-14/15, 4-5=-50/60
BOT CHORD 2-5=-57/140
WEBS 3-5=-138/63

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) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 5 SPF No.3 crushing capacity of 425 psi.
6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 5 and 111 lb uplift at joint 2.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 166 lb down and 104 lb up at 1-11-4 on top chord, and 14 lb down at 1-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 3=30 (F), 6=-2 (F)

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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J11	Jack-Open	1	1	I66262083 Job Reference (optional)

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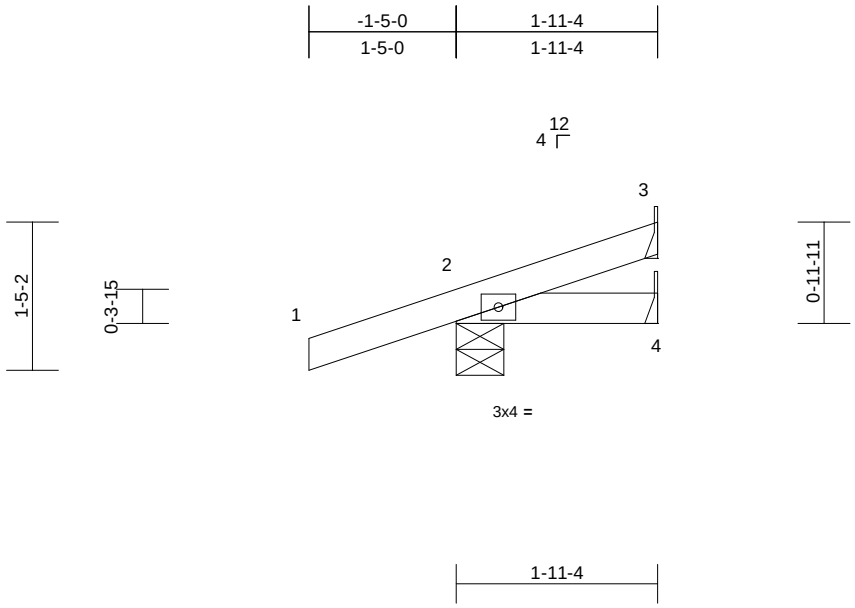

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.00	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	2-4	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=55 (LC 8)
Max Uplift 2=-110 (LC 8), 3=-19 (LC 12)
Max Grav 2=227 (LC 1), 3=26 (LC 1), 4=38 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-35/17
BOT CHORD 2-4=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 2 and 19 lb uplift at joint 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J13	Half Hip Girder	3	1	I66262084 Job Reference (optional)

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

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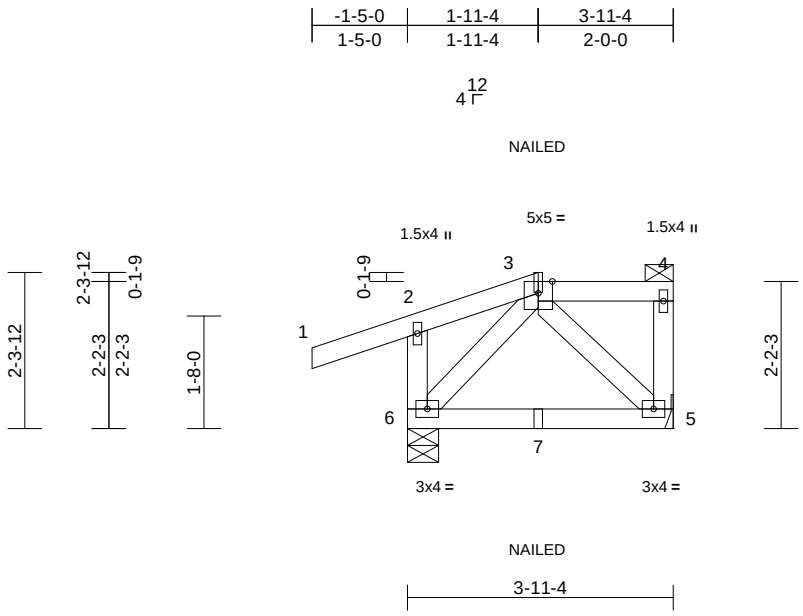

