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

Re: 2503401-A
Discover Pet Spa

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Lumber Specialties-Dyersville, IA.

Pages or sheets covered by this seal: I73987911 thru I73988021

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

Missouri COA: Engineering 001193

June 6,2025

Lu, Jie ,Engineer

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	CJ01	Diagonal Hip Girder	1	2	Job Reference (optional)	I73987911

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:13:57
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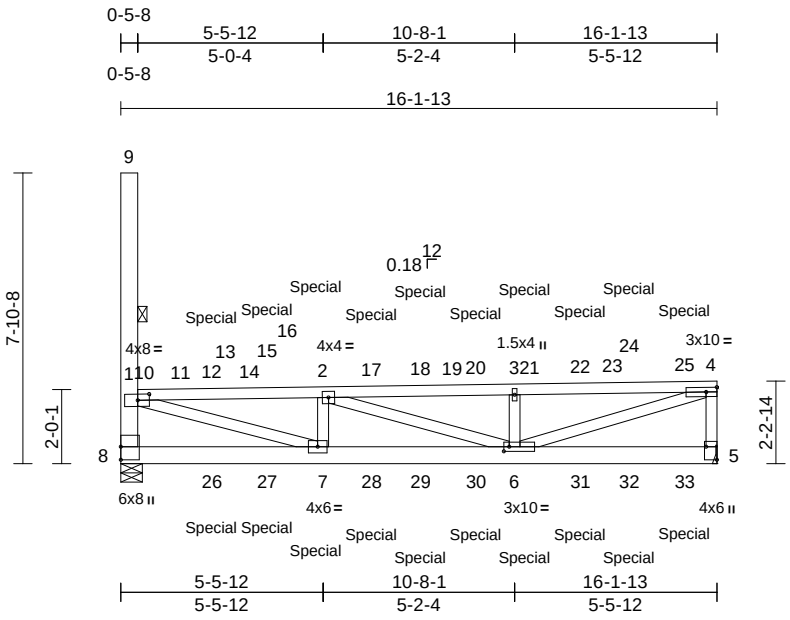

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Plate Offsets (X, Y): [1:0-3-12,0-2-0], [4:0-3-8,0-1-8], [5:Edge,0-3-8], [6:0-1-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	0.22	6-7	>861	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.24	6-7	>774	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.66	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 215 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 9-8:2x6 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-13 oc purlins, except end verticals.
Except:
6-0-0 oc bracing: 1-8
10-0-0 oc bracing: 1-9
BOT CHORD Rigid ceiling directly applied or 8-11-13 oc bracing.
WEBS 1 Row at midpt 1-9

REACTIONS (size) 5= Mechanical, 8=0-7-0
Max Horiz 8=375 (LC 63)
Max Uplift 5=-1855 (LC 10), 8=-2472 (LC 9)
Max Grav 5=3572 (LC 18), 8=3255 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-7708/6105, 2-3=-7234/4696, 3-4=-7232/4703, 4-5=-2595/1698, 1-8=-2584/2030, 1-9=0/0
BOT CHORD 7-8=-1774/2446, 6-7=-6168/7714, 5-6=-186/298
WEBS 2-7=-1090/217, 2-6=-1651/1488, 3-6=-675/348, 4-6=-4838/7351, 1-7=-5808/7283

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Provide adequate drainage to prevent water ponding.
7) Plates checked for a plus or minus 5 degree rotation about its center.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1855 lb uplift at joint 5 and 2472 lb uplift at joint 8.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 251 lb down and 184 lb up at 2-5-12, 178 lb down and 113 lb up at 3-11-13, 165 lb down and 103 lb up at 5-3-11, 166 lb down and 101 lb up at 6-9-12, 172 lb down and 105 lb up at 8-1-10, 139 lb down and 74 lb up at 9-7-11, 142 lb down and 78 lb up at 10-11-9, 74 lb down and 83 lb up at 12-5-10, and 78 lb down and 83 lb up at 13-9-8, and 103 lb down and 77 lb up at 15-3-9 on top chord, and 914 lb down and 911 lb up at 2-5-12, 558 lb down and 543 lb up at 3-11-13, 431 lb down and 404 lb up at 5-3-11, 354 lb down and 309 lb up at 6-9-12, 316 lb down and 259 lb up at 8-1-10, 451 lb down and 273 lb up at 9-7-11, 442 lb down and 250 lb up at 10-11-9, 480 lb down and 222 lb up at 12-5-10, and 461 lb down and 207 lb up at 13-9-8, and 535 lb down and 190 lb up at 15-3-9 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)

June 6,2025

Continued on page 2

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Vert: 5-8=-20

Concentrated Loads (lb)

Vert: 2=-83 (B), 3=-39 (B), 6=-342 (B), 4=-2, 7=-62 (B), 10=0, 11=-28, 12=-29 (B=-14), 15=-51 (F), 17=-146 (F), 18=-155 (B), 20=-52 (F), 21=-3, 22=-74 (F), 24=-56 (B), 25=-101 (F), 26=-15 (B), 27=-35 (F), 28=-96 (F), 29=-112 (B), 30=-331 (F), 31=-414 (F), 32=-404 (B), 33=-507 (F)

Trapezoidal Loads (lb/ft)

Vert: 1=-61-to-10=-79, 10=-103-to-11=-127, 11=-69-to-12=-61, 12=-125-to-13=-113, 13=-113-to-14=-93, 14=-93-to-15=-78, 15=-100-to-16=-90, 16=-90-to-2=-73, 2=-95-to-17=-73, 17=-91-to-18=-73, 18=-89-to-19=-78, 19=-77-to-20=-70, 20=-82-to-3=-72, 3=-72-to-21=-68, 21=-78-to-22=-67, 22=-74-to-23=-68, 23=-68-to-24=-66, 24=-70-to-25=-63, 25=-62-to-4=-61

June 6,2025

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	CJ58	Diagonal Hip Girder	1	1	Job Reference (optional)	I73987912

Lumber Specialties, Dyersville, IA - 52040,

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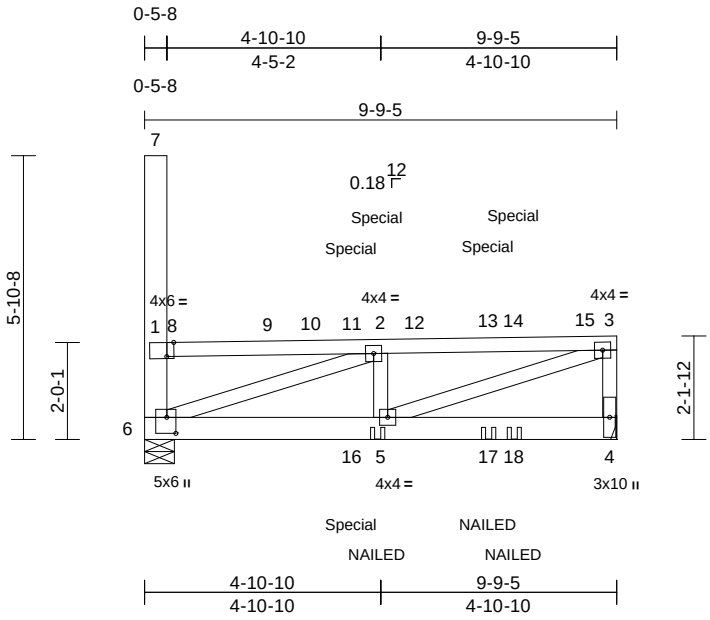

