MiTek®

RE: P230395-01 - Roof - CB Lot 145

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

Site Information:

Project Customer: Clover & Hive Project Name: Cherry Blossom - Farmhouse
Lot/Block: 145 Subdivision: Cobey Creek
Model:
Address: 3529 SE Corbin Dr
City: Lee's Summit State: MO

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

Design Code: IRC2018/TPI2014
Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-16 Wind Speed: 115 mph
Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16
Roof Load: 45.0 psf
Floor Load: N/A psf

Mean Roof Height (feet): 35
Exposure Category: C

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/06/2024 4:55:56

No.	Seal#	Truss Name	Date
1	I60735712	A01	9/13/23
2	I60735713	B01	9/13/23
3	I60735714	B02	9/13/23
4	I60735715	B03	9/13/23
5	I60735716	B04	9/13/23
6	I60735717	B05	9/13/23
7	I60735718	B06	9/13/23
8	I60735719	B07	9/13/23
9	I60735720	B08	9/13/23
10	I60735721	B09	9/13/23
11	I60735722	B10	9/13/23
12	I60735723	C01	9/13/23
13	I60735724	C02	9/13/23
14	I60735725	C03	9/13/23
15	I60735726	CJ01	9/13/23
16	I60735727	D01	9/13/23
17	I60735728	D02	9/13/23
18	I60735729	J01	9/13/23
19	I60735730	J02	9/13/23
20	I60735731	J03	9/13/23
21	I60735732	LG01	9/13/23
22	I60735733	LG02	9/13/23
23	I60735734	LG03	9/13/23
24	I60735735	LG04	9/13/23
25	I60735736	V01	9/13/23
26	I60735737	V02	9/13/23
27	I60735738	V03	9/13/23
28	I60735739	V04	9/13/23
29	I60735740	V05	9/13/23
30	I60735741	V06	9/13/23
31	I60735742	V07	9/13/23
32	I60735743	V08	9/13/23

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

Truss Design Engineer's Name: Nathan Fox
My license renewal date for the state of Missouri is December 31, 2024.

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

September 13,2023

Nathan Fox

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	A01	Common Supported Gable	1	1	I60735712 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:29 Page: 1
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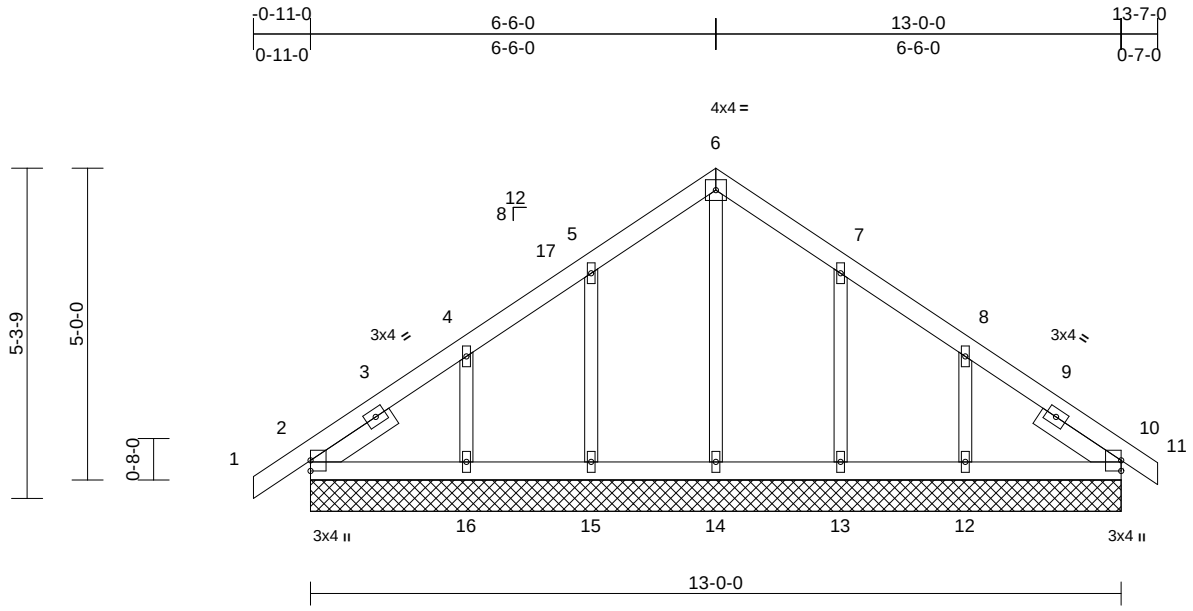

Scale = 1:36.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 62 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-6-4, Right 2x4 SP No.2 -- 1-6-4

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

REACTIONS (size) 2=13-0-0, 10=13-0-0, 12=13-0-0, 13=13-0-0, 14=13-0-0, 15=13-0-0, 16=13-0-0
Max Horiz 2=136 (LC 15)
Max Uplift 2=-30 (LC 17), 10=-7 (LC 16), 12=-114 (LC 17), 13=-72 (LC 17), 15=-73 (LC 16), 16=-114 (LC 16)
Max Grav 2=218 (LC 23), 10=187 (LC 24), 12=317 (LC 24), 13=277 (LC 24), 14=139 (LC 29), 15=280 (LC 23), 16=306 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-161/84, 4-5=-119/115, 5-6=-126/200, 6-7=-127/201, 7-8=-122/109, 8-10=-124/40, 10-11=0/5
BOT CHORD 2-16=-36/103, 15-16=-36/103, 14-15=-36/103, 13-14=-36/103, 12-13=-36/103, 10-12=-36/103
WEBS 6-14=-127/30, 5-15=-245/137, 4-16=-251/210, 7-13=-243/141, 8-12=-260/221

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 6-6-0, Corner(3R) 6-6-0 to 11-6-0, Exterior(2N) 11-6-0 to 13-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 1.5x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 2, 7 lb uplift at joint 10, 73 lb uplift at joint 15, 114 lb uplift at joint 16, 72 lb uplift at joint 13 and 114 lb uplift at joint 12.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	B01	Common Structural Gable	1	1	I60735713 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:31 Page: 1
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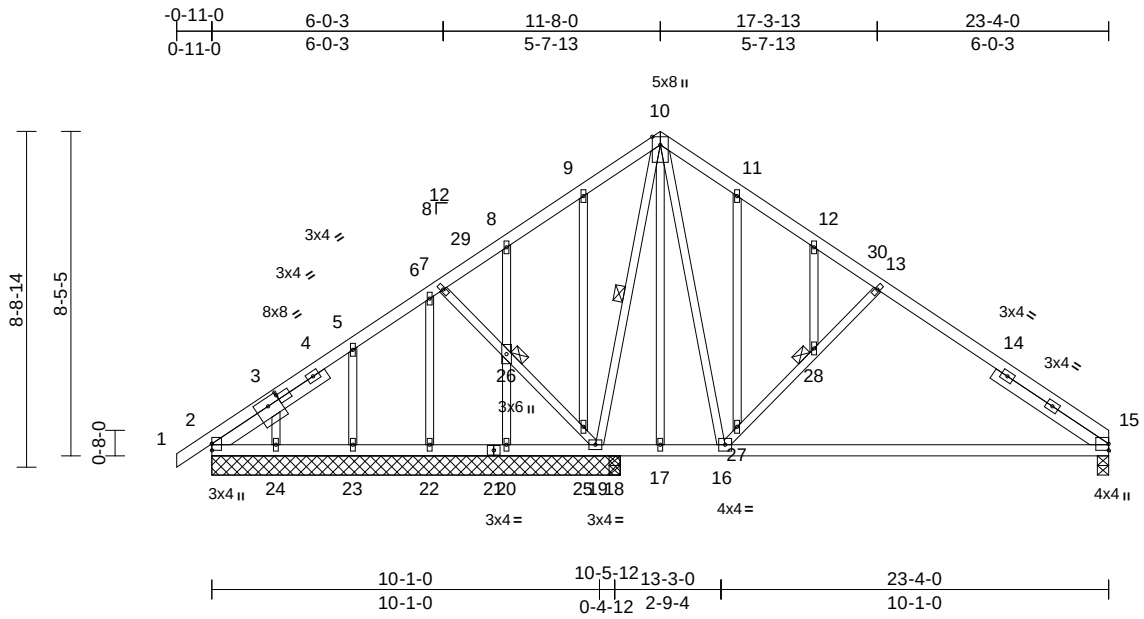

Scale = 1:59.9

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

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	0.51	Vert(LL)	-0.24	15-16	>646	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.49	15-16	>316	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.01	15	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 140 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-6-6, Right 2x4 SP No.2 -- 3-6-6

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 10-19
JOINTS 1 Brace at Jt(s): 26, 28

REACTIONS (size) 2=10-7-8, 15=0-3-8, 18=0-3-8, 19=10-7-8, 20=10-7-8, 22=10-7-8, 23=10-7-8, 24=10-7-8
Max Horiz 2=229 (LC 13)
Max Uplift 2=-70 (LC 12), 15=-133 (LC 17), 19=-57 (LC 16), 20=-97 (LC 16), 23=-90 (LC 16), 24=-86 (LC 16)
Max Grav 2=223 (LC 27), 15=678 (LC 24), 18=283 (LC 24), 19=461 (LC 24), 20=349 (LC 23), 22=135 (LC 1), 23=198 (LC 26), 24=174 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-3=-236/147, 3-5=-218/138, 5-6=-192/150, 6-7=-170/155, 7-8=-164/160, 8-9=-162/199, 9-10=-162/224, 10-11=-412/247, 11-12=-380/174, 12-13=-508/169, 13-15=-805/203
BOT CHORD 2-24=-61/129, 23-24=-61/125, 22-23=-61/125, 20-22=-61/125, 19-20=-61/125, 18-19=-2/183, 17-18=-2/183, 16-17=0/186, 15-16=-55/593
WEBS 10-16=-124/809, 16-27=-598/323, 27-28=-395/241, 13-28=-413/251, 10-19=-575/16, 7-26=-51/74, 25-26=-34/61, 19-25=-166/119, 10-17=-267/0, 9-25=-202/77, 8-26=-249/106, 20-26=-302/125, 6-22=-97/15, 5-23=-157/115, 3-24=-136/109, 11-27=-268/110, 12-28=-15/25

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 11-10-14, Exterior(2R) 11-10-14 to 16-10-14, Interior (1) 16-10-14 to 23-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 1.5x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 133 lb uplift at joint 15, 70 lb uplift at joint 2, 57 lb uplift at joint 19, 97 lb uplift at joint 20, 90 lb uplift at joint 23 and 86 lb uplift at joint 24.
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.

LOAD CASE(S) Standard

STATE OF MISSOURI
NATHANIEL FOX
NUMBER PE-2022042259
PROFESSIONAL ENGINEER

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	B02	Common	6	1	I60735714 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:31 Page: 1
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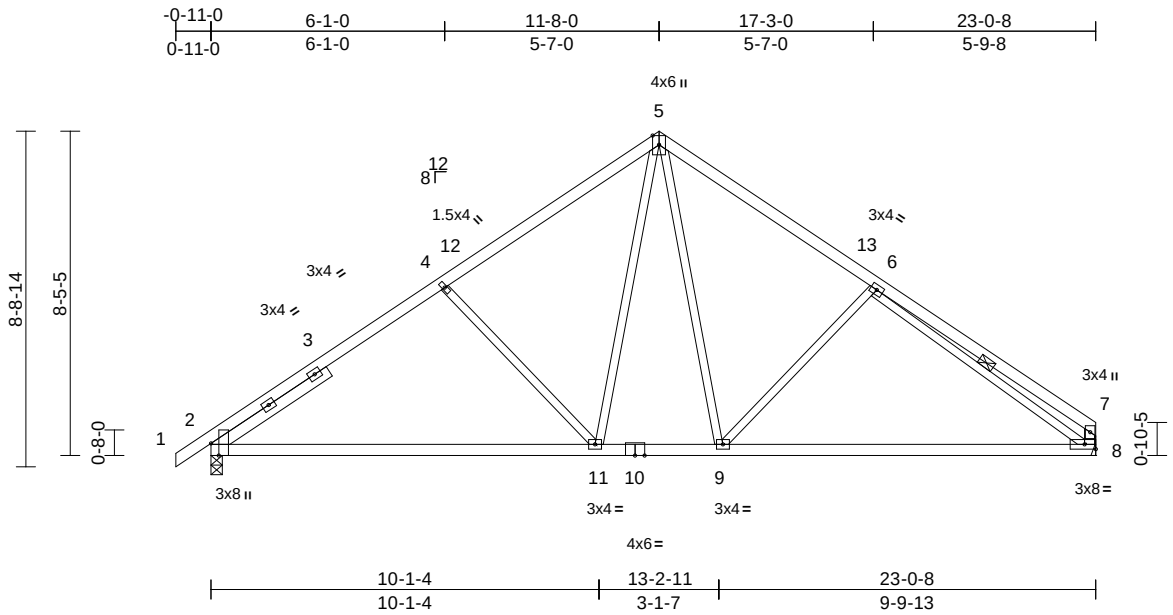

Scale = 1:60

Plate Offsets (X, Y): [2:0-3-13,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	0.89	Vert(LL)	-0.27	2-11	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.56	2-11	>494	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 111 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 8-7:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-7-6

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-8

REACTIONS (size) 2=0-3-8, 8= Mechanical
Max Horiz 2=241 (LC 13)
Max Uplift 2=-169 (LC 16), 8=-142 (LC 17)
Max Grav 2=1141 (LC 23), 8=1072 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-1480/251, 4-5=-1188/257, 5-6=-1170/257, 6-7=-500/111, 7-8=-403/125
BOT CHORD 2-11=-233/1144, 9-11=-20/750, 8-9=-146/1096
WEBS 4-11=-448/275, 5-11=-121/476, 5-9=-118/419, 6-9=-403/268, 6-8=-995/178

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 11-8-0, Exterior(2R) 11-8-0 to 16-8-0, Interior (1) 16-8-0 to 22-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
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 2 SP No.2 crushing capacity of 565 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 169 lb uplift at joint 2 and 142 lb uplift at joint 8.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	B03	Half Hip	1	1	I60735715 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:32 Page: 1