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 6-2:2x4 SP No.2

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

REACTIONS (size) 5= Mechanical, 6=0-5-8
Max Horiz 6=92 (LC 9)
Max Uplift 5=-51 (LC 9), 6=-121 (LC 8)
Max Grav 5=136 (LC 1), 6=293 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-32/122, 3-4=-40/46, 4-5=-65/80, 2-6=-220/319
BOT CHORD 5-6=-131/81
WEBS 3-5=-73/151, 3-6=-73/16

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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 6 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 5 and 121 lb uplift at joint 6.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

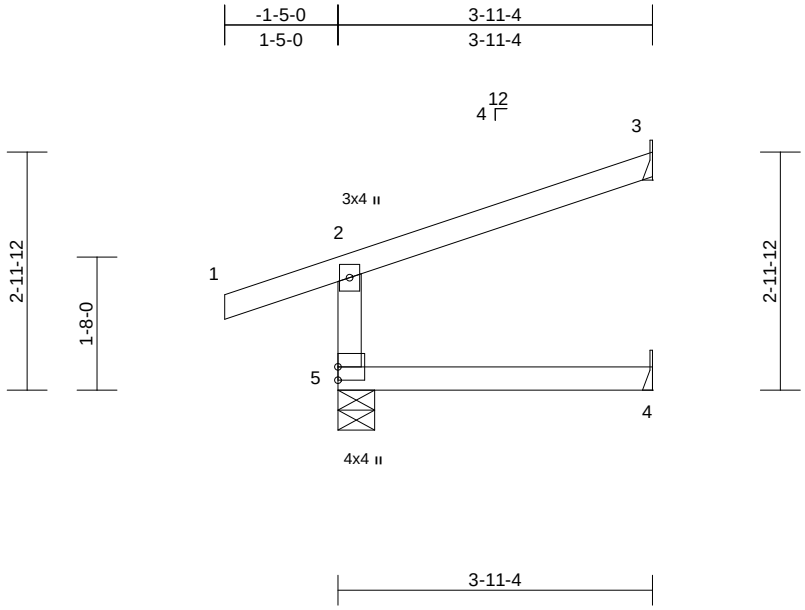
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-6=-20
Concentrated Loads (lb)
Vert: 7=8 (B)

June 14,2024

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

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J14	Jack-Open	25	1	I66262085 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. Fri Jun 14 12:32:38 Page: 1
ID:o8UlE?szVW7lOM5uY1Wz8QzeDBI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:28.8

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	0.48	Vert(LL)	0.02	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.02	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.06	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 16 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3

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

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=82 (LC 9)
Max Uplift 3=-66 (LC 12), 5=-90 (LC 8)
Max Grav 3=107 (LC 1), 4=70 (LC 3), 5=300 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-263/299, 1-2=0/35, 2-3=-67/31
BOT CHORD 4-5=0/0

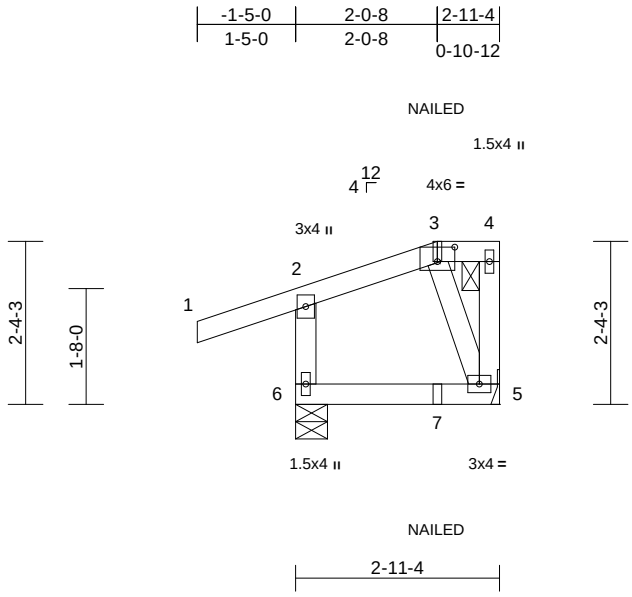
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 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 90 lb uplift at joint 5 and 66 lb uplift at joint 3.
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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J15	Half Hip Girder	2	1	I66262086 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. Fri Jun 14 12:32:38 ID:4I6ZUiA1?jQpVvEEz8BR_izeDQO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:33.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	0.00	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.00	5-6	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 17 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3 *Except* 6-2:2x4 SP No.2