Scale = 1:47.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	0.06	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.07	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 67 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-4-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-10-11 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-7-6
Max Horiz 6=-247 (LC 11)
Max Uplift 4=-684 (LC 10), 6=-537 (LC 9)
Max Grav 4=1270 (LC 18), 6=1016 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1085/751, 2-3=-2146/1711, 1-6=-407/178, 1-7=0/0
BOT CHORD 5-6=-1713/2141, 4-5=0/0
WEBS 3-4=-1010/768, 2-5=-363/555, 3-5=-1828/2285, 2-6=-2139/1900

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 684 lb uplift at joint 4 and 537 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 169 lb down and 83 lb up at 4-3-9, 169 lb down and 84 lb up at 4-9-14, and 135 lb down and 92 lb up at 7-1-8, and 167 lb down and 95 lb up at 7-7-13 on top chord, and 292 lb down and 276 lb up at 4-3-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-8=-61, 4-6=-20
Concentrated Loads (lb)
Vert: 5=-57 (B), 2=-80 (B), 11=-61 (F), 13=-135 (F), 14=-167 (B), 16=-42 (F), 17=-95 (F), 18=-112 (B)
Trapezoidal Loads (lb/ft)
Vert: 8=-147-to-9=-105, 9=-105-to-10=-86, 10=-86-to-11=-68, 11=-92-to-2=-80, 2=-105-to-12=-92, 12=-92-to-13=-66, 13=-86-to-14=-78, 14=-75-to-15=-104, 15=-84-to-3=-71

June 6,2025

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	CJ100	Roof Special Girder	1	1	Job Reference (optional)	I73987913

Lumber Specialties, Dyersville, IA - 52040,

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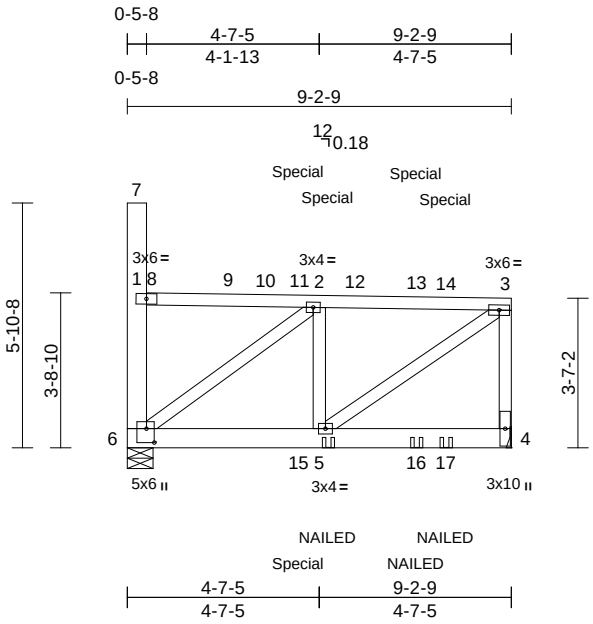

Scale = 1:55.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	0.02	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.03	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.56	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 71 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-7-6
Max Horiz 6=-239 (LC 9)
Max Uplift 4=-614 (LC 10), 6=-469 (LC 9)
Max Grav 4=1214 (LC 18), 6=920 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-420/306, 2-3=-972/753, 3-4=-953/715, 1-6=-387/172, 1-7=0/0
BOT CHORD 5-6=-835/988, 4-5=-71/79
WEBS 2-5=-272/550, 3-5=-943/1147, 2-6=-1177/1033

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 614 lb uplift at joint 4 and 469 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 159 lb down and 72 lb up at 4-1-7, 163 lb down and 76 lb up at 4-9-14, and 116 lb down and 88 lb up at 6-11-6, and 171 lb down and 92 lb up at 7-7-13 on top chord, and 282 lb down and 247 lb up at 4-1-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-8=-61, 4-6=-20
Concentrated Loads (lb)
Vert: 5=-53 (F), 3=-2, 2=-82 (F), 11=-52 (B), 13=-122 (B=-116), 14=-171 (F), 15=-33 (B), 16=-82 (B), 17=-108 (F)
Trapezoidal Loads (lb/ft)
Vert: 8=-139-to-9=-104, 9=-104-to-10=-87, 10=-87-to-11=-70, 11=-93-to-2=-84, 2=-107-to-12=-93, 12=-93-to-13=-68, 13=-67-to-14=-61, 14=-72-to-3=-102

June 6,2025

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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J02	Jack-Open	1	1	Job Reference (optional)	I73987914

Lumber Specialties, Dyersville, IA - 52040,

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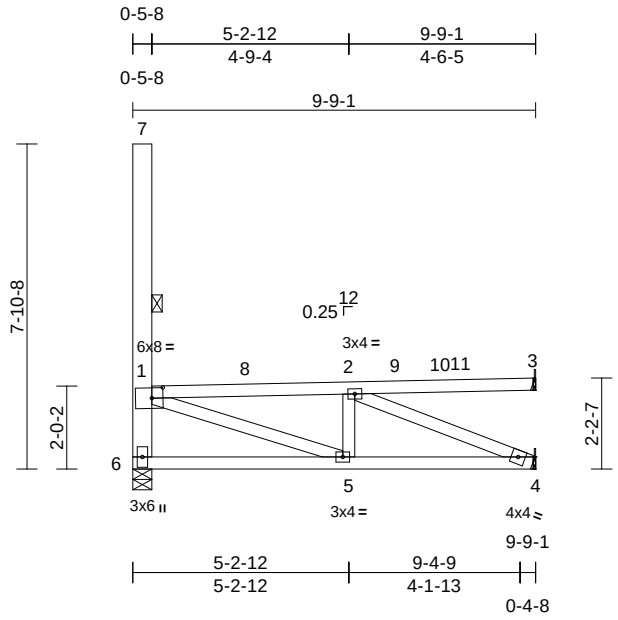

Scale = 1:55.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.04	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.02	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 62 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-7-5 oc purlins, except end verticals.
Except:
6-0-0 oc bracing: 1-6
7-5-0 oc bracing: 1-7
BOT CHORD Rigid ceiling directly applied or 6-9-14 oc bracing.
WEBS 1 Row at midpt 1-7

REACTIONS (size) 3= Mechanical, 4= Mechanical, 6=0-5-8
Max Horiz 6=-352 (LC 11)
Max Uplift 3=-53 (LC 9), 4=-190 (LC 10), 6=-237 (LC 9)
Max Grav 3=323 (LC 37), 4=469 (LC 18), 6=756 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1259/1016, 2-3=-7/3, 1-6=-706/664, 1-7=0/0
BOT CHORD 5-6=-1184/1753, 4-5=-1030/1260
WEBS 2-5=-244/532, 1-5=-1432/1075, 2-4=-1358/1110

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 3, 237 lb uplift at joint 6 and 190 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 4-6=-20
Concentrated Loads (lb)
Vert: 3=-3, 11=-2
Trapezoidal Loads (lb/ft)
Vert: 1=-144-to-8=-123, 8=-123-to-2=-102, 2=-102-to-9=-92, 9=-91-to-10=-84, 10=-84-to-11=-80, 11=-79-to-3=-69

June 6,2025

MiTek®
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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J03	Jack-Open	1	1	Job Reference (optional)	I73987915