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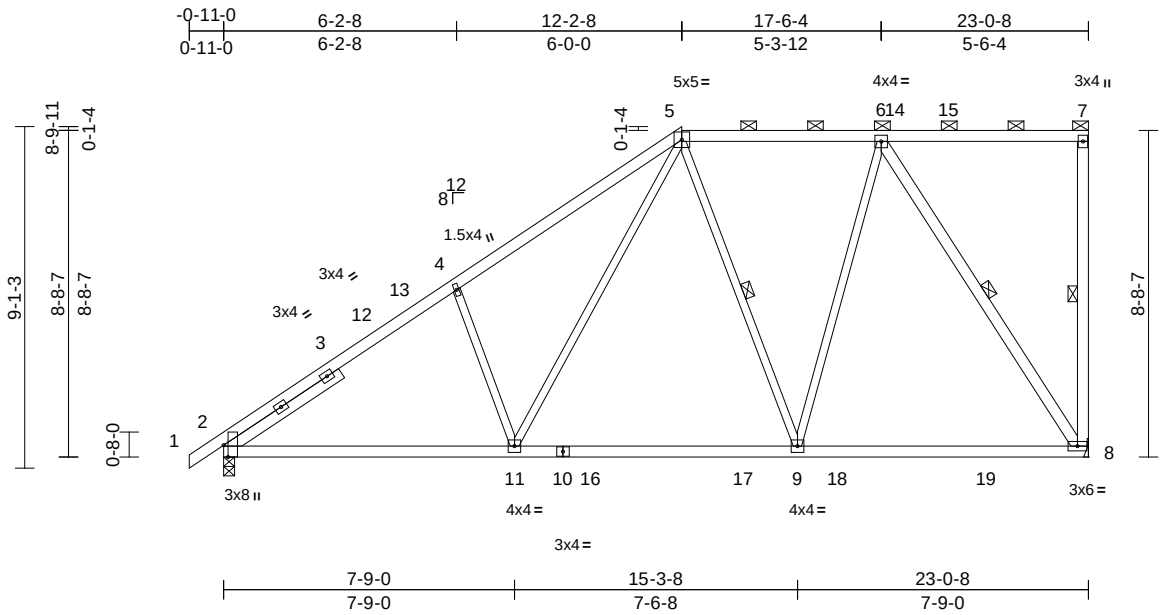

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Plate Offsets (X, Y): [2:0-3-13,Edge]

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	0.98	Vert(LL)	-0.15	8-9	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.25	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 131 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2 *Except* 7-8,8-6:2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 3-8-5

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-3-4 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 8-5-11 oc bracing.
WEBS	1 Row at midpt 7-8, 5-9, 6-8

REACTIONS (size) 2=0-3-8, 8= Mechanical
Max Horiz 2=362 (LC 13)
Max Uplift 2=-167 (LC 16), 8=-229 (LC 13)
Max Grav 2=1516 (LC 38), 8=1400 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/31, 2-4=-1962/206, 4-5=-1719/317, 5-6=-797/216, 6-7=-172/179, 7-8=-277/82
BOT CHORD	2-11=-472/1579, 9-11=-320/888, 8-9=-234/685
WEBS	4-11=-682/299, 5-11=-211/1021, 5-9=-451/195, 6-9=-74/786, 6-8=-1245/241

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 12-2-8, Exterior(2R) 12-2-8 to 19-3-6, Interior (1) 19-3-6 to 22-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
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 2 SP No.2 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 229 lb uplift at joint 8 and 167 lb uplift at joint 2.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	B04	Half Hip	1	1	I60735716 Job Reference (optional)

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

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:32 Page: 1
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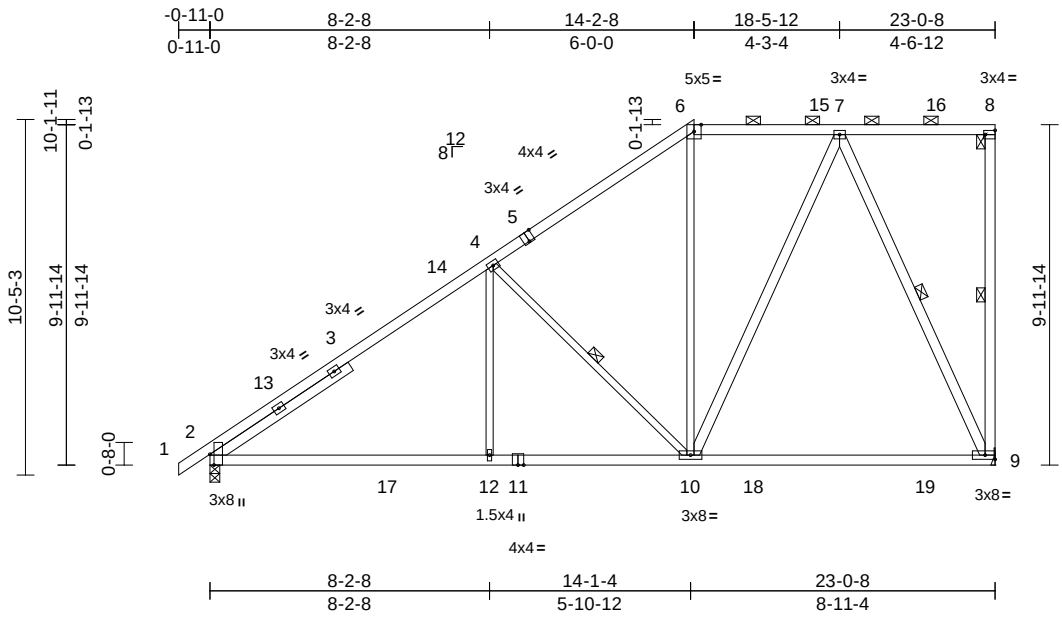


Scale = 1:67.6

Plate Offsets (X, Y): [2:0-3-13,Edge], [5:0-2-0,Edge], [8: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	0.96	Vert(LL)	-0.35	9-10	>778	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.55	9-10	>504	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.04	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 145 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-5:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 4-12,10-4,10-6:2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-10-10

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

REACTIONS (size) 2=0-3-8, 9= Mechanical
Max Horiz 2=417 (LC 13)
Max Uplift 2=-171 (LC 16), 9=-229 (LC 13)
Max Grav 2=1491 (LC 42), 9=1316 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-1911/186, 4-6=-1133/241, 6-7=-760/227, 7-8=-195/204, 8-9=-229/81
BOT CHORD 2-12=-448/1552, 10-12=-448/1552, 9-10=-239/477
WEBS 4-12=0/317, 4-10=-1018/293, 6-10=-29/235, 7-10=-151/925, 7-9=-1062/289

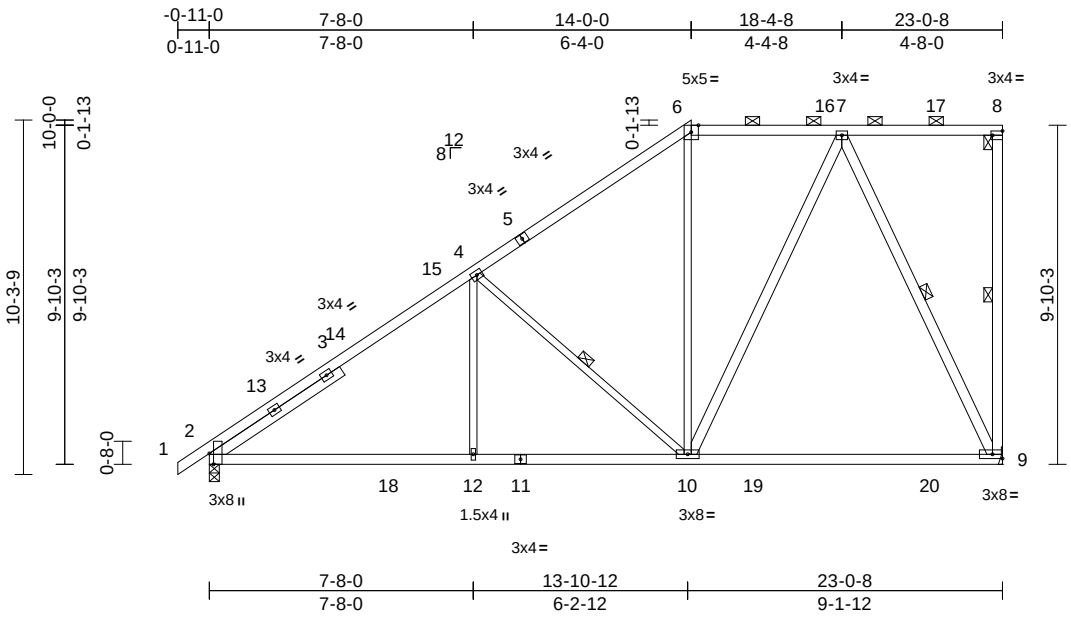
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 14-2-8, Exterior(2R) 14-2-8 to 21-3-6, Interior (1) 21-3-6 to 22-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
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 2 SP No.2 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 229 lb uplift at joint 9 and 171 lb uplift at joint 2.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	B05	Half Hip	1	1	I60735717 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:33 Page: 1
ID:bYyadlexN8LzlabJxqT073yx6yn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:66.9

Plate Offsets (X, Y): [2:0-3-13,Edge], [8: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	0.85	Vert(LL)	-0.36	9-10	>770	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.55	9-10	>500	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.04	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 144 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-5:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 11-9:2x4 SP 1650F 1.5E
WEBS 2x4 SP No.2 *Except* 4-12,10-4,10-6:2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-6-11

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 8-7-5 oc bracing.
WEBS 1 Row at midpt 8-9, 4-10, 7-9

REACTIONS (size) 2=0-3-8, 9= Mechanical
Max Horiz 2=411 (LC 13)
Max Uplift 2=-171 (LC 16), 9=-229 (LC 13)
Max Grav 2=1487 (LC 42), 9=1323 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-1947/192, 4-6=-1156/235, 6-7=-777/226, 7-8=-193/201, 8-9=-234/80
BOT CHORD 2-12=-456/1584, 10-12=-456/1584, 9-10=-240/491
WEBS 4-12=0/295, 4-10=-987/288, 6-10=-18/219, 7-10=-149/918, 7-9=-1074/284

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 14-0-0, Exterior(2R) 14-0-0 to 21-0-14, Interior (1) 21-0-14 to 22-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
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 2 SP No.2 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 229 lb uplift at joint 9 and 171 lb uplift at joint 2.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	B06	Half Hip	1	1	I60735718 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:33 Page: 1
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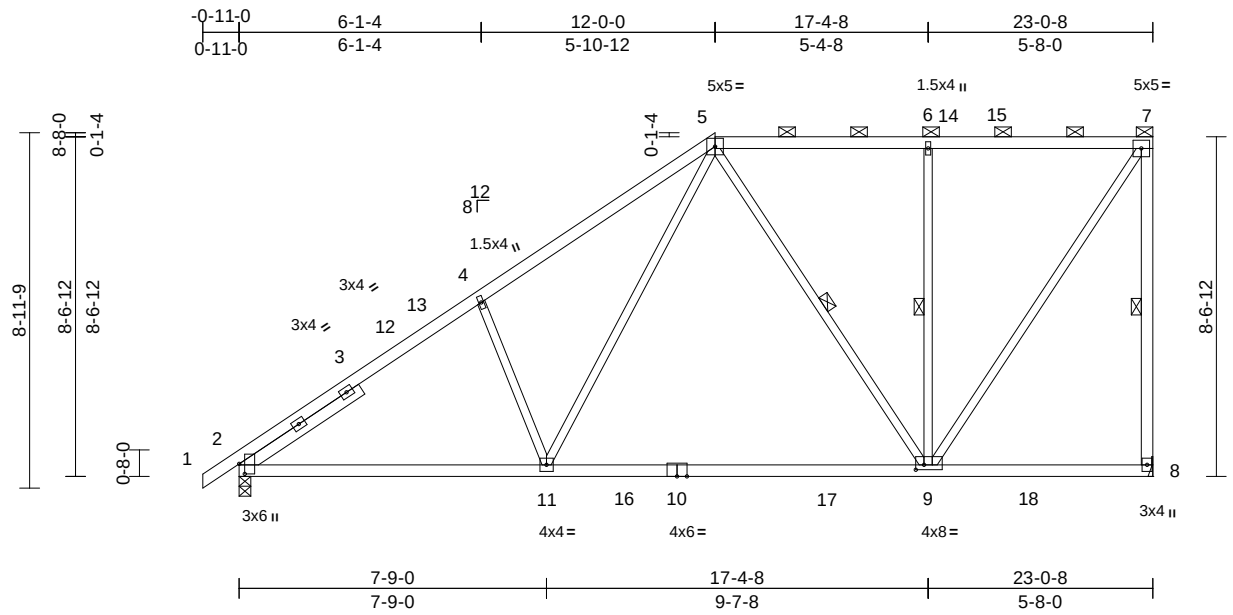


Scale = 1:58.1

Plate Offsets (X, Y): [2:0-3-1,0-1-11], [9:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.33	9-11	>824	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.52	9-11	>533	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.03	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 124 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 7-8:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-7-9

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

REACTIONS (size) 2=0-3-8, 8= Mechanical
Max Horiz 2=356 (LC 13)
Max Uplift 2=-166 (LC 16), 8=-229 (LC 13)
Max Grav 2=1507 (LC 38), 8=1412 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-1962/200, 4-5=-1711/302, 5-6=-747/221, 6-7=-745/220, 7-8=-1352/237
BOT CHORD 2-11=-467/1581, 9-11=-325/873, 8-9=-157/175
WEBS 4-11=-660/293, 5-11=-180/1070, 5-9=-528/192, 6-9=-814/213, 7-9=-211/1324

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 12-0-0, Exterior(2R) 12-0-0 to 19-0-14, Interior (1) 19-0-14 to 22-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
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 2 SP No.2 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 229 lb uplift at joint 8 and 166 lb uplift at joint 2.
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.