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

REACTIONS (size) 5= Mechanical, 6=0-5-8
Max Horiz 6=101 (LC 9)
Max Uplift 5=-54 (LC 9), 6=-114 (LC 8)
Max Grav 5=109 (LC 1), 6=269 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-58/52, 3-4=-43/47, 4-5=-58/44, 2-6=-237/288
BOT CHORD 5-6=-102/82
WEBS 3-5=-121/186

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 6 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 54 lb uplift at joint 5 and 114 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-6=-20
Concentrated Loads (lb)
Vert: 3=-39 (B), 7=8 (B)

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J16	Jack-Open	4	1	I66262087 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. Fri Jun 14 12:32:38 Page: 1
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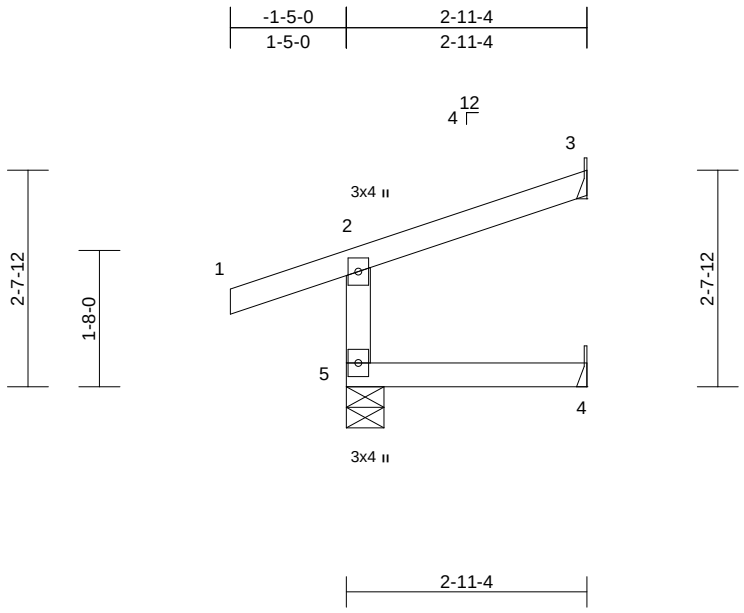

Scale = 1:28.1

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	0.36	Vert(LL)	0.01	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	0.01	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.03	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 13 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-11-4 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=72 (LC 9)
Max Uplift 3=-49 (LC 12), 5=-86 (LC 8)
Max Grav 3=68 (LC 1), 4=50 (LC 3), 5=263 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-232/264, 1-2=0/35, 2-3=-48/25
BOT CHORD 4-5=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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 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 86 lb uplift at joint 5 and 49 lb uplift at joint 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J18	Half Hip Girder	2	1	I66262088 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. Fri Jun 14 12:32:38 Page: 1
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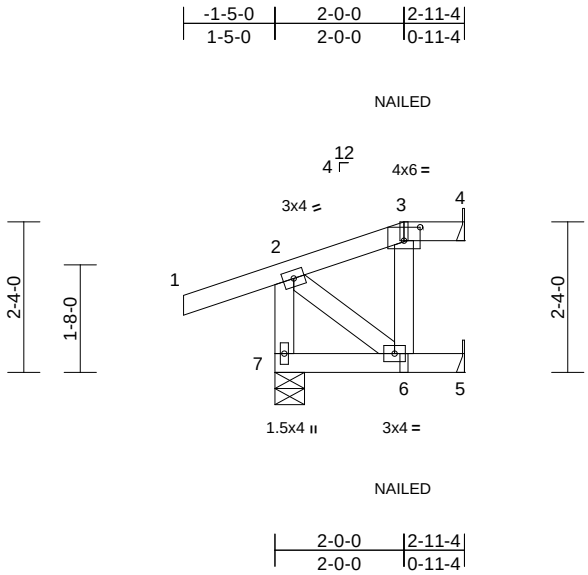

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Plate Offsets (X, Y): [3:0-3-0,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	0.01	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.01	6-7	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.05	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
WEBS 2x4 SPF No.3 *Except* 7-2:2x4 SP No.2

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

REACTIONS (size) 4= Mechanical, 5= Mechanical, 7=0-5-8
Max Horiz 7=64 (LC 9)
Max Uplift 4=-14 (LC 8), 5=-26 (LC 9), 7=-97 (LC 8)
Max Grav 4=31 (LC 1), 5=66 (LC 3), 7=261 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-35/16, 3-4=0/0, 2-7=-220/216
BOT CHORD 6-7=-132/36, 5-6=0/0
WEBS 3-6=-49/68, 2-6=-45/166