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:13:59
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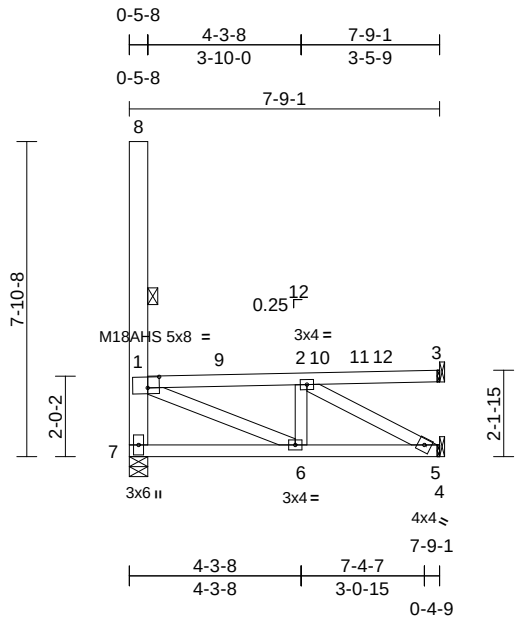

Scale = 1:57.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.01	6	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.02	6-7	>999	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.01	3	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 54 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 8-7:2x6 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
Except:
6-0-0 oc bracing: 1-7
7-5-0 oc bracing: 1-8
BOT CHORD Rigid ceiling directly applied or 6-11-6 oc bracing.
WEBS 1 Row at midpt 1-8

REACTIONS (size) 3= Mechanical, 5= Mechanical, 7=0-5-8
Max Horiz 7=-352 (LC 11)
Max Uplift 3=-46 (LC 9), 5=-233 (LC 10), 7=-262 (LC 9)
Max Grav 3=320 (LC 37), 5=454 (LC 18), 7=675 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1068/840, 2-3=-7/3, 1-7=-640/699, 1-8=0/0
BOT CHORD 6-7=-1152/1670, 5-6=-852/1070, 4-5=0/0
WEBS 2-6=-248/523, 1-6=-1201/875, 2-5=-1213/966

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 3, 262 lb uplift at joint 7 and 233 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 4-7=-20
Trapezoidal Loads (lb/ft)
Vert: 1=-147-to-9=-129, 9=-129-to-2=-112, 2=-112-to-10=-107, 10=-107-to-11=-100, 11=-100-to-12=-91, 12=-90-to-3=-77

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	I73987916
2503401-A	J04	Jack-Open	1	1	Job Reference (optional)	

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:13:59
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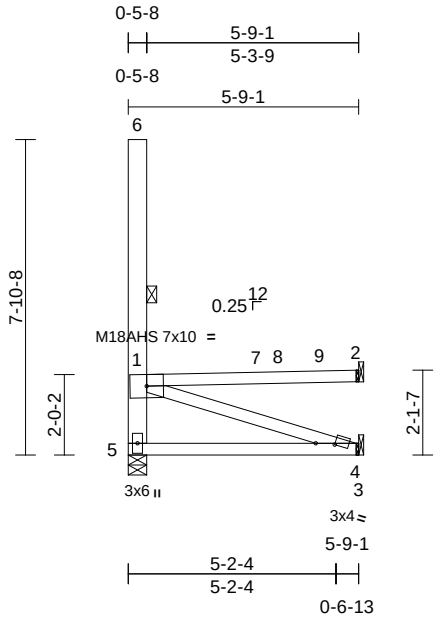

Scale = 1:57.5

Plate Offsets (X, Y): [4:0-5-9,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.05	4-5	>999	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 42 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x6 SP 2400F 2.0E *Except* 1-4:2x4 SP No.2

BRACING

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

REACTIONS (size) 2= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=-352 (LC 11)
Max Uplift 2=-77 (LC 10), 4=-242 (LC 10), 5=-315 (LC 9)
Max Grav 2=407 (LC 35), 4=333 (LC 11), 5=577 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-10/5, 1-5=-523/806, 1-6=0/0
BOT CHORD	4-5=-1292/1751, 3-4=0/0
WEBS	1-4=-1836/1354

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 2, 315 lb uplift at joint 5 and 242 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 3-5=-20
   Concentrated Loads (lb)
   Vert: 7=-16
   Trapezoidal Loads (lb/ft)
   Vert: 1=-147-to-7=-122, 7=-91-to-8=-89, 8=-116-to-9=-98, 9=-97-to-2=-85

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J05	Jack-Open	1	1	Job Reference (optional)	I73987917

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:13:59
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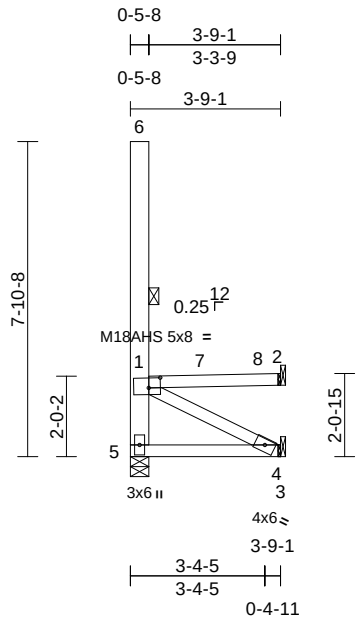

Scale = 1:57.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.01	4-5	>999	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 33 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x6 SP 2400F 2.0E *Except* 1-4:2x4 SP No.2

BRACING

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

REACTIONS (size) 2= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=-352 (LC 11)
Max Uplift 2=-71 (LC 10), 4=-387 (LC 10), 5=-455 (LC 9)
Max Grav 2=363 (LC 35), 4=448 (LC 11), 5=539 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-8/3, 1-5=-645/1035, 1-6=0/0
BOT CHORD	4-5=-1147/1659, 3-4=0/0
WEBS	1-4=-1854/1282

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 2, 455 lb uplift at joint 5 and 387 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 2-8=-61, 3-5=-20
   Concentrated Loads (lb)
   Vert: 2=-20, 7=-5
   Trapezoidal Loads (lb/ft)
   Vert: 1=-147-to-7=-135, 7=-132-to-8=-101

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J06	Jack-Open	1	1	Job Reference (optional)	I73987918

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:00
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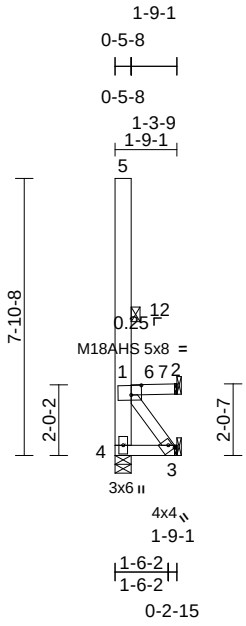

Scale = 1:65.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	0.00	3-4	>999	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 25 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x6 SP 2400F 2.0E *Except* 1-3:2x4 SP No.2

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

REACTIONS (size) 2= Mechanical, 3= Mechanical, 4=0-5-8
Max Horiz 4=-352 (LC 11)
Max Uplift 2=-157 (LC 10), 3=-901 (LC 10), 4=-1050 (LC 9)
Max Grav 2=301 (LC 35), 3=931 (LC 11), 4=1066 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/6, 1-4=-1418/2190, 1-5=0/0
BOT CHORD 3-4=-999/1505
WEBS 1-3=-2390/1587

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 157 lb uplift at joint 2, 1050 lb uplift at joint 4 and 901 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 3-4=-20
Concentrated Loads (lb)
Vert: 2=-5, 7=-4
Trapezoidal Loads (lb/ft)
Vert: 1=-131-to-6=-116, 6=-101-to-7=-100, 7=-100-to-2=-98

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J07	Jack-Open	1	1	Job Reference (optional)	I73987919

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:00
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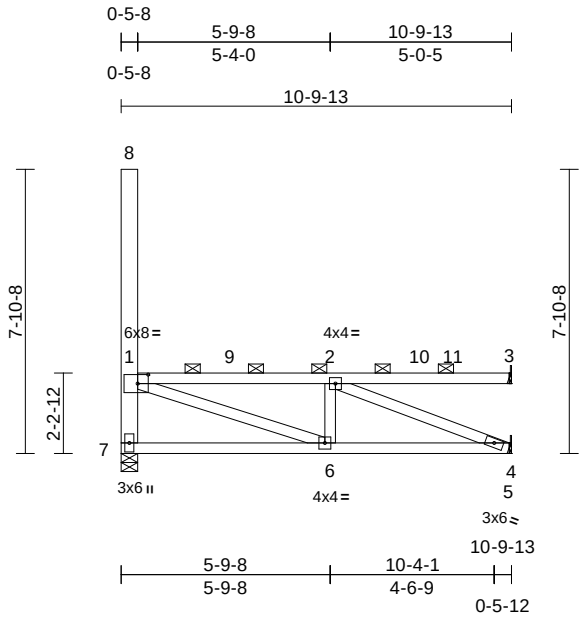

Scale = 1:63.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.04	6	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.06	6-7	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 67 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 8-7:2x6 SP 2400F 2.0E

BRACING
TOP CHORD 2-0-0 oc purlins (5-5-7 max.): 1-3, 1-8, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-3-6 oc bracing.