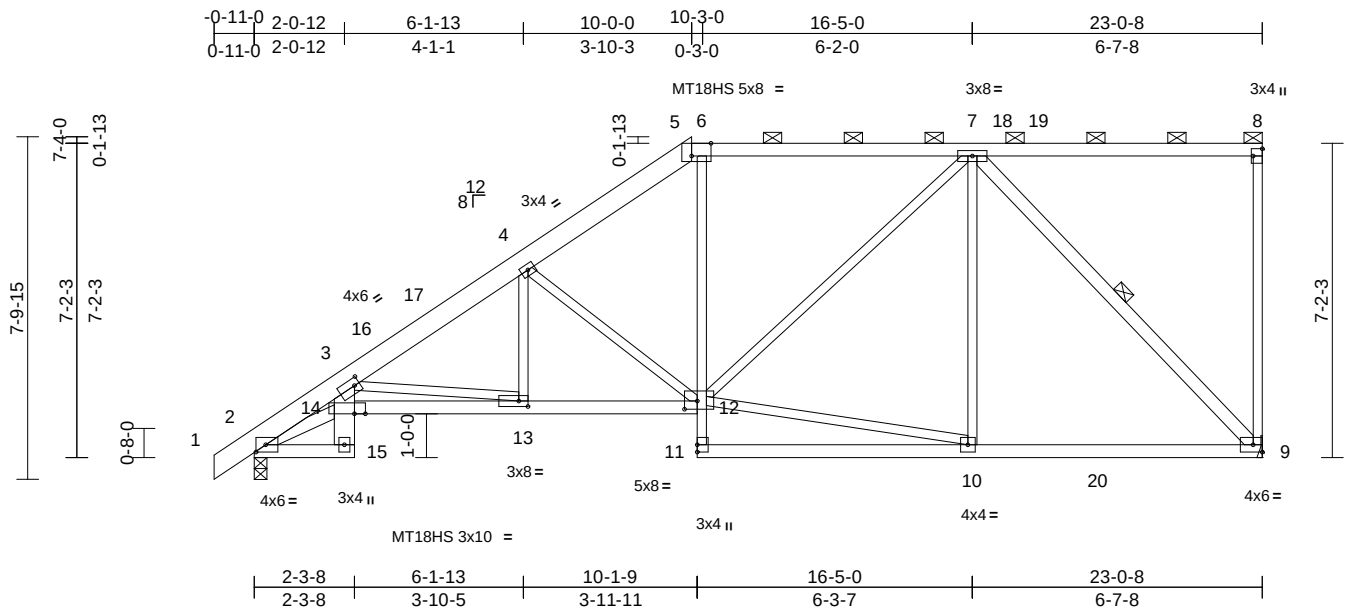
LOAD CASE(S) Standard

September 13,2023

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/06/2024 4:55:57

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	B07	Half Hip	1	1	I60735719 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:34 ID:8j1KGTfdbyx3qU0SsU_jXnyx6xT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:52.7

Plate Offsets (X, Y): [2:0-2-11,0-2-0], [3:0-1-8,0-2-0], [5:0-5-5,Edge], [8:Edge,0-2-8], [12:0-3-8,0-2-4], [13:0-2-8,0-1-8], [14:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.13	13-14	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.20	13-14	>999	180	MT18HS	113/123
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.13	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 134 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SPF No.2 *Except* 5-8:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 15-3:1 1/2" x 5 1/2" 2.0E Microllam® LVL, 14-12:2x4 SP 1650F 1.5E, 6-11:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 9-7,2-14:2x4 SP No.2

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

REACTIONS (size) 2=0-3-8, 9= Mechanical
Max Horiz 2=301 (LC 15)
Max Uplift 2=-157 (LC 16), 9=-226 (LC 13)
Max Grav 2=1461 (LC 38), 9=1487 (LC 37)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/55, 2-3=-2562/296, 3-4=-2158/243, 4-5=-1454/215, 5-6=-1220/210, 6-7=-1225/211, 7-8=-143/150, 8-9=-335/93
BOT CHORD 2-15=-234/1029, 14-15=-19/22, 3-14=-89/411, 13-14=-878/3355, 12-13=-528/1830, 11-12=0/102, 6-12=-15/468, 10-11=-8/66, 9-10=-227/1049
WEBS 10-12=-224/1000, 7-12=-182/563, 7-10=-17/273, 7-9=-1509/239, 4-13=-10/446, 3-13=-1546/354, 2-14=-394/1092, 4-12=-990/232

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 10-0-0, Exterior(2R) 10-0-0 to 17-0-14, Interior (1) 17-0-14 to 22-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
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, with BCDL = 10.0psf.
10) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
11) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 226 lb uplift at joint 9 and 157 lb uplift at joint 2.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	B08	Half Hip	1	1	I60735720 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:34 Page: 1
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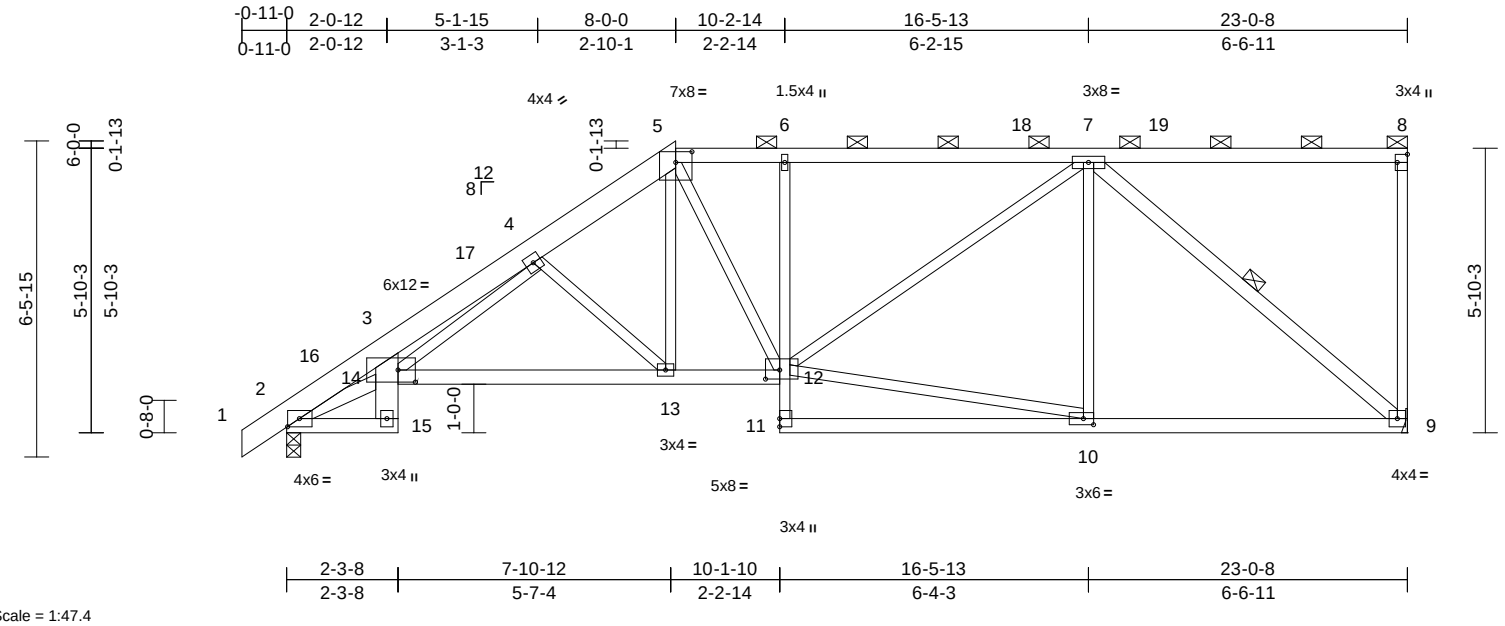


Scale = 1:47.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.11	13-14	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.21	13-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.12	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 131 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SPF No.2 *Except* 5-8:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 15-3:2x6 SP 2400F 2.0E, 6-11:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 9-7,2-14:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-2-4 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-3 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 14-15
8-1-8 oc bracing: 13-14.
WEBS 1 Row at midpt 7-9

REACTIONS (size) 2=0-3-8, 9= Mechanical
Max Horiz 2=244 (LC 15)
Max Uplift 2=-142 (LC 16), 9=-226 (LC 13)
Max Grav 2=1350 (LC 38), 9=1560 (LC 37)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/55, 2-3=-2338/293, 3-4=-3241/578, 4-5=-1908/246, 5-6=-1790/255, 6-7=-1791/256, 7-8=-121/124, 8-9=-334/89
BOT CHORD 2-15=-221/876, 14-15=-10/26, 3-14=-459/149, 13-14=-528/1892, 12-13=-343/1533, 11-12=0/105, 6-12=-606/156, 10-11=-2/116, 9-10=-253/1374
WEBS 5-12=-190/580, 10-12=-254/1273, 7-12=-160/541, 7-10=-63/213, 7-9=-1790/265, 5-13=-103/684, 4-13=-811/243, 4-14=-340/1264, 2-14=-368/970

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 8-0-0, Exterior(2R) 8-0-0 to 15-0-14, Interior (1) 15-0-14 to 22-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
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 2 SP No.2 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 226 lb uplift at joint 9 and 142 lb uplift at joint 2.
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.

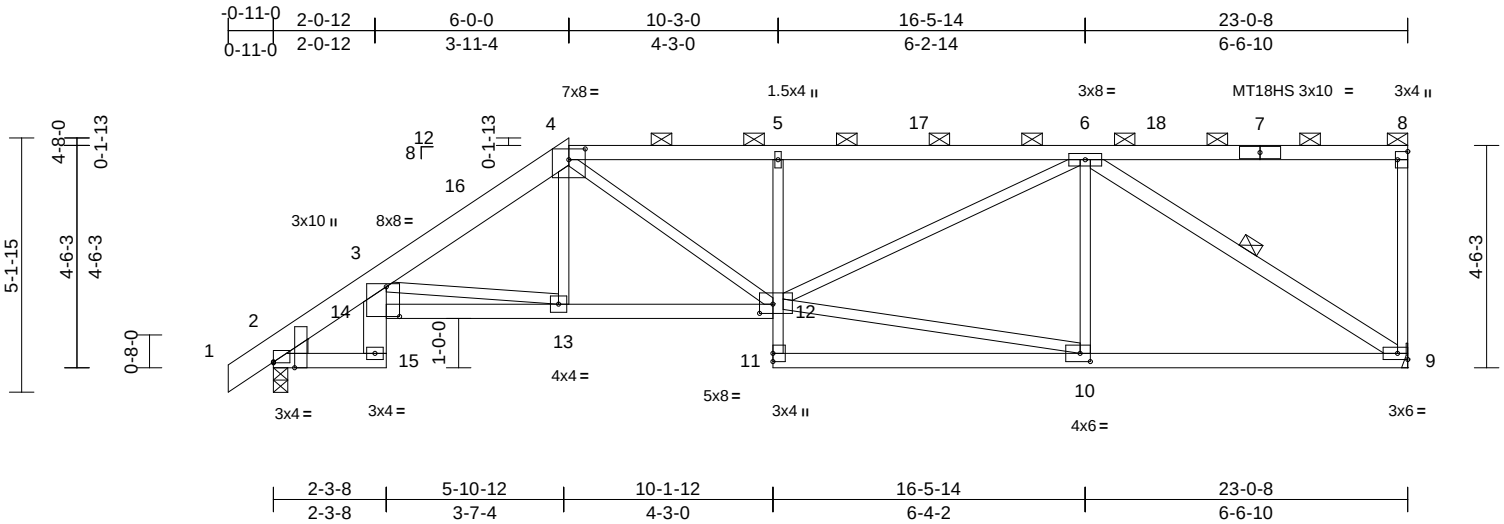
LOAD CASE(S) Standard

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	B09	Half Hip	1	1	I60735721 Job Reference (optional)

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

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:35 Page: 1
ID:CP0H61S02EFhkd38jLABCiyx6wR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:46.8

Plate Offsets (X, Y): [2:Edge,0-0-3], [2:0-1-6,Edge], [3:0-3-4,0-7-4], [4:0-4-0,0-2-10], [8:Edge,0-2-8], [10:0-2-8,0-2-0], [12:0-3-4,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.17	5	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.25	5	>999	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.17	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 119 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SPF No.2 *Except* 4-7:2x4 SP 1650F 1.5E, 7-8:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 5-15:3:1 1/2" x 5 1/2" 2.0E Microllam® LVL, 5-11:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 9-6:2x4 SP No.2
WEDGE Left: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-1 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-11-13 oc bracing: 13-14
9-9-2 oc bracing: 12-13.
WEBS 1 Row at midpt 6-9

REACTIONS (size) 2=0-3-8, 9= Mechanical
Max Horiz 2=187 (LC 13)
Max Uplift 2=-124 (LC 16), 9=-226 (LC 13)
Max Grav 2=1242 (LC 37), 9=1602 (LC 37)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1642/168, 3-4=-2303/312, 4-5=-2707/389, 5-6=-2699/389, 6-8=-98/95, 8-9=-339/87
BOT CHORD 2-15=-286/1109, 14-15=-2/66, 3-14=0/107, 13-14=-713/2745, 12-13=-367/1936, 11-12=0/105, 5-12=-666/173, 10-11=-14/140, 9-10=-304/1866
WEBS 4-12=-214/969, 10-12=-294/1748, 6-12=-180/938, 6-10=-143/179, 6-9=-2196/314, 4-13=-19/321, 3-13=-1130/389

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 6-0-0, Exterior(2R) 6-0-0 to 13-0-14, Interior (1) 13-0-14 to 22-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
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) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
11) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 226 lb uplift at joint 9 and 124 lb uplift at joint 2.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	B10	Half Hip Girder	1	2	I60735722 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:36 Page: 1
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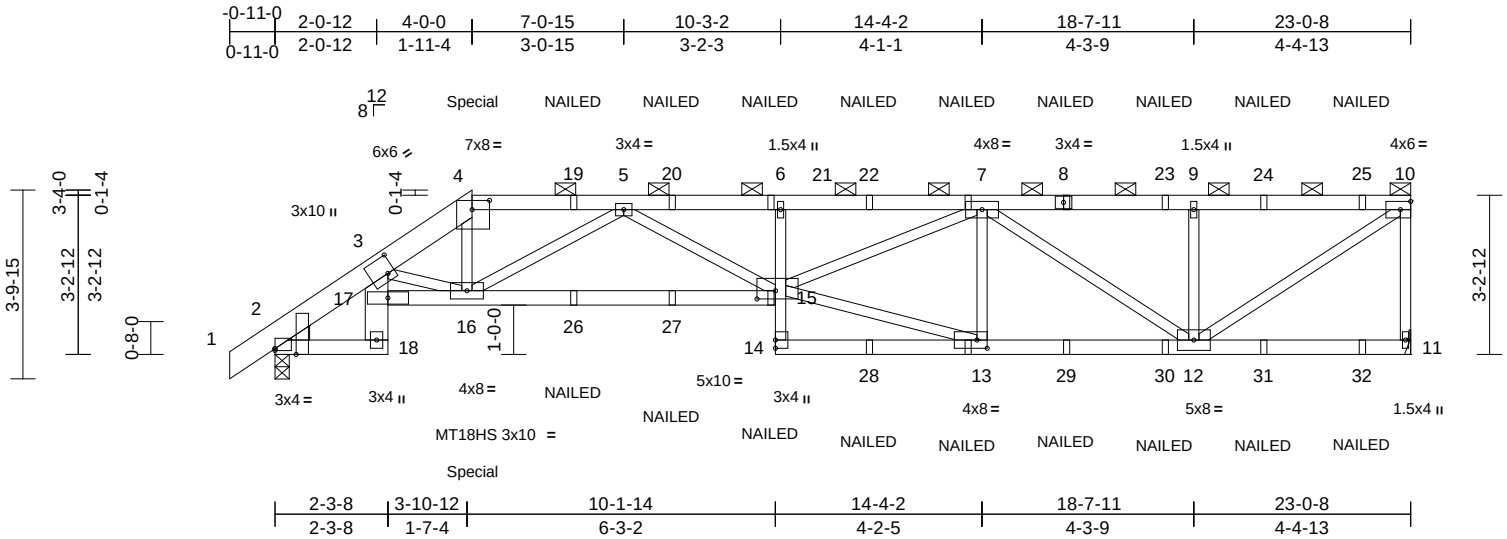

Scale = 1:46.7

Plate Offsets (X, Y): [2:Edge,0-0-7], [2:0-1-6,Edge], [3:0-1-12,0-4-4], [4:0-4-4,0-2-4], [13:0-2-8,0-2-0], [15:0-4-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.29	15-16	>935	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.41	15-16	>662	180	MT18HS	113/123
TCDL	10.0	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.17	11	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 218 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-4:2x6 SPF No.2
BOT CHORD 2x4 SP No.2 *Except* 18-3:1 1/2" x 5 1/2" 2.0E Microllam® LVL, 17-15:2x4 SP 1650F 1.5E, 6-14:2x3 SPF No.2
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2

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

REACTIONS (size) 2=0-3-8, 11= Mechanical
Max Horiz 2=132 (LC 15)
Max Uplift 2=-528 (LC 16), 11=-611 (LC 13)
Max Grav 2=2212 (LC 37), 11=2378 (LC 37)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-3017/724, 3-4=-5061/1318, 4-5=-4253/1125, 5-6=-7143/1807, 6-7=-7038/1785, 7-9=-2928/757, 9-10=-2928/757, 10-11=-2308/638
BOT CHORD 2-18=-607/2057, 17-18=-16/105, 3-17=-189/73, 16-17=-1464/4974, 15-16=-1576/5993, 14-15=0/99, 6-15=-488/145, 13-14=-50/225, 12-13=-1168/4468, 11-12=-51/77
WEBS 5-15=-367/1347, 13-15=-1151/4368, 7-15=-741/2845, 7-13=-933/358, 7-12=-1865/473, 9-12=-798/332, 10-12=-898/3502, 3-16=-729/293, 4-16=-587/2244, 5-16=-2038/511

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc, 2x3 - 1 row 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, 2x3 - 1 row at 0-9-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) 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) -0-11-0 to 4-0-0, Exterior(2R) 4-0-0 to 11-0-14, Interior (1) 11-0-14 to 22-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
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) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
12) Refer to girder(s) for truss to truss connections.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 611 lb uplift at joint 11 and 528 lb uplift at joint 2.
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.
16) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.