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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: , Joint 7 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 4, 97 lb uplift at joint 7 and 26 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 6=8 (F)

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	J19	Jack-Open	3	1	I66262089
					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. Fri Jun 14 12:32:38 Page: 1
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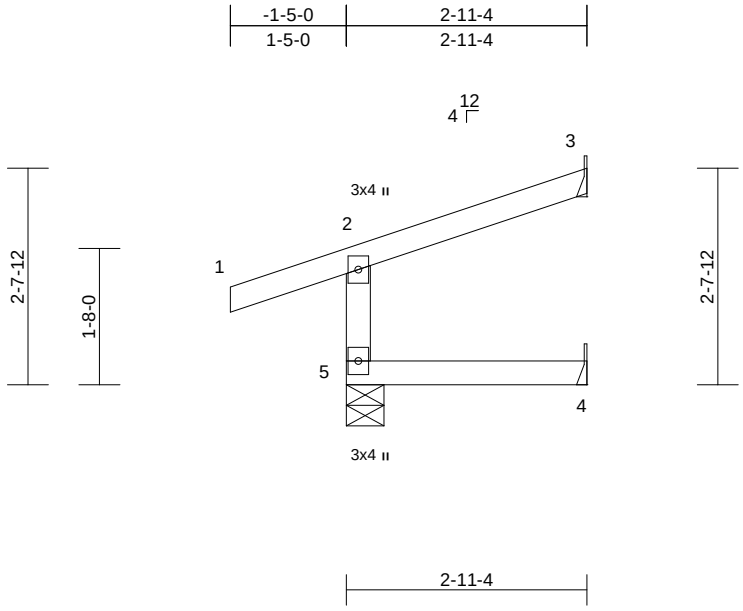

Scale = 1:28.1

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	0.36	Vert(LL)	0.01	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	0.01	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.03	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 13 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-11-4 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=72 (LC 9)
Max Uplift 3=-49 (LC 12), 5=-86 (LC 8)
Max Grav 3=68 (LC 1), 4=50 (LC 3), 5=263 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-232/264, 1-2=0/35, 2-3=-48/25
BOT CHORD 4-5=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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 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 86 lb uplift at joint 5 and 49 lb uplift at joint 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

June 14,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	M01	Monopitch Supported Gable	2	1	I66262090 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. Fri Jun 14 12:32:38 Page: 1
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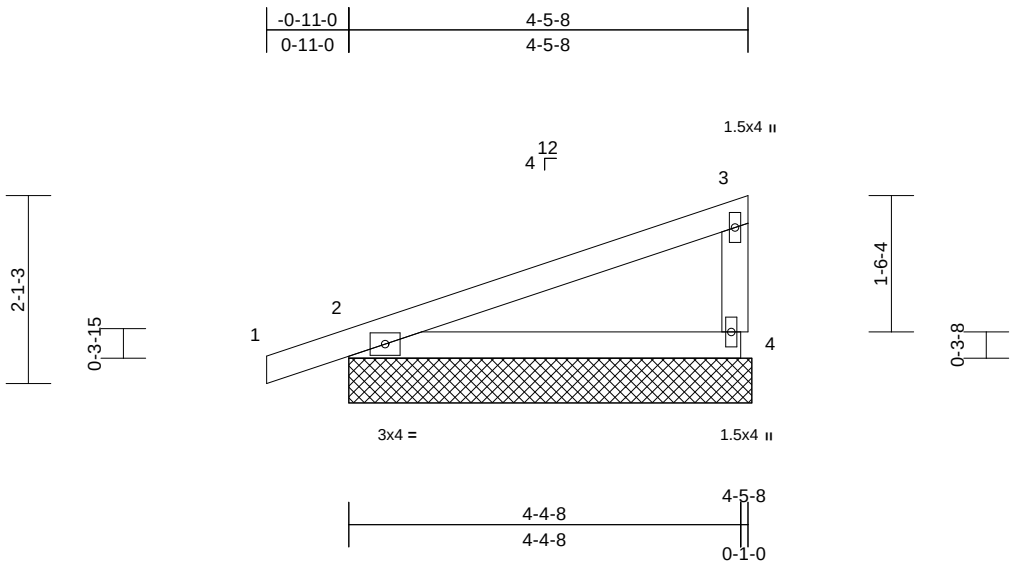


Scale = 1:25.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	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
WEBS 2x4 SPF No.3