REACTIONS (size) 3= Mechanical, 5= Mechanical, 7=0-5-8
Max Horiz 7=-347 (LC 11)
Max Uplift 3=-58 (LC 9), 5=-178 (LC 10), 7=-232 (LC 9)
Max Grav 3=338 (LC 37), 5=556 (LC 18), 7=879 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1302/1034, 2-3=0/0, 1-7=-823/657, 1-8=0/0
BOT CHORD 6-7=-1031/1539, 5-6=-1034/1302, 4-5=0/0
WEBS 2-6=-302/514, 1-6=-1335/1262, 2-5=-1398/1111

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 3, 232 lb uplift at joint 7 and 178 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 4-7=-20
Trapezoidal Loads (lb/ft)
Vert: 1=-169-to-9=-146, 9=-146-to-2=-124, 2=-124-to-10=-104, 10=-104-to-11=-97, 11=-94-to-3=-79

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J08	Jack-Open	1	1	Job Reference (optional)	I73987920

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:00
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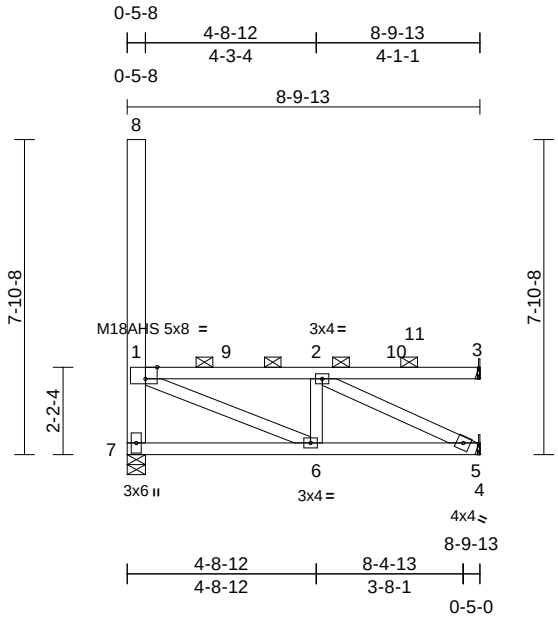

Scale = 1:57.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.02	6	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.03	6-7	>999	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 58 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 8-7:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-8, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-3-10 oc bracing.

REACTIONS (size) 3= Mechanical, 5= Mechanical, 7=0-5-8
Max Horiz 7=-348 (LC 11)
Max Uplift 3=-52 (LC 9), 5=-205 (LC 10), 7=-247 (LC 9)
Max Grav 3=346 (LC 37), 5=508 (LC 18), 7=780 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1118/896, 2-3=0/0, 1-7=-741/675, 1-8=0/0
BOT CHORD	6-7=-1038/1513, 5-6=-896/1118, 4-5=0/0
WEBS	2-6=-265/503, 1-6=-1130/937, 2-5=-1237/991

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 3, 247 lb uplift at joint 7 and 205 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-7=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-9=-150, 9=-150-to-2=-133, 2=-133-to-10=-117, 10=-117-to-11=-113, 11=-111-to-3=-89

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J09	Jack-Open	1	1	Job Reference (optional)	I73987921

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:00
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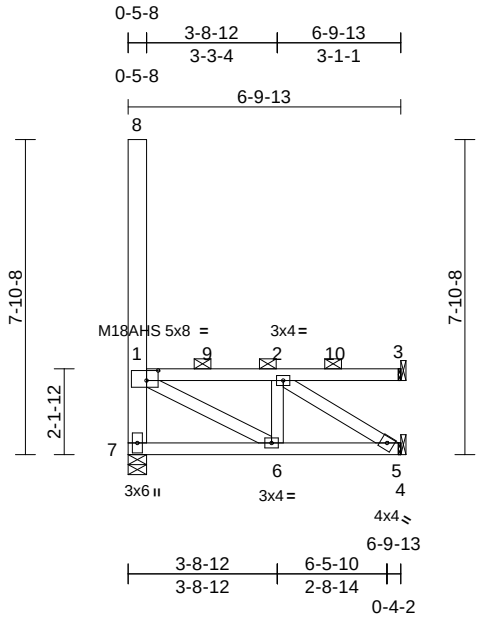

Scale = 1:57.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.01	6	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.01	6-7	>999	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	3	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 50 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 8-7:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-8, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-4-7 oc bracing.

REACTIONS (size) 3= Mechanical, 5= Mechanical, 7=0-5-8
Max Horiz 7=-349 (LC 11)
Max Uplift 3=-44 (LC 9), 5=-256 (LC 10), 7=-282 (LC 9)
Max Grav 3=333 (LC 37), 5=479 (LC 18), 7=671 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-981/764, 2-3=0/0, 1-7=-640/733, 1-8=0/0
BOT CHORD	6-7=-1024/1511, 5-6=-764/981, 4-5=0/0
WEBS	2-6=-269/541, 1-6=-1054/749, 2-5=-1155/899

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 3, 282 lb uplift at joint 7 and 256 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-7=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-9=-154, 9=-154-to-2=-141, 2=-141-to-10=-129, 10=-127-to-3=-99

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J10	Jack-Open	1	1	Job Reference (optional)	I73987922

Lumber Specialties, Dyersville, IA - 52040,

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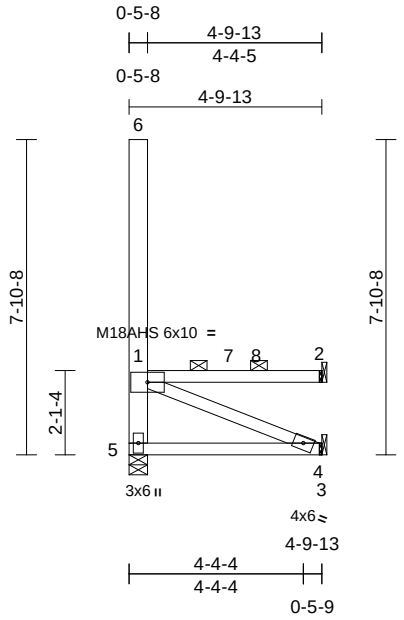

Scale = 1:57.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.02	4-5	>999	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 38 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x6 SP 2400F 2.0E *Except* 1-4:2x4 SP No.2

BRACING
TOP CHORD 2-0-0 oc purlins: 1-2, 1-6, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-11-4 oc bracing.