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17) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 157 lb down and 89 lb up at 4-0-0 on top chord, and 387 lb down and 166 lb up at 4-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 1-4=-70, 4-10=-70, 2-18=-20, 15-17=-20, 11-14=-20
   Concentrated Loads (lb)
   Vert: 4=-26 (B), 8=-147 (B), 15=-152 (B), 6=-14 (B), 13=-19 (B), 7=-147 (B), 16=-387 (B), 19=-14 (B), 20=-14 (B), 22=-147 (B), 23=-147 (B), 24=-147 (B), 25=-152 (B), 26=-152 (B), 27=-152 (B), 28=-19 (B), 29=-19 (B), 30=-19 (B), 31=-19 (B), 32=-21 (B)

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	C01	Common Girder	1	2	I60735723 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:37 Page: 1
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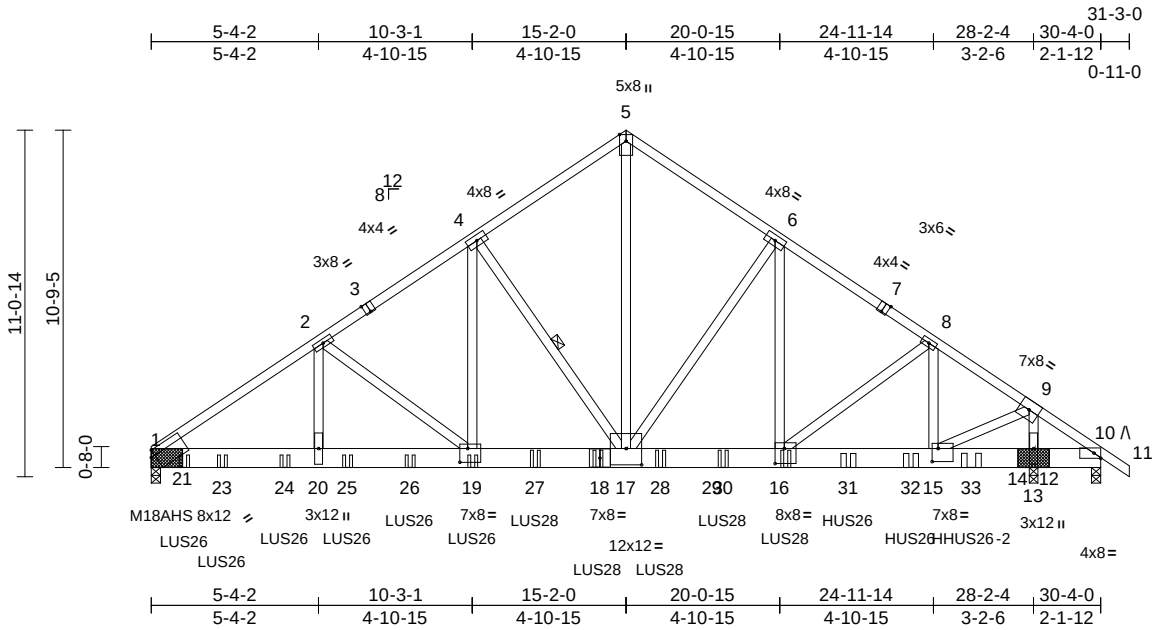

Scale = 1:73.6

Plate Offsets (X, Y): [1:Edge,0-2-6], [3:0-2-0,Edge], [7:0-2-0,Edge], [15:0-2-4,0-5-0], [16:0-3-8,0-5-12], [17:0-6-0,0-6-4], [19:0-3-0,0-5-4]

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	0.87	Vert(LL)	-0.22	17-19	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.34	17-19	>987	180	M18AHS	186/179
TCDL	10.0	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.07	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 508 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E *Except* 1-3:2x4 SP 2400F 2.0E, 7-11:2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 17-5,15-9:2x4 SP 1650F 1.5E

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-17

REACTIONS (size) 1=(0-3-8 + bearing block), (req. 0-4-2), 10=0-3-8, 13=(0-3-6 + bearing block), (req. 0-4-11)
Max Horiz 1=-295 (LC 12)
Max Uplift 1=-1513 (LC 16), 10=REL, 13=-2931 (LC 17)
Max Grav 1=9962 (LC 23), 10=830 (LC 16), 13=11360 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-14040/2142, 2-4=-11372/1837, 4-5=-8800/1523, 5-6=-8758/1524, 6-8=-10886/1716, 8-9=-10418/1373, 9-10=-1501/0, 10-11=0/47
BOT CHORD 1-20=-1833/11326, 19-20=-1833/11326, 17-19=-1448/9389, 16-17=-1250/8997, 15-16=-1032/8613, 13-15=0/1138, 10-13=0/1138
WEBS 2-20=-367/3033, 2-19=-2477/485, 4-19=-638/4155, 4-17=-3841/745, 5-17=-1545/9243, 6-17=-3221/577, 6-16=-453/3389, 9-13=-8844/2169, 9-15=-1891/8436, 8-16=-275/897, 8-15=-1247/420

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 0-6-0 oc.
Bottom chords connected as follows: 2x8 - 4 rows staggered at 0-7-0 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) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 1 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SP 2400F 2.0E.
4) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 13 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SP 2400F 2.0E.
5) Unbalanced roof live loads have been considered for this design.
6) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-4-2, Interior (1) 5-4-2 to 15-2-0, Exterior(2R) 15-2-0 to 20-0-15, Interior (1) 20-0-15 to 31-3-0 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
7) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
8) Unbalanced snow loads have been considered for this design.
9) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
10) All plates are MT20 plates unless otherwise indicated.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1513 lb uplift at joint 1 and 2931 lb uplift at joint 13.
15) "/\" indicates Released bearing: allow for upward movement at joint(s) 10.
16) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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17) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-0-12 from the left end to 10-3-4 to connect truss(es) to back face of bottom chord.
18) Use Simpson Strong-Tie LUS28 (6-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent spaced at 6-0-0 oc max. starting at 12-3-4 from the left end to 20-3-4 to connect truss(es) to back face of bottom chord.
19) Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 14-3-4 from the left end to 16-3-4 to connect truss(es) to back face of bottom chord.
20) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 22-3-4 from the left end to 24-3-4 to connect truss(es) to back face of bottom chord.
21) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 4-10d Truss) or equivalent at 26-2-7 from the left end to connect truss(es) to back face of bottom chord.
22) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 1-5=-70, 5-11=-70, 1-10=-20
   Concentrated Loads (lb)
   Vert: 18=-1254 (B), 19=-1052 (B), 16=-1467 (B), 21=-1053 (B), 23=-1052 (B), 24=-1052 (B), 25=-1052 (B), 26=-1052 (B), 27=-1360 (B), 28=-1266 (B), 30=-1370 (B), 31=-1540 (B), 32=-1582 (B), 33=-2358 (B)

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	C02	Common	3	1	I60735724 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:38 Page: 1
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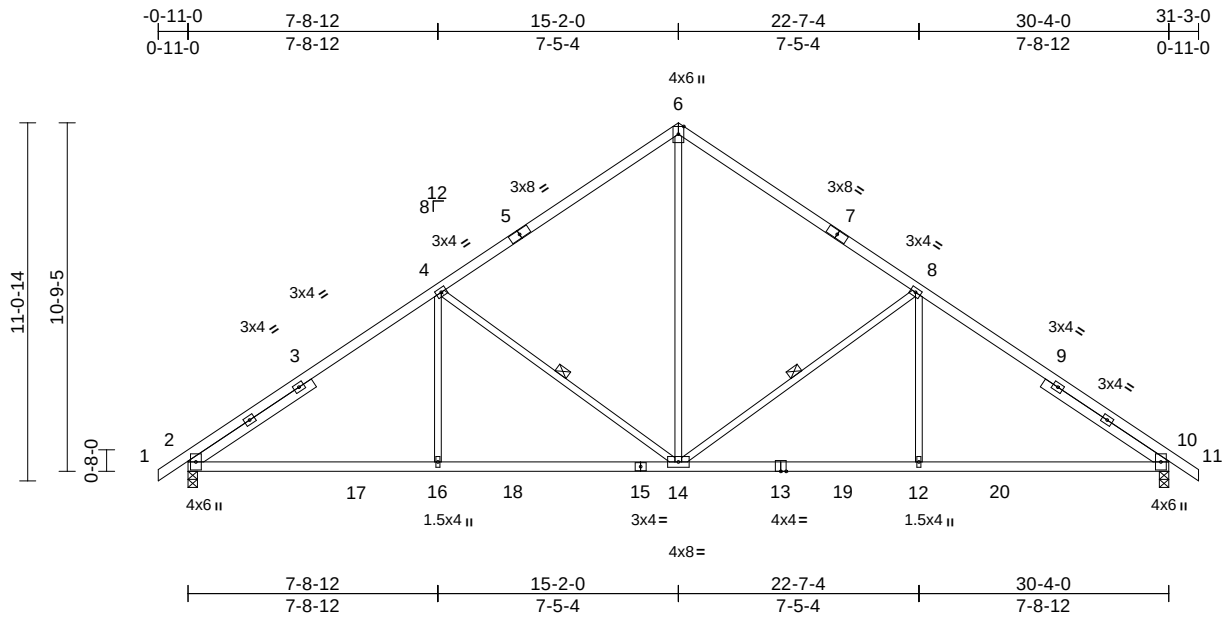


Scale = 1:71.3

Plate Offsets (X, Y): [2:0-3-5,0-0-15], [10:0-3-5,0-0-15]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.12	10-12	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.23	10-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.08	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 148 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* 1-5,7-11:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-7-2, Right 2x4 SP No.2 -- 4-7-2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-14, 4-14

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=-299 (LC 14)
Max Uplift 2=-216 (LC 16), 10=-216 (LC 17)
Max Grav 2=1597 (LC 26), 10=1597 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-2143/284, 4-6=-1491/320, 6-8=-1491/320, 8-10=-2144/284, 10-11=0/31
BOT CHORD 2-16=-276/1872, 14-16=-276/1872, 12-14=-106/1673, 10-12=-106/1673
WEBS 6-14=-149/1072, 8-14=-811/306, 8-12=0/412, 4-14=-810/306, 4-16=0/412

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 15-2-0, Exterior(2R) 15-2-0 to 20-2-0, Interior (1) 20-2-0 to 31-3-0 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
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, with BCDL = 10.0psf.
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 216 lb uplift at joint 2 and 216 lb uplift at joint 10.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

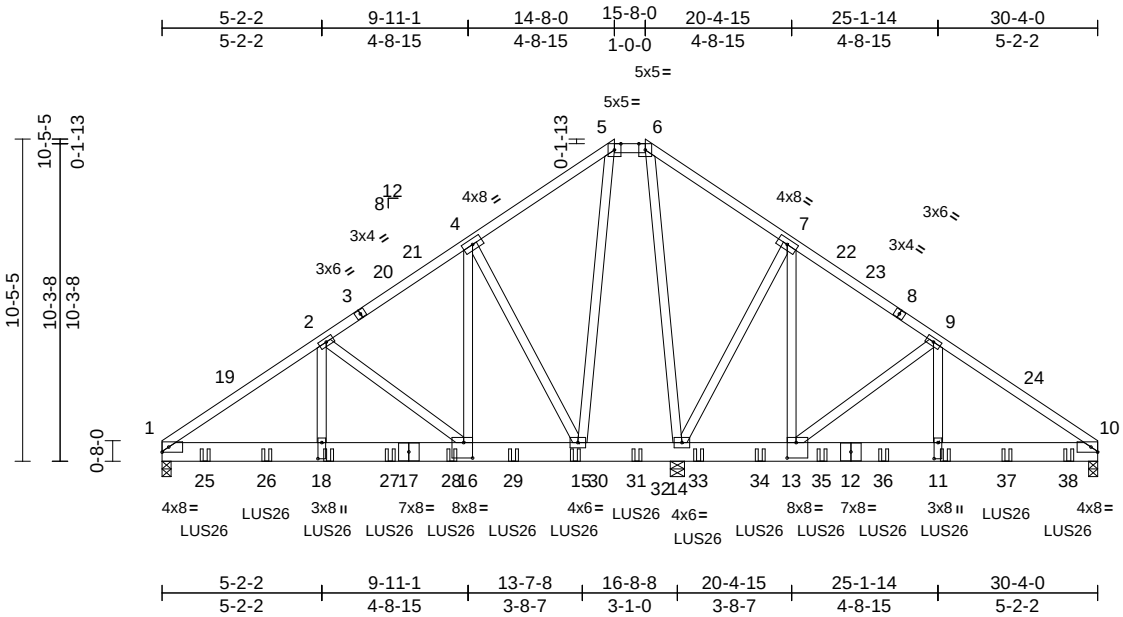
LOAD CASE(S) Standard

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	C03	Hip Girder	1	2	I60735725 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:39 Page: 1

ID:m?rts4KhE263g2hh6cwmJgyx6sk-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:74.7

Plate Offsets (X, Y): [11:0-6-4,0-1-8], [13:0-3-8,0-6-0], [16:0-3-8,0-6-0], [18:0-6-4,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.14	15-16	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.21	15-16	>939	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.03	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 463 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2

BOT CHORD 2x8 SPF No.2 *Except* 12-17:2x8 SP 2400F 2.0E

WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-8-7 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.