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

REACTIONS (size) 2=4-6-0, 4=4-6-0
Max Horiz 2=76 (LC 9)
Max Uplift 2=-85 (LC 8), 4=-45 (LC 12)
Max Grav 2=265 (LC 1), 4=187 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-112/68, 3-4=-144/238
BOT CHORD 2-4=-30/40

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) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 4 and 85 lb uplift at joint 2.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

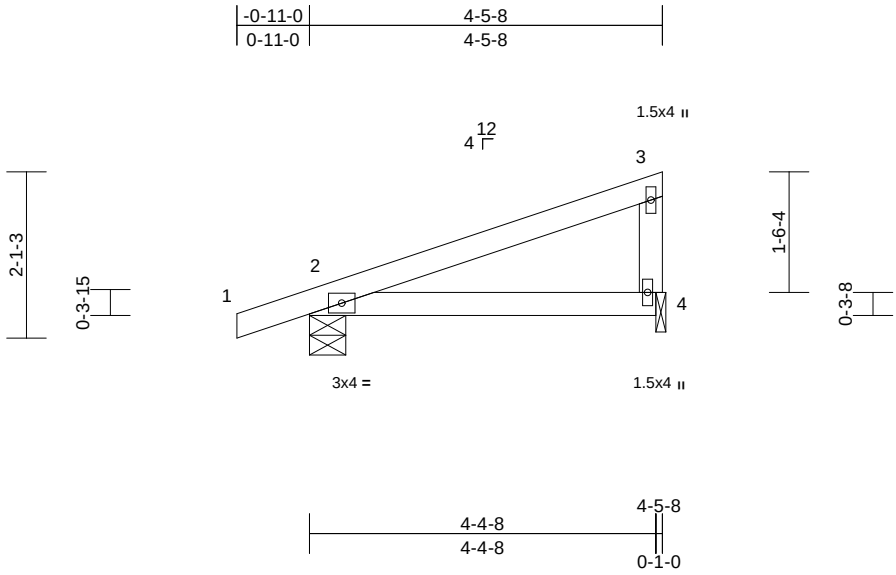
STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

June 14,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/18/2024 8:50:11

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 191
P240542-01	M02	Monopitch	7	1	I66262091 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. Fri Jun 14 12:32:38 Page: 1
ID:KTzupnDOFu58HEfZb5Jk?VzeCKc-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:29.1

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	0.37	Vert(LL)	-0.02	2-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.03	2-4	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	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
WEBS 2x4 SPF No.3

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

REACTIONS (size) 2=0-5-8, 4=0-1-8
Max Horiz 2=76 (LC 9)
Max Uplift 2=-95 (LC 8), 4=-42 (LC 12)
Max Grav 2=275 (LC 1), 4=172 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-102/60, 3-4=-132/193
BOT CHORD 2-4=-30/33

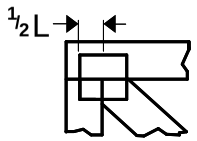
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 4 SPF No.3 crushing capacity of 425 psi.
5) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 2 and 42 lb uplift at joint 4.
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

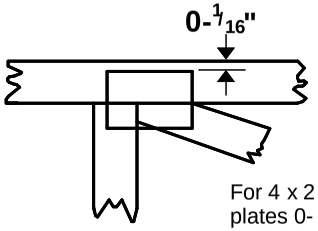
June 14,2024

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

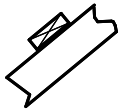
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

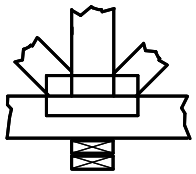
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

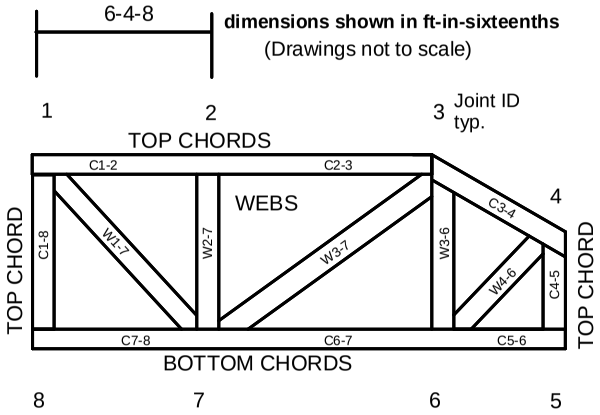


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

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

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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.