REACTIONS (size) 2= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=-350 (LC 11)
Max Uplift 2=-71 (LC 10), 4=-292 (LC 10), 5=-364 (LC 9)
Max Grav 2=410 (LC 35), 4=371 (LC 11), 5=566 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 1-5=-534/882, 1-6=0/0
BOT CHORD 4-5=-1144/1609, 3-4=0/0
WEBS 1-4=-1735/1233

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 2, 364 lb uplift at joint 5 and 292 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 3-5=-20
Concentrated Loads (lb)
Vert: 1=-1
Trapezoidal Loads (lb/ft)
Vert: 1=-166-to-7=-151, 7=-151-to-8=-146, 8=-143-to-2=-108

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J11	Jack-Open	1	1	Job Reference (optional)	I73987923

Lumber Specialties, Dyersville, IA - 52040,

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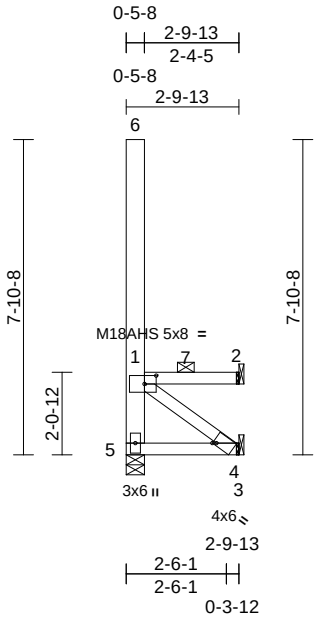

Scale = 1:57.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	0.00	4-5	>999	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 29 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING
TOP CHORD 2-0-0 oc purlins: 1-2, 1-6, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-3-15 oc bracing.

REACTIONS (size) 2= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=-351 (LC 11)
Max Uplift 2=-84 (LC 10), 4=-527 (LC 10), 5=-609 (LC 9)
Max Grav 2=333 (LC 35), 4=575 (LC 11), 5=645 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 1-5=-840/1322, 1-6=0/0
BOT CHORD 4-5=-1043/1550, 3-4=0/0
WEBS 1-4=-1905/1282

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 2, 609 lb uplift at joint 5 and 527 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 3-5=-20
Concentrated Loads (lb)
Vert: 2=-2, 1=-13
Trapezoidal Loads (lb/ft)
Vert: 1=-148-to-7=-131, 7=-131-to-2=-114

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J59	Jack-Open	1	1	Job Reference (optional)	I73987924

Lumber Specialties, Dyersville, IA - 52040,

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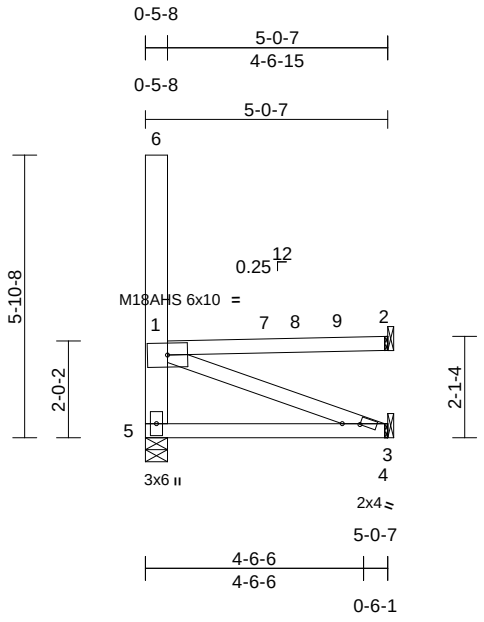

Scale = 1:47.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.03	4-5	>999	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	NO	WB	0.39	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 34 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-0-7 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-5-3 oc bracing.

REACTIONS (size) 2= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=-249 (LC 11)
Max Uplift 2=-63 (LC 10), 4=-145 (LC 10), 5=-205 (LC 9)
Max Grav 2=397 (LC 35), 4=225 (LC 18), 5=541 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-10/4, 1-5=-494/581, 1-6=0/0
BOT CHORD	4-5=-768/1001, 3-4=0/0
WEBS	1-4=-1065/817

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 2, 205 lb uplift at joint 5 and 145 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 3-5=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-148-to-7=-129, 7=-129-to-8=-124, 8=-123-to-9=-107, 9=-106-to-2=-91

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J60	Jack-Open	1	1	Job Reference (optional)	I73987925

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:01
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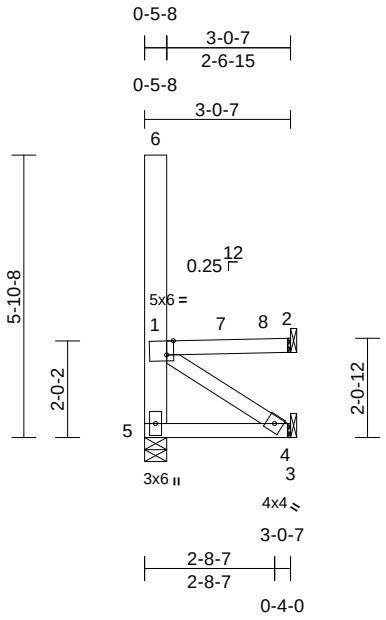

Scale = 1:47.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.00	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 26 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-0-7 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-3-6 oc bracing.

REACTIONS (size) 2= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=-249 (LC 11)
Max Uplift 2=-53 (LC 10), 4=-259 (LC 10), 5=-309 (LC 9)
Max Grav 2=344 (LC 35), 4=309 (LC 11), 5=420 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-7/3, 1-5=-461/745, 1-6=0/0
BOT CHORD	4-5=-647/930, 3-4=0/0
WEBS	1-4=-1101/766

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 2, 309 lb uplift at joint 5 and 259 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 2-8=-61, 3-5=-20
   Concentrated Loads (lb)
   Vert: 2=-23
   Trapezoidal Loads (lb/ft)
   Vert: 1=-157-to-7=-127, 7=-127-to-8=-108

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J61	Jack-Open	1	1	Job Reference (optional)	I73987926

Lumber Specialties, Dyersville, IA - 52040,

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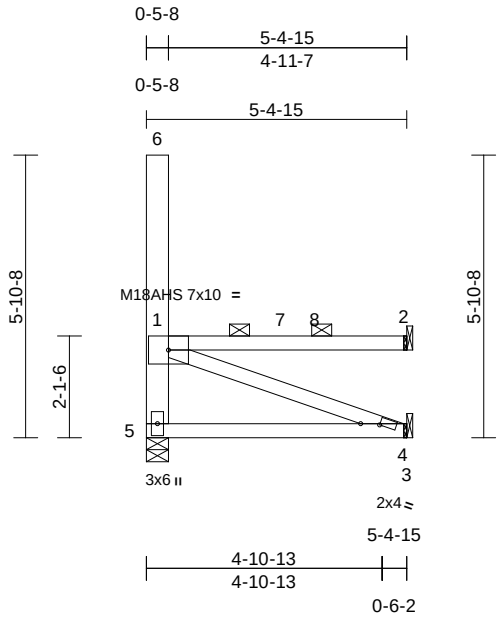

Scale = 1:47.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.04	4-5	>999	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 36 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (2-6-0 max.): 1-2, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-7-5 oc bracing.