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

REACTIONS (size) 1=0-3-8, 10=0-3-8, 14=0-5-8
Max Horiz 1=277 (LC 15)
Max Uplift 1=-534 (LC 16), 10=-392 (LC 17), 14=-1001 (LC 17)
Max Grav 1=4032 (LC 40), 10=3403 (LC 40), 14=7508 (LC 40)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5368/697, 2-4=-3356/502, 4-5=-1227/286, 5-6=-732/262, 6-7=-809/273, 7-9=-1818/288, 9-10=-4182/500

BOT CHORD 1-18=-663/4260, 16-18=-663/4260, 15-16=-438/2670, 14-15=-194/774, 13-14=-179/1364, 11-13=-342/3306, 10-11=-342/3306

WEBS 2-18=-205/1970, 2-16=-2004/377, 4-16=-552/3936, 7-13=-262/1599, 9-13=-2447/440, 9-11=-248/2321, 6-14=-880/120, 5-15=-202/1210, 7-14=-1660/406, 4-15=-3934/687

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: 2x8 - 2 rows staggered at 0-8-0 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) 0-1-12 to 5-2-2, Interior (1) 5-2-2 to 14-8-0, Exterior(2E) 14-8-0 to 15-8-0, Exterior(2R) 15-8-0 to 22-8-14, Interior (1) 22-8-14 to 30-2-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) Provide adequate drainage to prevent water ponding.
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, with BCDL = 10.0psf.
10) Bearings are assumed to be: Joint 1 SPF No.2 crushing capacity of 425 psi, Joint 14 SP 2400F 2.0E crushing capacity of 805 psi, Joint 10 SPF No.2 crushing capacity of 425 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 534 lb uplift at joint 1, 392 lb uplift at joint 10 and 1001 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) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 16-0-0 oc max. starting at 1-4-12 from the left end to 29-4-12 to connect truss(es) to front face of bottom chord.
15) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 9-4-12 from the left end to 21-4-12 to connect truss(es) to front face of bottom chord.

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Continued on page 2

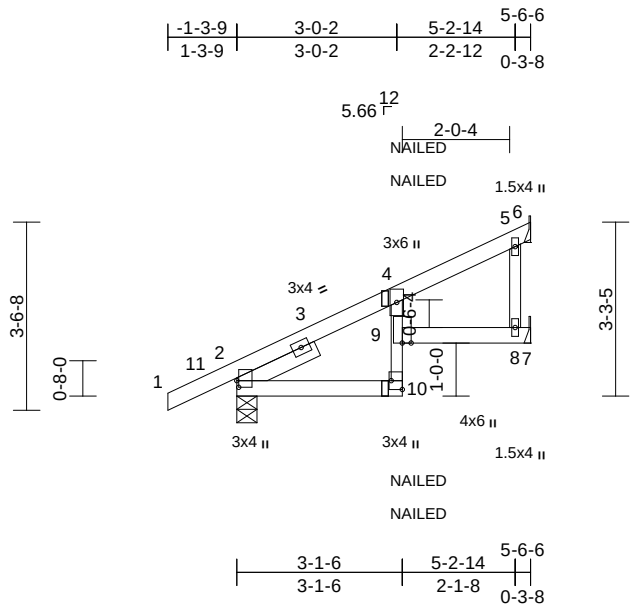
16) Fill all nail holes where hanger is in contact with lumber.
17) N/A

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 1-5=-70, 5-6=-70, 6-10=-70, 1-10=-20
   Concentrated Loads (lb)
   Vert: 18=-726 (F), 11=-726 (F), 15=-726 (F), 25=-726 (F), 26=-726 (F), 27=-726 (F), 28=-726 (F), 29=-726 (F), 31=-726 (F), 33=-726 (F), 34=-726 (F), 35=-726 (F), 36=-726 (F), 37=-726 (F), 38=-728 (F)

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	CJ01	Diagonal Hip Girder	1	1	I60735726 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:39 Page: 1
ID:idVeFtx6L7iry3uPkRzBSYyx7_z-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:43.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.09	9	>717	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.13	10	>500	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.06	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 25 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 10-4:2x3 SPF No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-7-9

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

REACTIONS (size) 2=0-4-9, 6= Mechanical, 7= Mechanical
Max Horiz 2=138 (LC 16)
Max Uplift 2=-57 (LC 16), 6=-7 (LC 16), 7=-79 (LC 16)
Max Grav 2=477 (LC 23), 6=80 (LC 23), 7=263 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-4=-391/44, 4-5=-78/80, 5-6=-13/33
BOT CHORD 2-10=-138/219, 9-10=-5/68, 4-9=0/77, 8-9=0/0, 7-8=0/0
WEBS 5-8=-158/132

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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
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 2 SP No.2 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 7 lb uplift at joint 6, 57 lb uplift at joint 2 and 79 lb uplift at joint 7.
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) "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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-6=-70, 2-10=-20, 7-9=-20

September 13,2023

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/06/2024 4:55:57

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	D01	Scissor Supported Gable	2	1	I60735727 Job Reference (optional)

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

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:40 Page: 1
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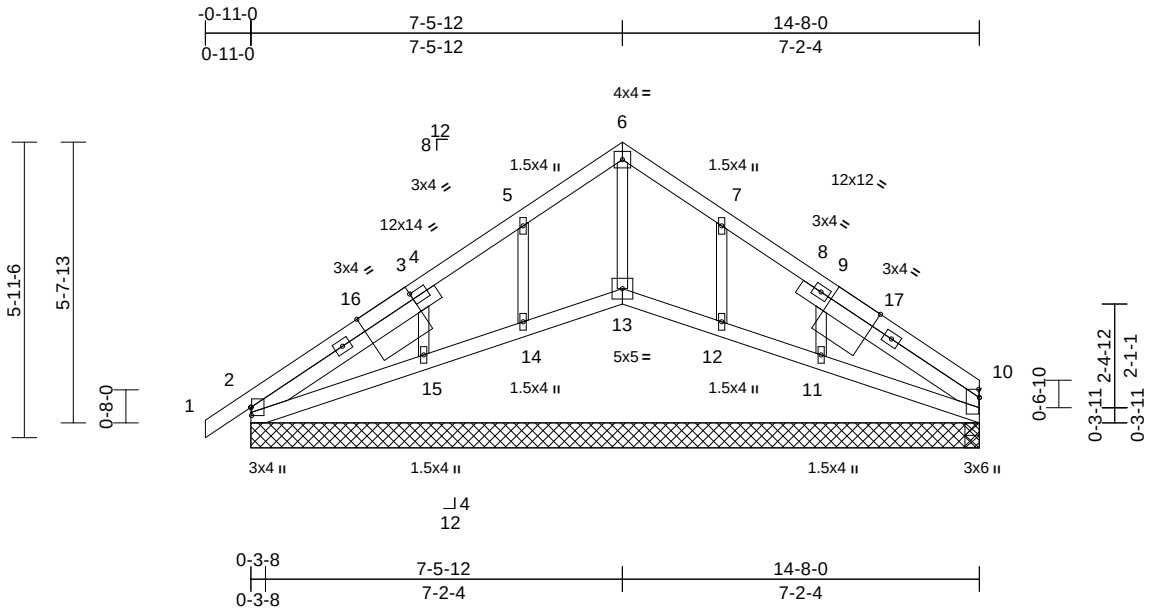


Scale = 1:46.4

Plate Offsets (X, Y): [2:0-2-0,0-0-2], [2:3-11-1,0-1-8], [3:2-9-1,Edge], [9:2-7-1,Edge], [10:0-2-0,0-0-2]

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	0.13	Vert(LL)	0.00	2-15	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	2-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 72 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-5-14, Right 2x4 SP No.2 -- 4-4-7

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

REACTIONS (size) 2=14-8-0, 10=14-8-0, 11=14-8-0, 12=14-8-0, 13=14-8-0, 14=14-8-0, 15=14-8-0
Max Horiz 2=154 (LC 13)
Max Uplift 2=-62 (LC 17), 10=-16 (LC 17), 11=-133 (LC 17), 12=-70 (LC 17), 14=-76 (LC 16), 15=-131 (LC 16)
Max Grav 2=223 (LC 23), 10=128 (LC 24), 11=357 (LC 24), 12=269 (LC 24), 13=223 (LC 33), 14=271 (LC 23), 15=357 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-148/126, 3-5=-123/102, 5-6=-90/136, 6-7=-90/132, 7-9=-116/69, 9-10=-88/76
BOT CHORD 2-15=-61/115, 14-15=-66/114, 13-14=-64/115, 12-13=-64/115, 11-12=-66/115, 10-11=-56/110
WEBS 6-13=-141/1, 5-14=-239/97, 3-15=-287/162, 7-12=-236/95, 9-11=-289/162

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 7-5-12, Exterior(2R) 7-5-12 to 12-5-12, Interior (1) 12-5-12 to 14-6-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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 16 lb uplift at joint 10, 62 lb uplift at joint 2, 76 lb uplift at joint 14, 131 lb uplift at joint 15, 70 lb uplift at joint 12 and 133 lb uplift at joint 11.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10.
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.

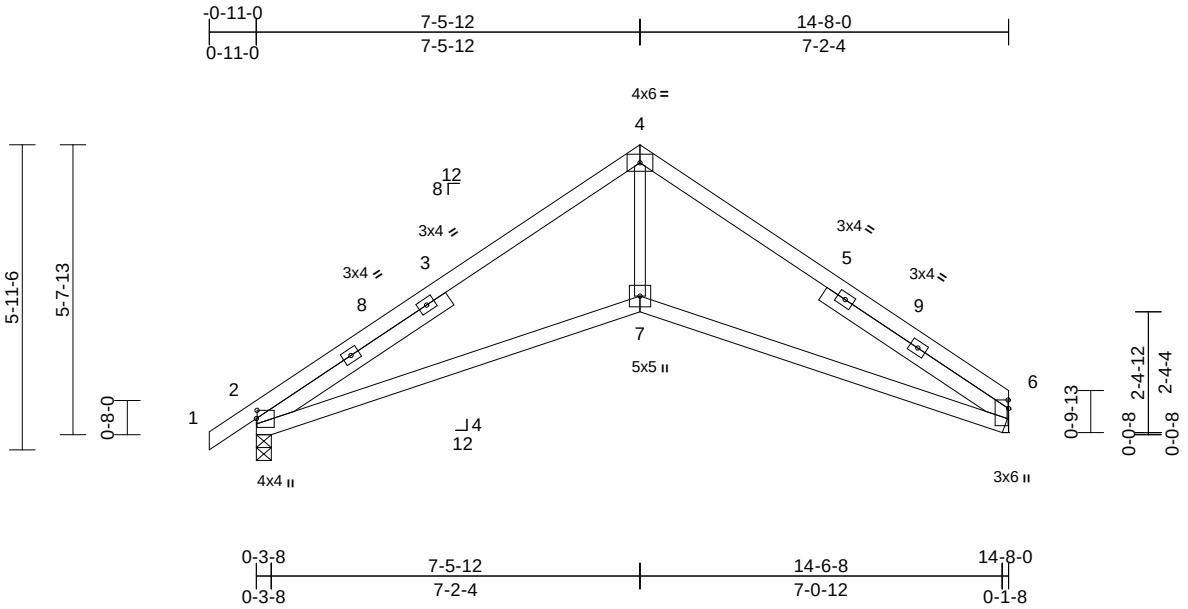
LOAD CASE(S) Standard

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	D02	Scissor	15	1	I60735728 Job Reference (optional)

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

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:40 ID:aX2aiF9TrY0h9ILFUSCGQRyx6uE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:44.9

Plate Offsets (X, Y): [2:0-1-15,0-0-2], [6:0-2-0,0-0-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.10	2-7	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.21	2-7	>816	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.04	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 67 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E *Except* 4-6:2x4 SP 1650F 1.5E
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 4-5-14, Right 2x4 SP No.2 -- 4-4-7

BRACING

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

REACTIONS (size) 2=0-3-8, 6= Mechanical
Max Horiz 2=154 (LC 13)
Max Uplift 2=-117 (LC 16), 6=-88 (LC 17)
Max Grav 2=821 (LC 23), 6=746 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/24, 2-4=-1296/165, 4-6=-1302/181
BOT CHORD	2-7=-65/982, 6-7=-63/983
WEBS	4-7=0/767

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 7-5-12, Exterior(2R) 7-5-12 to 12-5-12, Interior (1) 12-5-12 to 14-6-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
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 2 SP No.2 crushing capacity of 565 psi.
9) Refer to girder(s) for truss to truss connections.
10) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 6 and 117 lb uplift at joint 2.
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.

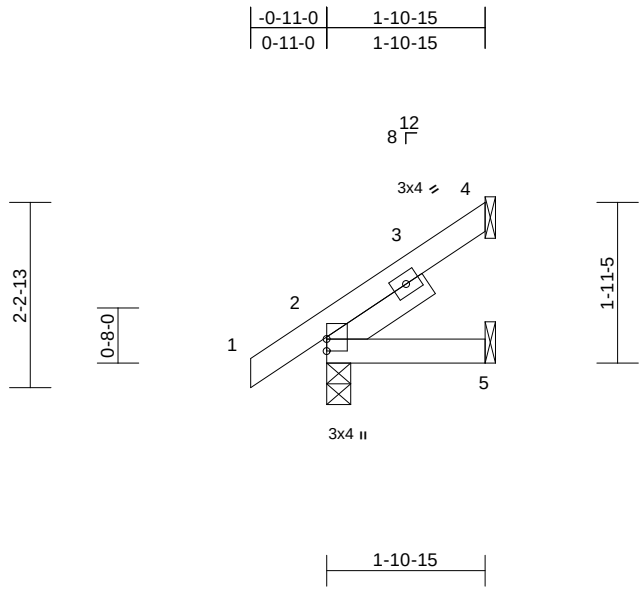
LOAD CASE(S) Standard

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	J01	Jack-Open	2	1	I60735729 Job Reference (optional)

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

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:41 ID:WzHepUPuyl1D29ymbUfe72yx7?g-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:27.8

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	0.11	Vert(LL)	0.00	2-5	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	2-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 10 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-4-12

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

REACTIONS (size) 2=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=80 (LC 16)
Max Uplift 2=-18 (LC 16), 4=-54 (LC 16)
Max Grav 2=239 (LC 23), 4=77 (LC 23), 5=38 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-87/40
BOT CHORD 2-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
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 2 SP No.2 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 18 lb uplift at joint 2 and 54 lb uplift at joint 4.
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
NATHANIEL FOX
NUMBER PE-2022042259
PROFESSIONAL ENGINEER

September 13,2023

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

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	J02	Jack-Open	4	1	I60735730 Job Reference (optional)

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

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:41 Page: 1
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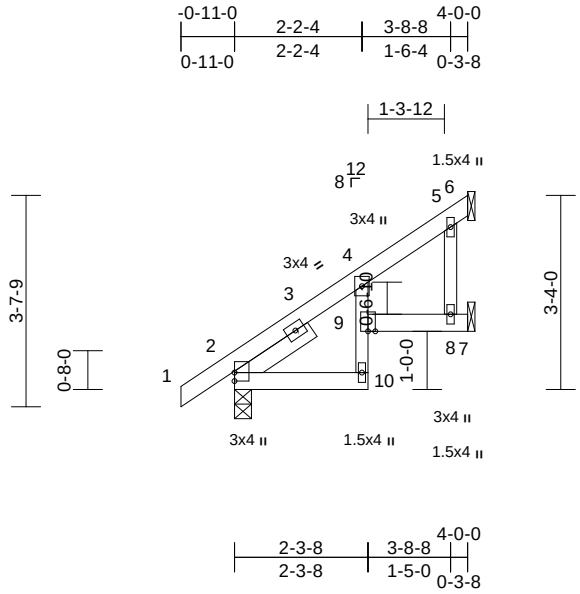