REACTIONS (size) 2= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=-247 (LC 11)
Max Uplift 2=-66 (LC 10), 4=-131 (LC 10), 5=-196 (LC 9)
Max Grav 2=423 (LC 35), 4=233 (LC 18), 5=591 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/0, 1-5=-540/572, 1-6=0/0
BOT CHORD	4-5=-733/948, 3-4=0/0
WEBS	1-4=-1006/779

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 2, 196 lb uplift at joint 5 and 131 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 3-5=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-169-to-7=-149, 7=-149-to-8=-144, 8=-141-to-2=-101

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J62	Jack-Open	1	1	Job Reference (optional)	I73987927

Lumber Specialties, Dyersville, IA - 52040,

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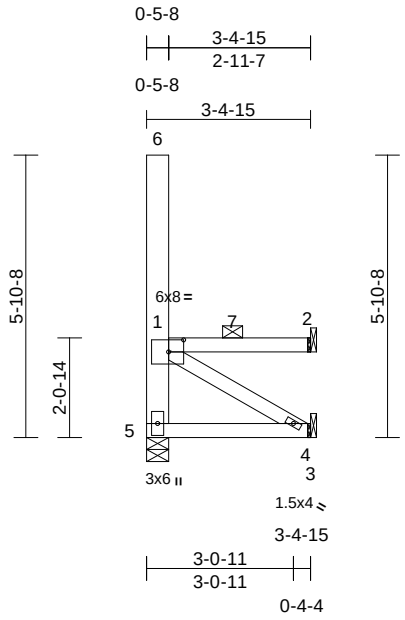

Scale = 1:47.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.00	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 27 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins: 1-2, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-4-4 oc bracing.

REACTIONS (size) 2= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=-248 (LC 11)
Max Uplift 2=-53 (LC 10), 4=-225 (LC 10), 5=-278 (LC 9)
Max Grav 2=360 (LC 35), 4=282 (LC 11), 5=468 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/0, 1-5=-438/689, 1-6=0/0
BOT CHORD	4-5=-634/903, 3-4=0/0
WEBS	1-4=-1043/732

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 2, 278 lb uplift at joint 5 and 225 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 3-5=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-187-to-7=-148, 7=-148-to-2=-110

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J101	Jack-Open	1	1	Job Reference (optional)	I73987928

Lumber Specialties, Dyersville, IA - 52040,

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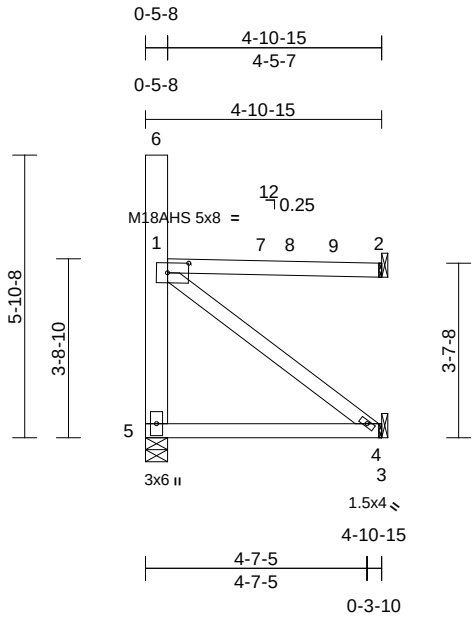

Scale = 1:47.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	4-5	>999	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 35 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-10-15 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=-211 (LC 11)
Max Uplift 2=-58 (LC 10), 4=-120 (LC 10), 5=-181 (LC 9)
Max Grav 2=379 (LC 35), 4=212 (LC 11), 5=500 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-4/9, 1-5=-455/519, 1-6=0/0
BOT CHORD	4-5=-334/418, 3-4=0/0
WEBS	1-4=-523/418

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 2, 181 lb uplift at joint 5 and 120 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 3-5=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-132-to-7=-115, 7=-115-to-8=-112, 8=-111-to-9=-98, 9=-98-to-2=-88

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J102	Jack-Open	1	1	Job Reference (optional)	I73987929

Lumber Specialties, Dyersville, IA - 52040,

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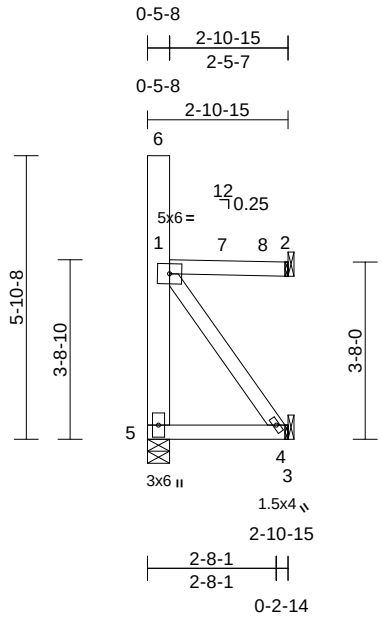

Scale = 1:47.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 27 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=-211 (LC 11)
Max Uplift 2=-42 (LC 10), 4=-230 (LC 10), 5=-272 (LC 9)
Max Grav 2=335 (LC 35), 4=299 (LC 11), 5=398 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-3/6, 1-5=-417/647, 1-6=0/0
BOT CHORD 4-5=-288/390, 3-4=0/0
WEBS 1-4=-655/484

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 2, 272 lb uplift at joint 5 and 230 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 2-8=-61, 3-5=-20
Concentrated Loads (lb)
Vert: 2=-20
Trapezoidal Loads (lb/ft)
Vert: 1=-142-to-7=-118, 7=-118-to-8=-102

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J103	Jack-Open	1	1	Job Reference (optional)	I73987930

Lumber Specialties, Dyersville, IA - 52040,

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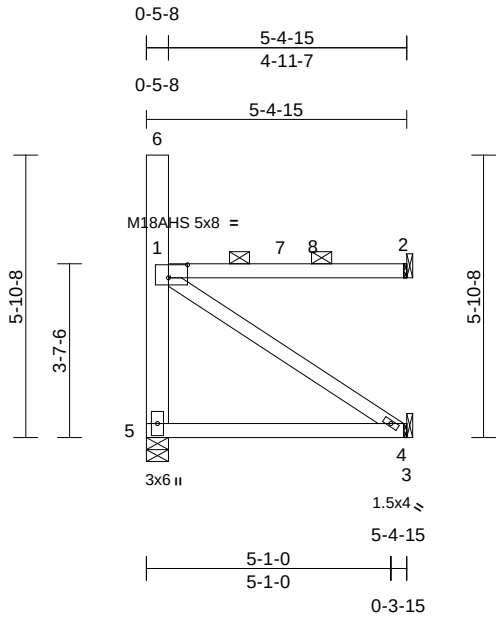

Scale = 1:47.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.03	4-5	>999	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	NO	WB	0.32	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 37 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 2= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=-214 (LC 11)
Max Uplift 2=-63 (LC 10), 4=-111 (LC 10), 5=-171 (LC 9)
Max Grav 2=426 (LC 35), 4=221 (LC 18), 5=592 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/0, 1-5=-541/511, 1-6=0/0
BOT CHORD	4-5=-375/449, 3-4=0/0
WEBS	1-4=-537/448

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 2, 171 lb uplift at joint 5 and 111 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 3-5=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-169-to-7=-149, 7=-149-to-8=-144, 8=-142-to-2=-102

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	J104	Jack-Open	1	1	Job Reference (optional)	I73987931

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:02 Page: 1
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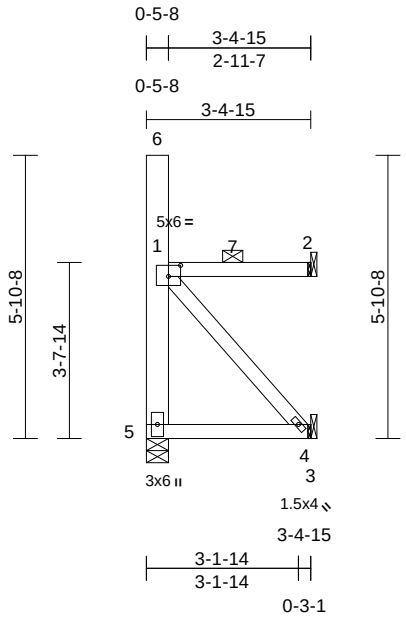

Scale = 1:47.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.00	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 29 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 2= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=-213 (LC 11)
Max Uplift 2=-45 (LC 10), 4=-195 (LC 10), 5=-235 (LC 9)
Max Grav 2=362 (LC 35), 4=264 (LC 11), 5=467 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/0, 1-5=-436/585, 1-6=0/0
BOT CHORD	4-5=-312/410, 3-4=0/0
WEBS	1-4=-610/465

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 2, 235 lb uplift at joint 5 and 195 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 3-5=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-186-to-7=-148, 7=-148-to-2=-109

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M08	Flat	1	1	Job Reference (optional)	I73987932

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:03
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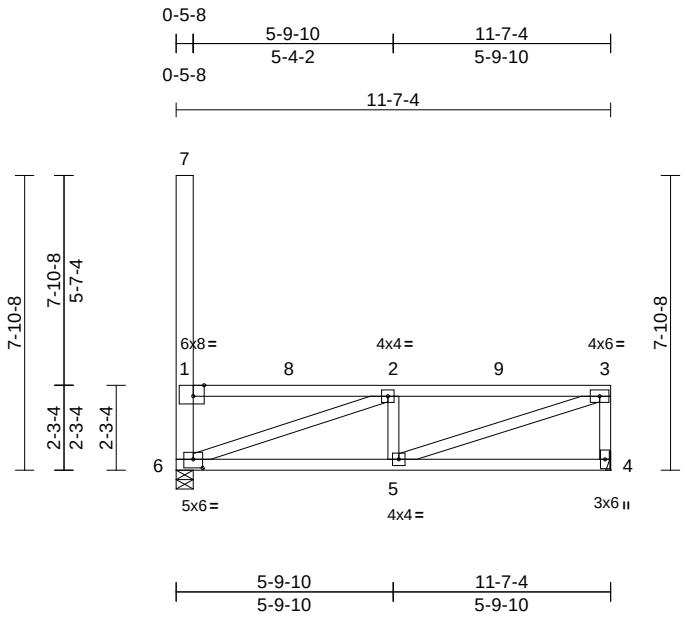

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.05	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.07	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 73 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-11-6 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-362 (LC 9)
Max Uplift 4=-233 (LC 10), 6=-233 (LC 9)
Max Grav 4=747 (LC 36), 6=913 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1515/1013, 2-3=-1411/1080, 3-4=-690/556, 1-6=-551/204, 1-7=0/0
BOT CHORD	5-6=-1133/1423, 4-5=-71/94
WEBS	2-5=-369/468, 3-5=-1125/1433, 2-6=-1369/1355

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 233 lb uplift at joint 4 and 233 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1, 3=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-169-to-8=-146, 8=-146-to-2=-124, 2=-124-to-9=-102, 9=-102-to-3=-79

June 6,2025

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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M09	Flat	1	1	Job Reference (optional)	I73987933

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:03
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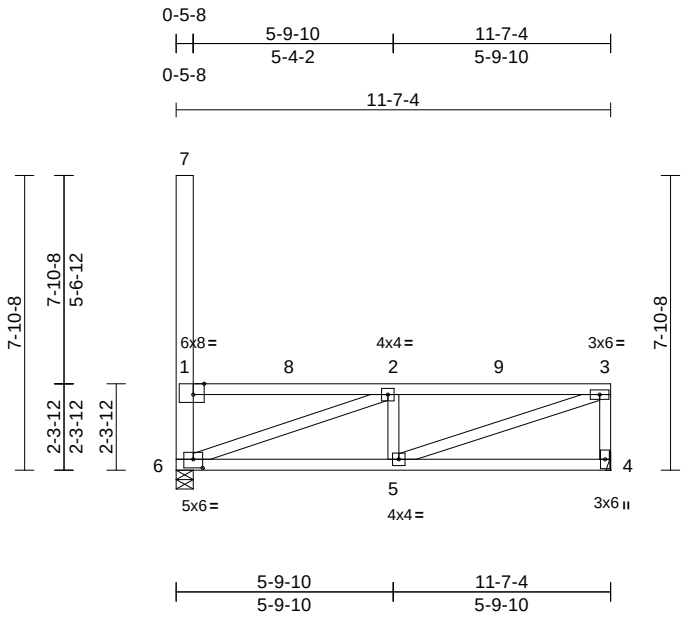

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.04	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.07	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 73 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-361 (LC 9)
Max Uplift 4=-232 (LC 10), 6=-232 (LC 9)
Max Grav 4=739 (LC 36), 6=908 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1481/991, 2-3=-1376/1057, 3-4=-683/556, 1-6=-549/204, 1-7=0/0
BOT CHORD	5-6=-1111/1388, 4-5=-70/91
WEBS	2-5=-366/468, 3-5=-1106/1402, 2-6=-1339/1331

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 4 and 232 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-123, 2=-123-to-9=-101, 9=-101-to-3=-78

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M10	Flat	1	1	Job Reference (optional)	I73987934

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:03
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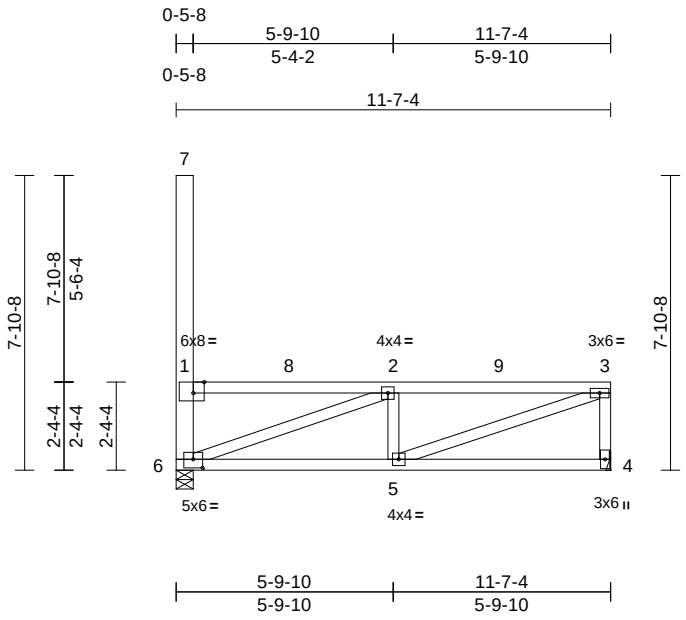

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.04	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.07	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 73 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-1-0 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-361 (LC 9)
Max Uplift 4=-232 (LC 10), 6=-232 (LC 9)
Max Grav 4=739 (LC 36), 6=908 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1448/970, 2-3=-1349/1036, 3-4=-683/556, 1-6=-549/203, 1-7=0/0
BOT CHORD	5-6=-1091/1361, 4-5=-69/88
WEBS	2-5=-366/469, 3-5=-1087/1379, 2-6=-1316/1307

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 4 and 232 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-123, 2=-123-to-9=-101, 9=-101-to-3=-78

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M11	Flat	1	1	Job Reference (optional)	I73987935