Scale = 1:39.5

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	0.25	Vert(LL)	-0.03	9	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.04	10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.02	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 20 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 10-4:2x3 SPF No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-6-4

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

REACTIONS (size) 2=0-3-8, 6= Mechanical, 7= Mechanical
Max Horiz 2=140 (LC 16)
Max Uplift 2=-16 (LC 16), 6=-27 (LC 16), 7=-58 (LC 16)
Max Grav 2=389 (LC 23), 6=84 (LC 23), 7=172 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-274/0, 4-5=-74/75, 5-6=-28/45
BOT CHORD 2-10=-76/111, 9-10=-6/49, 4-9=-1/54, 8-9=0/0, 7-8=0/0
WEBS 5-8=-95/68

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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
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 2 SP No.2 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 27 lb uplift at joint 6, 16 lb uplift at joint 2 and 58 lb uplift at joint 7.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	J03	Jack-Open	6	1	I60735731 Job Reference (optional)

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

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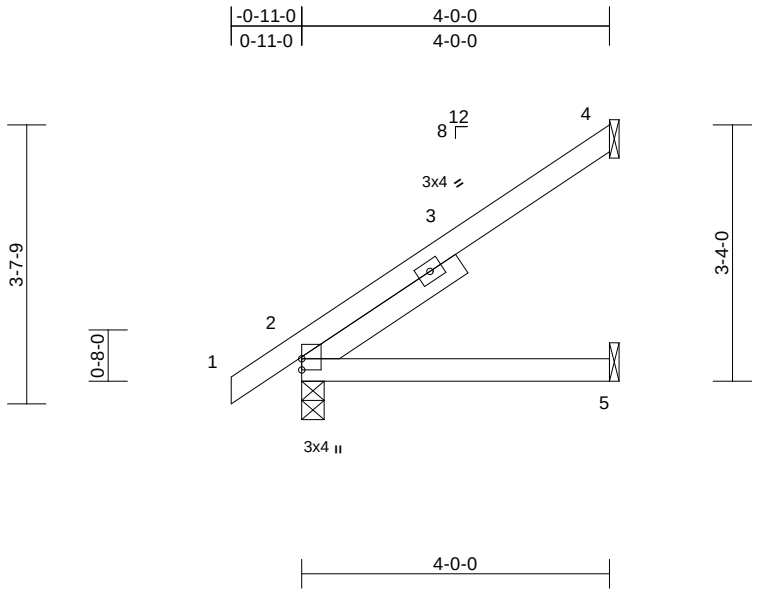

Scale = 1:30

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)	-0.01	2-5	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.03	2-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 19 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-5-0

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

REACTIONS (size) 2=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=140 (LC 16)
Max Uplift 2=-16 (LC 16), 4=-108 (LC 16)
Max Grav 2=389 (LC 23), 4=217 (LC 23), 5=79 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-4=-157/94
BOT CHORD 2-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
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 2 SP No.2 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 108 lb uplift at joint 4 and 16 lb uplift at joint 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
NATHANIEL FOX
NUMBER
PE-2022042259
PROFESSIONAL ENGINEER

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	LG01	Lay-In Gable	1	1	I60735732 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:41 Page: 1
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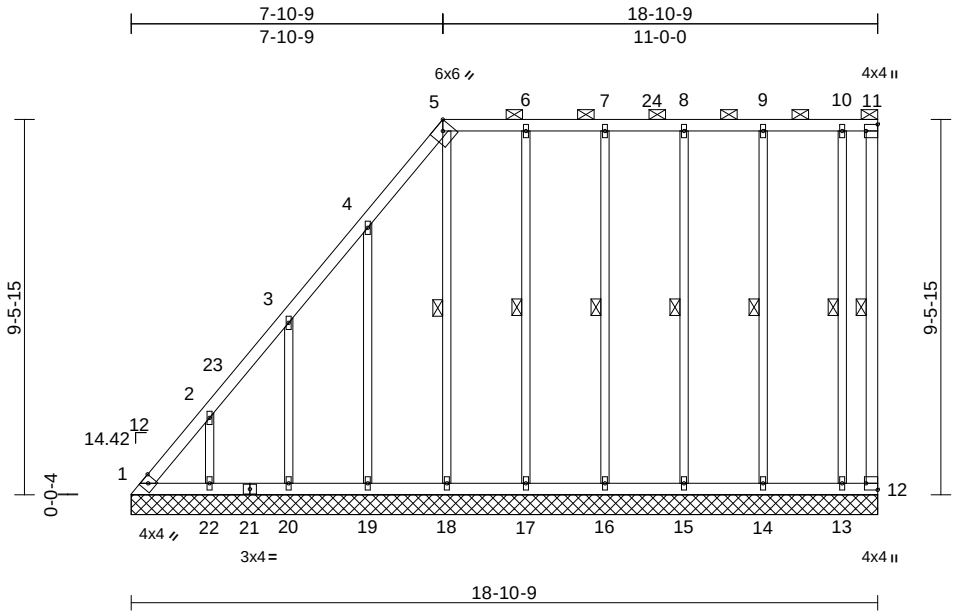

Scale = 1:58.3

Plate Offsets (X, Y): [5:0-2-11,Edge], [11:Edge,0-3-8], [12: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	0.96	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.33	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horiz(TL)	0.00	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 126 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
OTHERS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 11-12, 5-18, 6-17, 7-16, 8-15, 9-14, 10-13

REACTIONS (size) 1=18-10-9, 12=18-10-9, 13=18-10-9, 14=18-10-9, 15=18-10-9, 16=18-10-9, 17=18-10-9, 18=18-10-9, 19=18-10-9, 20=18-10-9, 22=18-10-9
Max Horiz 1=391 (LC 13)
Max Uplift 1=-193 (LC 14), 12=-73 (LC 15), 13=-99 (LC 12), 14=-65 (LC 13), 15=-46 (LC 12), 16=-40 (LC 12), 17=-51 (LC 13), 18=-140 (LC 13), 19=-169 (LC 16), 20=-166 (LC 16), 22=-168 (LC 16)
Max Grav 1=344 (LC 13), 12=46 (LC 12), 13=247 (LC 46), 14=352 (LC 36), 15=330 (LC 36), 16=329 (LC 36), 17=361 (LC 36), 18=219 (LC 40), 19=347 (LC 41), 20=330 (LC 37), 22=340 (LC 41)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-681/668, 2-3=-545/542, 3-4=-404/415, 4-5=-272/274, 5-6=-176/191, 6-7=-176/192, 7-8=-176/192, 8-9=-176/192, 9-10=-176/192, 10-11=-176/192, 11-12=-193/203
BOT CHORD 1-22=-177/194, 20-22=-177/195, 19-20=-178/195, 18-19=-178/195, 17-18=-178/194, 16-17=-178/194, 15-16=-178/194, 14-15=-178/194, 13-14=-178/194, 12-13=-178/194
WEBS 2-22=-289/184, 3-20=-292/192, 4-19=-306/192, 5-18=-292/228, 6-17=-321/75, 7-16=-289/65, 8-15=-291/67, 9-14=-311/79, 10-13=-204/142

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-3-12 to 5-3-12, Interior (1) 5-3-12 to 7-10-13, Exterior(2R) 7-10-13 to 14-11-10, Interior (1) 14-11-10 to 18-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 1.5x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 193 lb uplift at joint 1, 73 lb uplift at joint 12, 168 lb uplift at joint 22, 166 lb uplift at joint 20, 169 lb uplift at joint 19, 140 lb uplift at joint 18, 51 lb uplift at joint 17, 40 lb uplift at joint 16, 46 lb uplift at joint 15, 65 lb uplift at joint 14 and 99 lb uplift at joint 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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	LG02	Lay-In Gable	1	1	I60735733 Job Reference (optional)

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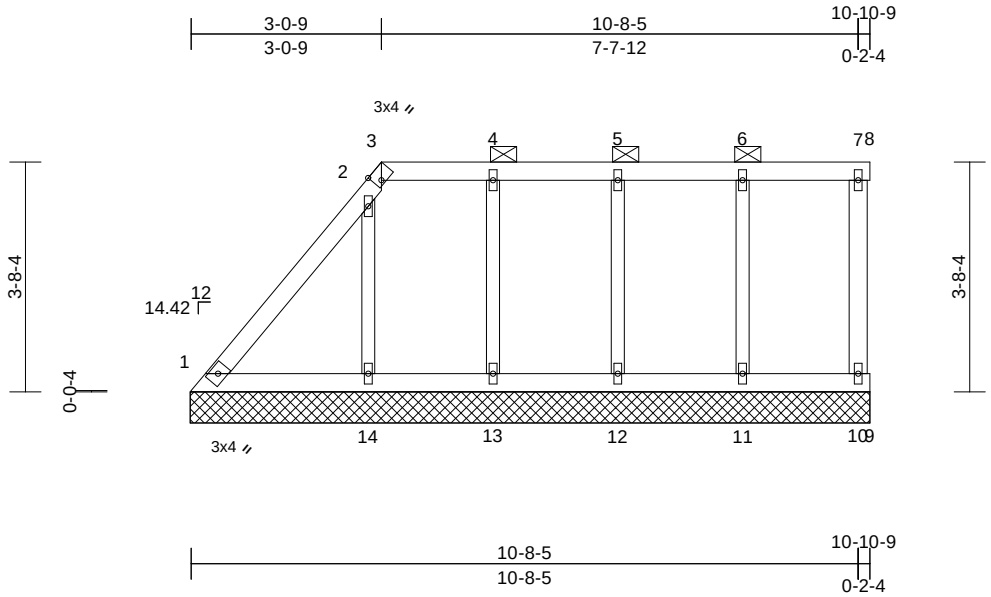

Scale = 1:36.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 48 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 1=10-10-12, 8=10-10-12, 9=10-10-12, 10=10-10-12, 11=10-10-12, 12=10-10-12, 13=10-10-12, 14=10-10-12
Max Horiz 1=148 (LC 16)
Max Uplift 8=-14 (LC 36), 9=-49 (LC 7), 10=-5 (LC 13), 11=-44 (LC 12), 12=-40 (LC 13), 13=-54 (LC 12), 14=-160 (LC 16)
Max Grav 1=181 (LC 37), 8=3 (LC 13), 9=-14 (LC 16), 10=198 (LC 36), 11=347 (LC 36), 12=331 (LC 36), 13=338 (LC 36), 14=355 (LC 37)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-176/155, 2-3=-96/30, 3-4=0/0, 4-5=0/0, 5-6=0/0, 6-7=0/0, 7-8=0/0
BOT CHORD 1-14=0/1, 13-14=0/0, 12-13=0/0, 11-12=0/0, 10-11=0/0, 9-10=0/0
WEBS 7-10=-152/33, 6-11=-309/67, 5-12=-289/64, 4-13=-303/74, 2-14=-280/176

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) 0-3-12 to 3-0-13, Exterior(2R) 3-0-13 to 10-1-10, Interior (1) 10-1-10 to 10-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 1.5x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 8, 49 lb uplift at joint 9, 5 lb uplift at joint 10, 44 lb uplift at joint 11, 40 lb uplift at joint 12, 54 lb uplift at joint 13 and 160 lb uplift at joint 14.
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

September 13,2023

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/06/2024 4:55:58

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	LG03	Lay-In Gable	1	1	I60735734 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:42 Page: 1
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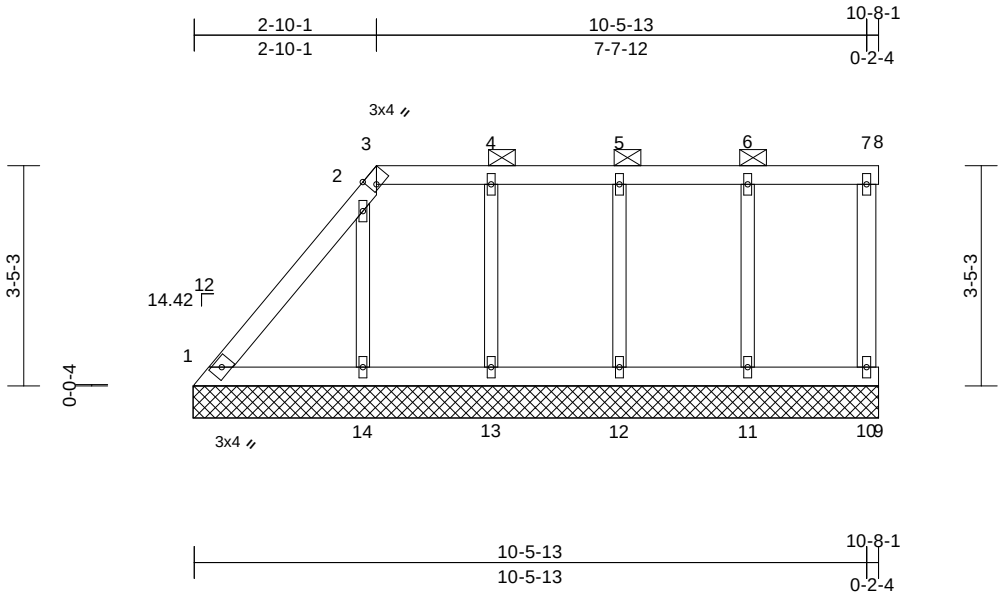


Scale = 1:35.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 46 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 1=10-8-4, 8=10-8-4, 9=10-8-4, 10=10-8-4, 11=10-8-4, 12=10-8-4, 13=10-8-4, 14=10-8-4
Max Horiz 1=137 (LC 16)
Max Uplift 8=-19 (LC 36), 9=-49 (LC 7), 10=-7 (LC 13), 11=-44 (LC 12), 12=-40 (LC 13), 13=-51 (LC 12), 14=-145 (LC 16)
Max Grav 1=167 (LC 37), 8=4 (LC 13), 9=-14 (LC 16), 10=203 (LC 36), 11=347 (LC 36), 12=330 (LC 36), 13=341 (LC 36), 14=327 (LC 37)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-163/142, 2-3=-95/28, 3-4=0/0, 4-5=0/0, 5-6=0/0, 6-7=0/0, 7-8=0/0
BOT CHORD 1-14=0/1, 13-14=0/0, 12-13=0/0, 11-12=0/0, 10-11=0/0, 9-10=0/0
WEBS 7-10=-157/34, 6-11=-308/67, 5-12=-288/64, 4-13=-305/72, 2-14=-257/163

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) 0-3-12 to 2-10-5, Exterior(2R) 2-10-5 to 9-11-2, Interior (1) 9-11-2 to 10-8-4 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) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 1.5x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 8, 49 lb uplift at joint 9, 7 lb uplift at joint 10, 44 lb uplift at joint 11, 40 lb uplift at joint 12, 51 lb uplift at joint 13 and 145 lb uplift at joint 14.
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

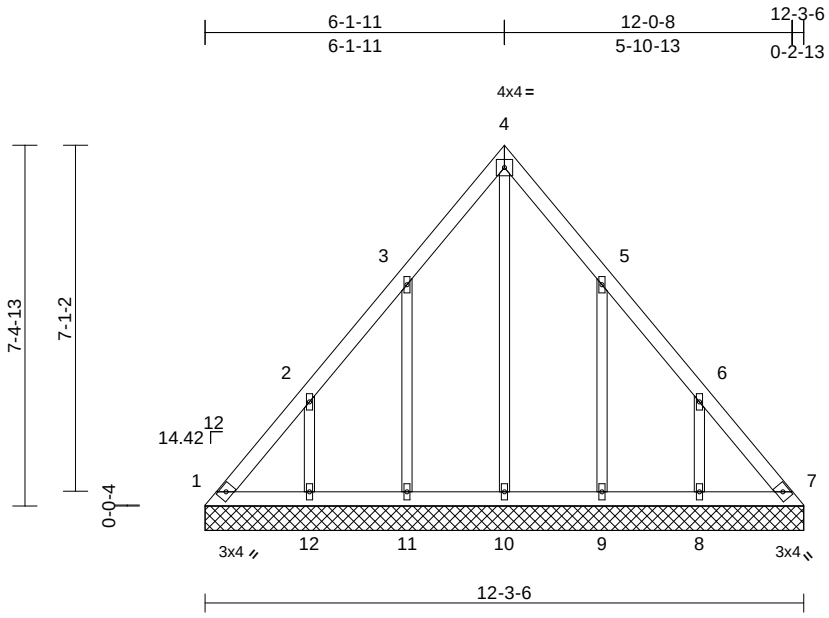
September 13,2023

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/06/2024 4:55:58

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	LG04	Lay-In Gable	1	1	I60735735 Job Reference (optional)

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

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:42 ID:S4tzfMDUUh9LlrJtDqu70uyx7?v-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 61 lb	FT = 20%

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

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

REACTIONS (size) 1=12-3-6, 7=12-3-6, 8=12-3-6, 9=12-3-6, 10=12-3-6, 11=12-3-6, 12=12-3-6
Max Horiz 1=207 (LC 13)
Max Uplift 1=-80 (LC 14), 7=-54 (LC 15), 8=-178 (LC 17), 9=-166 (LC 17), 11=-167 (LC 16), 12=-178 (LC 16)
Max Grav 1=194 (LC 16), 7=177 (LC 17), 8=254 (LC 23), 9=328 (LC 23), 10=149 (LC 28), 11=328 (LC 22), 12=254 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-271/173, 2-3=-154/106, 3-4=-167/130, 4-5=-167/124, 5-6=-149/71, 6-7=-249/173
BOT CHORD 1-12=-135/197, 11-12=-136/197, 10-11=-136/197, 9-10=-136/197, 8-9=-136/197, 7-8=-135/196
WEBS 4-10=-120/81, 3-11=-290/193, 2-12=-229/195, 5-9=-290/192, 6-8=-229/195

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) 0-3-12 to 5-3-12, Interior (1) 5-3-12 to 6-1-14, Exterior(2R) 6-1-14 to 11-1-14, Interior (1) 11-1-14 to 12-0-1 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) All plates are 1.5x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 1, 54 lb uplift at joint 7, 167 lb uplift at joint 11, 178 lb uplift at joint 12, 166 lb uplift at joint 9 and 178 lb uplift at joint 8.
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.

LOAD CASE(S) Standard

STATE OF MISSOURI
NATHANIEL FOX
NUMBER PE-2022042259
PROFESSIONAL ENGINEER

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	V01	Valley	1	1	I60735736
					Job Reference (optional)

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

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:43 Page: 1
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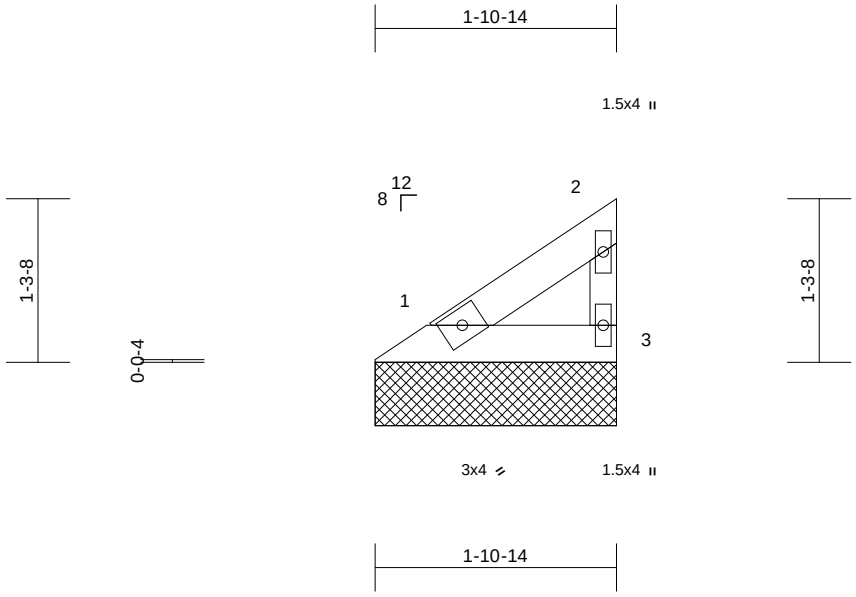

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 6 lb	FT = 20%

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

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

REACTIONS (size) 1=1-10-14, 3=1-10-14
Max Horiz 1=38 (LC 13)
Max Uplift 1=-7 (LC 16), 3=-20 (LC 16)
Max Grav 1=77 (LC 22), 3=77 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-56/42, 2-3=-64/67
BOT CHORD 1-3=-19/20

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 7 lb uplift at joint 1 and 20 lb uplift at joint 3.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	V02	Valley	1	1	I60735737
					Job Reference (optional)

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

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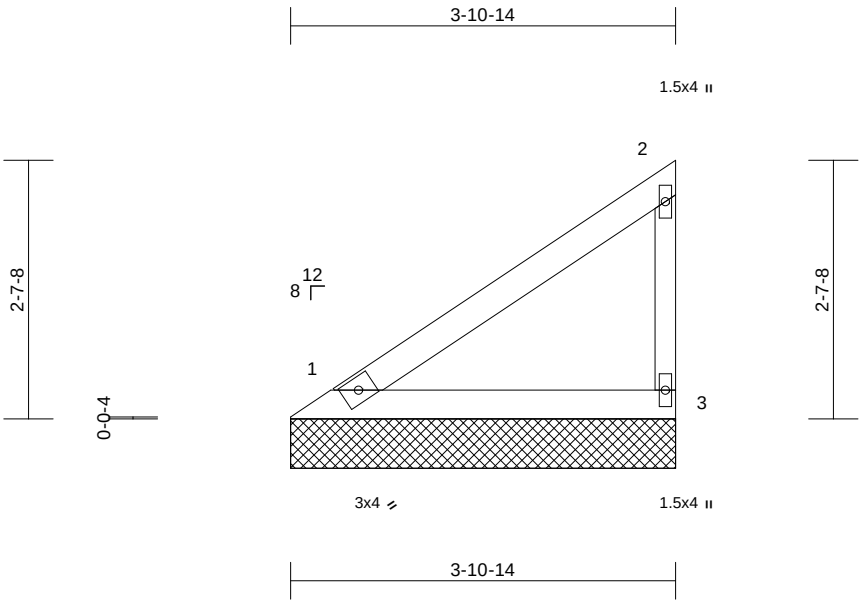

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 14 lb	FT = 20%

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

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

REACTIONS (size) 1=3-10-14, 3=3-10-14
Max Horiz 1=95 (LC 13)
Max Uplift 1=-16 (LC 16), 3=-50 (LC 16)
Max Grav 1=216 (LC 22), 3=216 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-133/99, 2-3=-182/156
BOT CHORD 1-3=-46/50

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 16 lb uplift at joint 1 and 50 lb uplift at joint 3.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	V03	Valley	1	1	I60735738
					Job Reference (optional)

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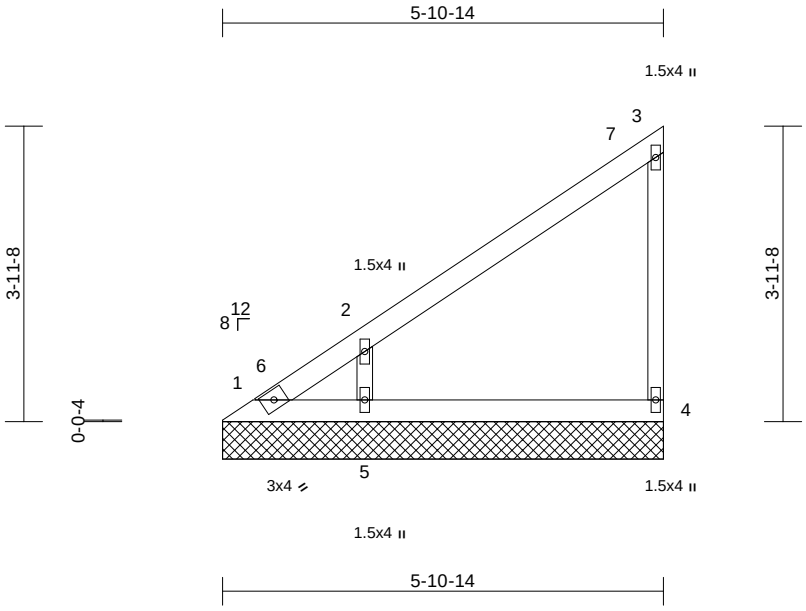

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 22 lb	FT = 20%

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

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

REACTIONS (size) 1=5-10-14, 4=5-10-14, 5=5-10-14
Max Horiz 1=152 (LC 13)
Max Uplift 1=-67 (LC 14), 4=-40 (LC 13), 5=-157 (LC 16)
Max Grav 1=88 (LC 16), 4=216 (LC 22), 5=551 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-330/215, 2-3=-153/118, 3-4=-185/153
BOT CHORD 1-5=-73/80, 4-5=-73/80
WEBS 2-5=-470/303

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 5-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 67 lb uplift at joint 1, 40 lb uplift at joint 4 and 157 lb uplift at joint 5.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	V04	Valley	1	1	I60735739 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:43 Page: 1
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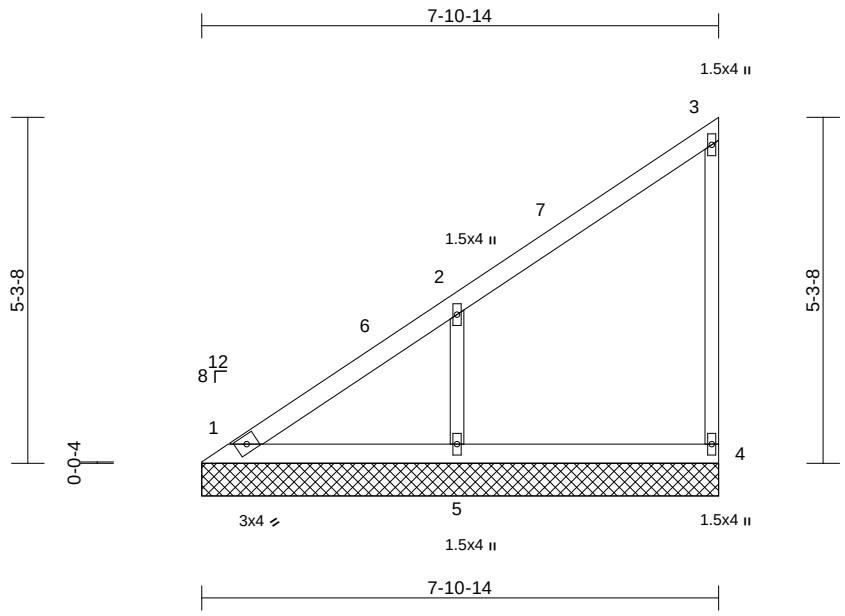


Scale = 1:35.2

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	0.50	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 31 lb	FT = 20%

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

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

REACTIONS (size) 1=7-10-14, 4=7-10-14, 5=7-10-14
Max Horiz 1=209 (LC 13)
Max Uplift 1=-13 (LC 12), 4=-47 (LC 13), 5=-179 (LC 16)
Max Grav 1=147 (LC 26), 4=213 (LC 22), 5=581 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-361/242, 2-3=-167/138, 3-4=-183/149
BOT CHORD 1-5=-101/109, 4-5=-101/109
WEBS 2-5=-489/312

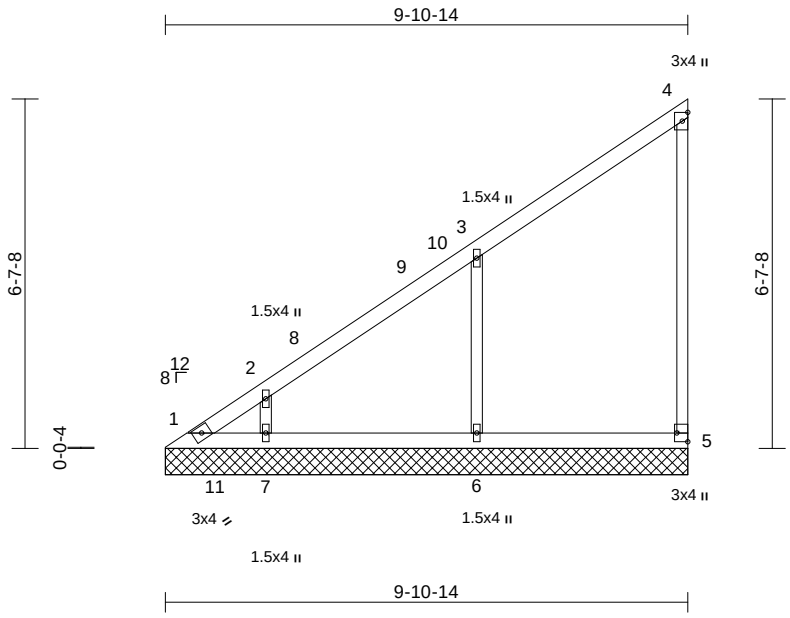
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 7-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 13 lb uplift at joint 1, 47 lb uplift at joint 4 and 179 lb uplift at joint 5.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	V05	Valley	1	1	I60735740
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:44 Page: 1
ID:wGRLsiE6F?HCN?u3nYPMZ5yx7?u-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:43.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 40 lb	FT = 20%

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

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

REACTIONS (size) 1=9-10-14, 5=9-10-14, 6=9-10-14, 7=9-10-14
Max Horiz 1=265 (LC 13)
Max Uplift 1=-80 (LC 14), 5=-56 (LC 13), 6=-176 (LC 16), 7=-124 (LC 16)
Max Grav 1=139 (LC 13), 5=228 (LC 5), 6=579 (LC 5), 7=339 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-468/296, 2-3=-366/252, 3-4=-173/146, 4-5=-186/137
BOT CHORD 1-7=-125/137, 6-7=-125/137, 5-6=-125/137
WEBS 3-6=-482/301, 2-7=-237/203

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) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 9-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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, with BCDL = 10.0psf.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 1, 56 lb uplift at joint 5, 176 lb uplift at joint 6 and 124 lb uplift at joint 7.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	V06	Valley	1	1	I60735741 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:44 Page: 1
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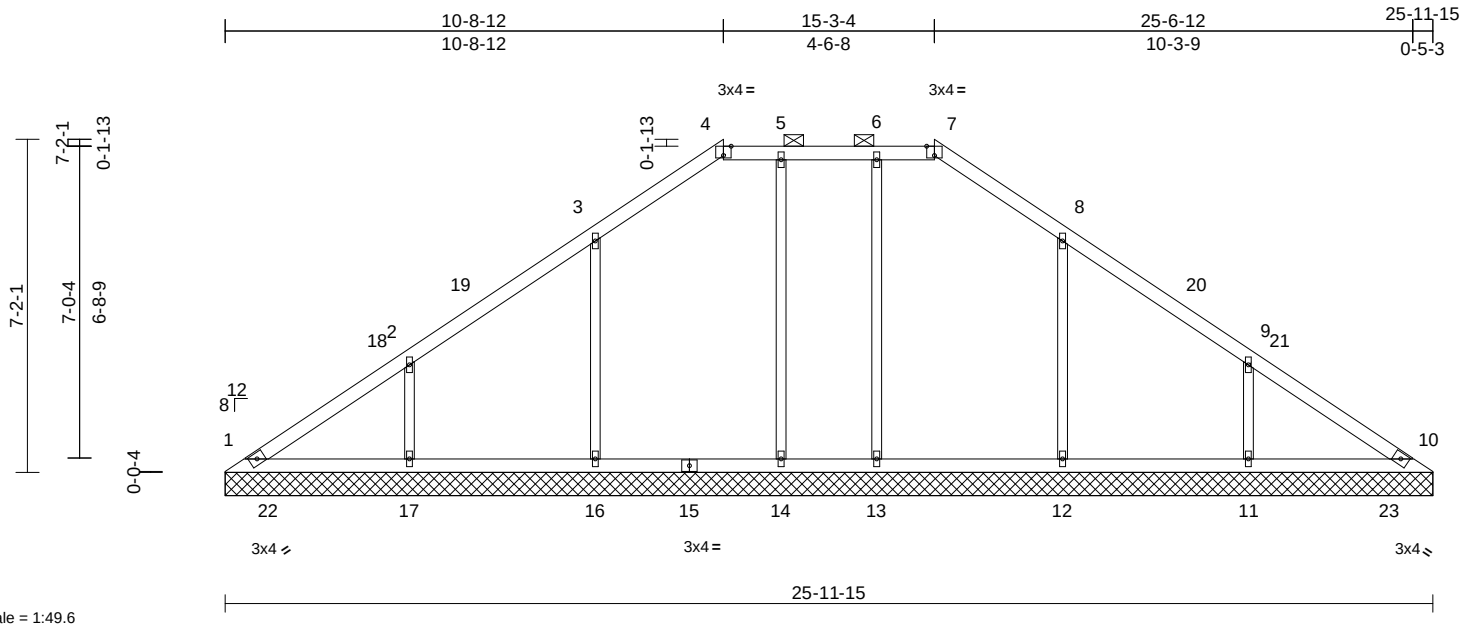


Scale = 1:49.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.31	Horiz(TL)	0.01	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 104 lb	FT = 20%

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

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

REACTIONS (size) 1=25-11-15, 10=25-11-15, 11=25-11-15, 12=25-11-15, 13=25-11-15, 14=25-11-15, 16=25-11-15, 17=25-11-15
Max Horiz 1=-189 (LC 12)
Max Uplift 1=-9 (LC 12), 11=-171 (LC 17), 12=-126 (LC 17), 13=-43 (LC 12), 14=-56 (LC 13), 16=-130 (LC 16), 17=-170 (LC 16)
Max Grav 1=305 (LC 40), 10=305 (LC 40), 11=638 (LC 50), 12=611 (LC 50), 13=351 (LC 6), 14=351 (LC 5), 16=616 (LC 48), 17=637 (LC 48)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-317/121, 2-3=-339/85, 3-4=-316/117, 4-5=-164/112, 5-6=-162/113, 6-7=-164/113, 7-8=-316/107, 8-9=-339/51, 9-10=-300/89
BOT CHORD 1-17=-69/223, 16-17=-69/223, 14-16=-69/223, 13-14=-69/223, 12-13=-69/223, 11-12=-69/223, 10-11=-69/223
WEBS 2-17=-526/212, 3-16=-471/181, 5-14=-278/91, 9-11=-526/213, 8-12=-471/177, 6-13=-278/77

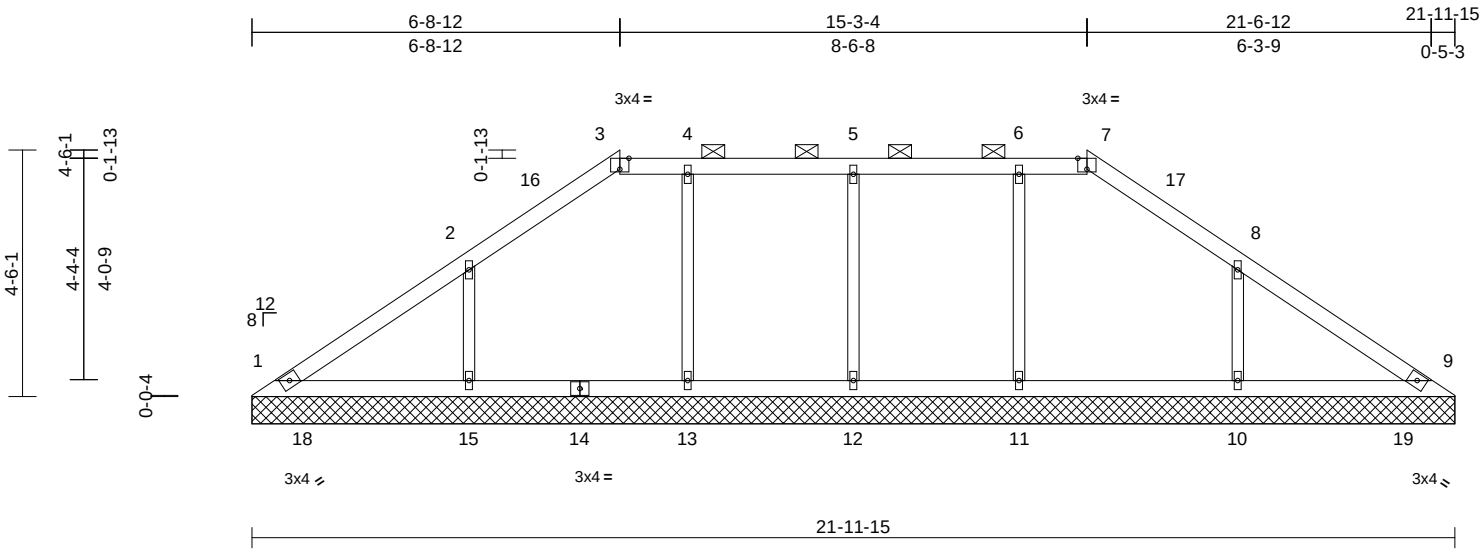
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 10-9-2, Exterior(2E) 10-9-2 to 15-3-10, Exterior(2R) 15-3-10 to 22-4-7, Interior (1) 22-4-7 to 25-6-15 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 1.5x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 4-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 1, 170 lb uplift at joint 17, 130 lb uplift at joint 16, 56 lb uplift at joint 14, 171 lb uplift at joint 11, 126 lb uplift at joint 12 and 43 lb uplift at joint 13.
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

September 13,2023

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	V07	Valley	1	1	I60735742 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:44 ID:OT?j42Ek0JP3_9SGKFwb5Jyx7?t-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:42.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.01	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 81 lb	FT = 20%

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

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

REACTIONS (size) 1=21-11-15, 9=21-11-15, 10=21-11-15, 11=21-11-15, 12=21-11-15, 13=21-11-15, 15=21-11-15
Max Horiz 1=115 (LC 15)
Max Uplift 1=-5 (LC 17), 10=-145 (LC 17), 11=-43 (LC 12), 12=-76 (LC 12), 13=-54 (LC 13), 15=-147 (LC 16)
Max Grav 1=306 (LC 40), 9=306 (LC 40), 10=612 (LC 50), 11=404 (LC 45), 12=465 (LC 45), 13=404 (LC 45), 15=614 (LC 48)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-290/63, 2-3=-308/80, 3-4=-157/80, 4-5=-155/79, 5-6=-155/79, 6-7=-157/80, 7-8=-308/72, 8-9=-290/43
BOT CHORD 1-15=-32/171, 13-15=-32/171, 12-13=-32/171, 11-12=-32/171, 10-11=-32/171, 9-10=-32/171
WEBS 2-15=-485/191, 4-13=-327/97, 8-10=-485/188, 6-11=-327/87, 5-12=-403/108

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) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 6-9-2, Exterior(2R) 6-9-2 to 14-0-11, Interior (1) 14-0-11 to 15-3-10, Exterior(2E) 15-3-10 to 21-6-15 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 1.5x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 4-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 1, 147 lb uplift at joint 15, 54 lb uplift at joint 13, 145 lb uplift at joint 10, 43 lb uplift at joint 11 and 76 lb uplift at joint 12.
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

September 13,2023

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
02/06/2024 4:55:58

Job	Truss	Truss Type	Qty	Ply	Roof - CB Lot 145
P230395-01	V08	Valley	1	1	I60735743 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 18:26:45 Page: 1
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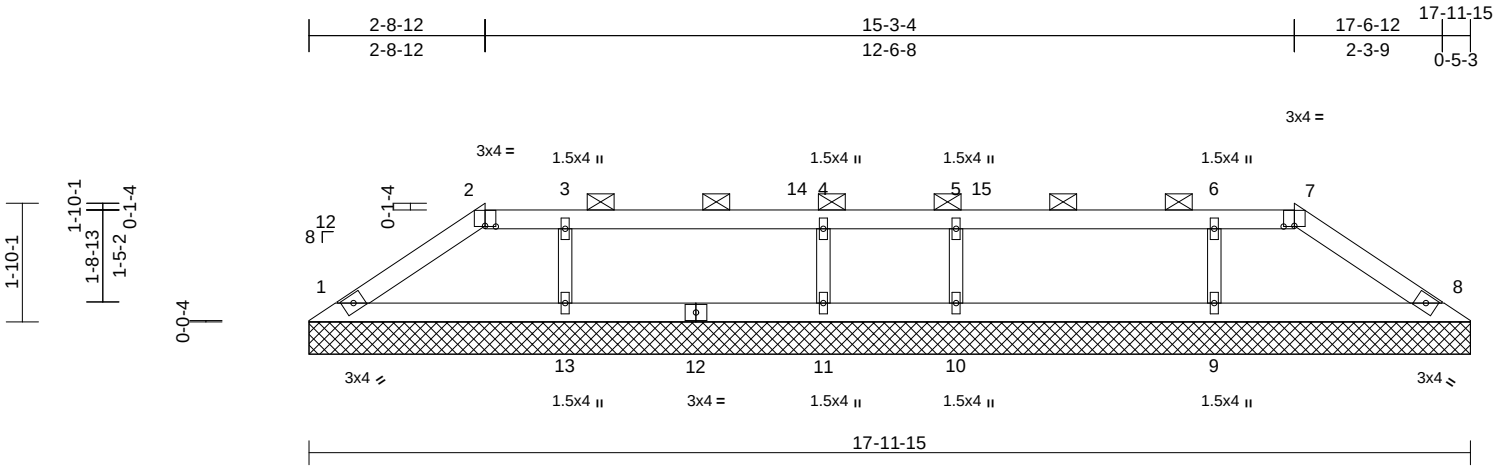


Scale = 1:35.7

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

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	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 57 lb	FT = 20%

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

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

REACTIONS (size) 1=17-11-15, 8=17-11-15, 9=17-11-15, 10=17-11-15, 11=17-11-15, 13=17-11-15
Max Horiz 1=41 (LC 15)
Max Uplift 1=-36 (LC 16), 8=-37 (LC 17), 9=-82 (LC 12), 10=-70 (LC 13), 11=-70 (LC 12), 13=-86 (LC 13)
Max Grav 1=284 (LC 40), 8=284 (LC 40), 9=547 (LC 39), 10=433 (LC 39), 11=433 (LC 39), 13=547 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-293/51, 2-3=-179/58, 3-4=-178/57, 4-5=-178/57, 5-6=-178/57, 6-7=-179/58, 7-8=-293/47
BOT CHORD 1-13=-16/178, 11-13=-16/178, 10-11=-16/178, 9-10=-16/178, 8-9=-16/178
WEBS 3-13=-459/134, 4-11=-376/103, 6-9=-459/131, 5-10=-376/103

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) 0-5-12 to 2-9-2, Exterior(2R) 2-9-2 to 10-0-11, Interior (1) 10-0-11 to 15-3-10, Exterior(2E) 15-3-10 to 17-6-15 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 1.5x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 4-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 1, 37 lb uplift at joint 8, 86 lb uplift at joint 13, 70 lb uplift at joint 11, 82 lb uplift at joint 9 and 70 lb uplift at joint 10.
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.

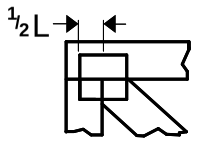
LOAD CASE(S) Standard

STATE OF MISSOURI
NATHANIEL FOX
NUMBER PE-2022042259
PROFESSIONAL ENGINEER

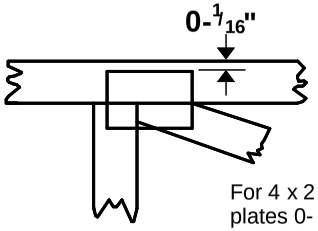
September 13,2023

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.

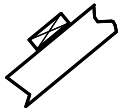
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

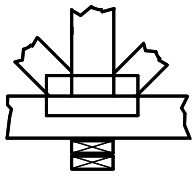
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

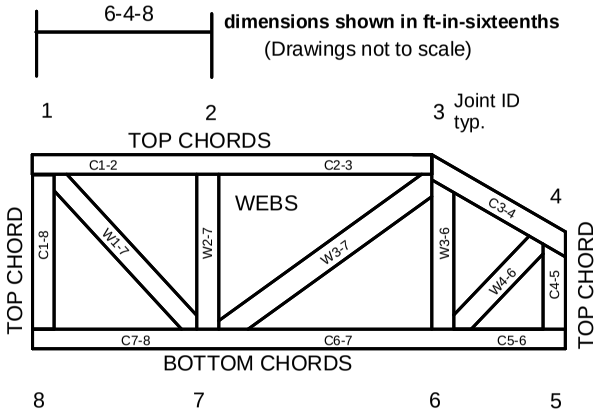


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.