Lumber Specialties, Dyersville, IA - 52040,

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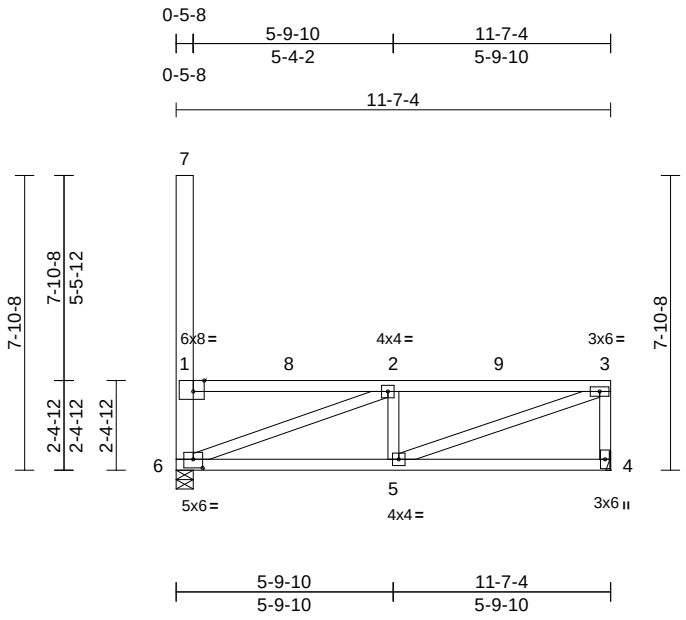

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.04	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.06	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 74 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-1-11 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-360 (LC 11)
Max Uplift 4=-232 (LC 10), 6=-232 (LC 9)
Max Grav 4=739 (LC 36), 6=908 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1417/950, 2-3=-1323/1015, 3-4=-684/556, 1-6=-548/203, 1-7=0/0
BOT CHORD	5-6=-1071/1335, 4-5=-68/86
WEBS	2-5=-367/469, 3-5=-1070/1356, 2-6=-1295/1285

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 4 and 232 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-123, 2=-123-to-9=-101, 9=-101-to-3=-78

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M12	Flat	1	1	Job Reference (optional)	I73987936

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:04
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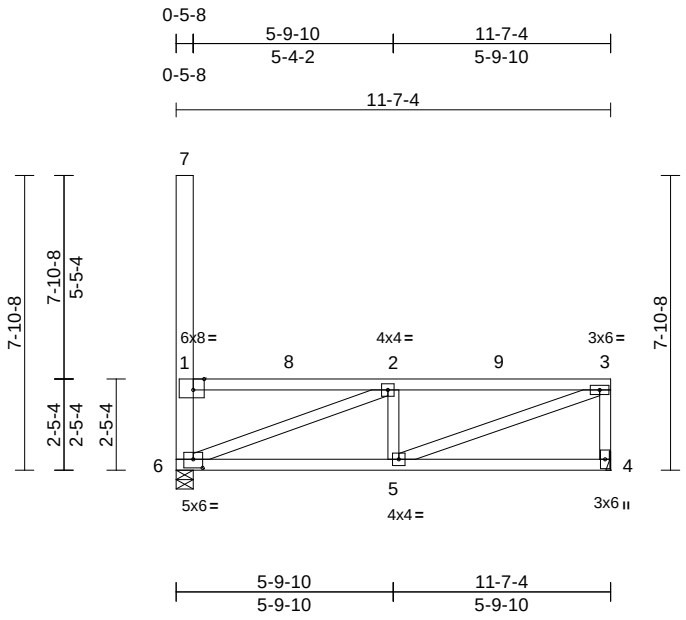

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.04	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.06	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 74 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-359 (LC 9)
Max Uplift 4=-232 (LC 10), 6=-232 (LC 9)
Max Grav 4=739 (LC 36), 6=908 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1387/930, 2-3=-1298/995, 3-4=-684/556, 1-6=-548/203, 1-7=0/0
BOT CHORD	5-6=-1052/1311, 4-5=-68/83
WEBS	2-5=-367/469, 3-5=-1053/1335, 2-6=-1275/1263

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 4 and 232 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-123, 2=-123-to-9=-101, 9=-101-to-3=-78

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M13	Flat	1	1	Job Reference (optional)	I73987937

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:04
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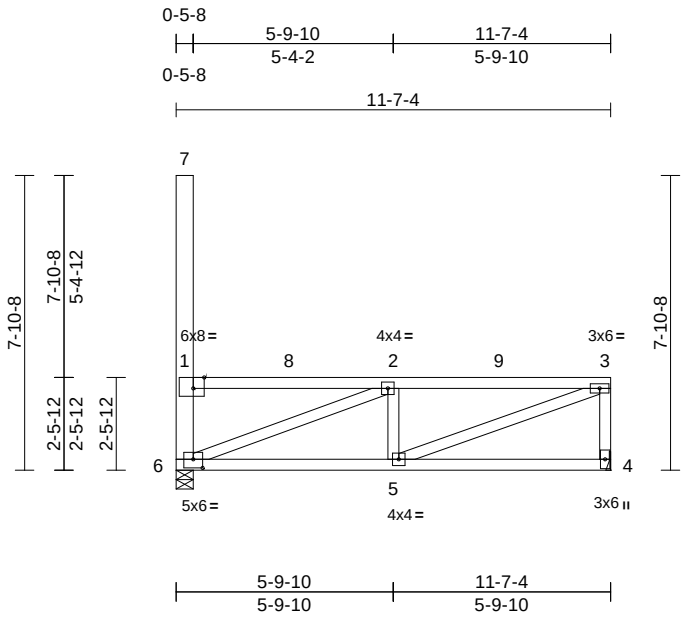

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.04	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 74 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-3-4 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-359 (LC 11)
Max Uplift 4=-232 (LC 10), 6=-232 (LC 9)
Max Grav 4=739 (LC 36), 6=908 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1358/911, 2-3=-1274/975, 3-4=-684/556, 1-6=-548/203, 1-7=0/0
BOT CHORD	5-6=-1034/1287, 4-5=-67/81
WEBS	2-5=-367/469, 3-5=-1037/1314, 2-6=-1255/1242

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 4 and 232 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-123, 2=-123-to-9=-101, 9=-101-to-3=-78

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M14	Flat	1	1	Job Reference (optional)	I73987938

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:04
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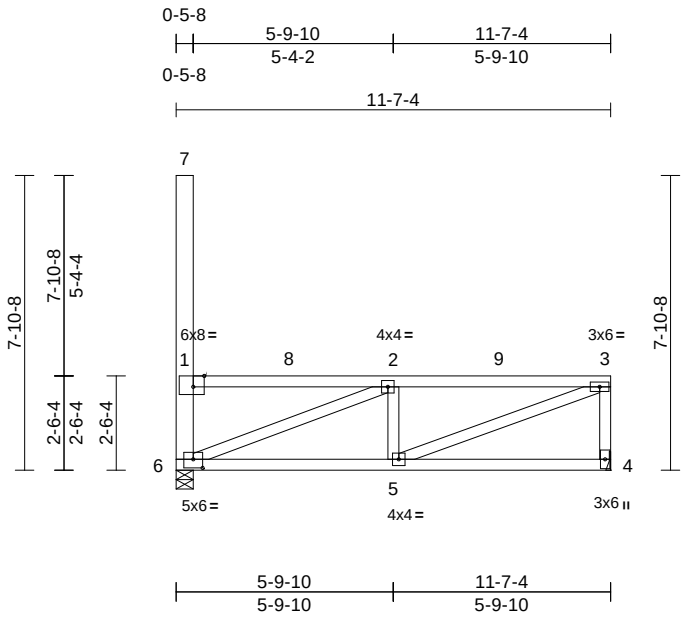

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.04	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 74 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-4-1 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-358 (LC 9)
Max Uplift 4=-232 (LC 10), 6=-232 (LC 9)
Max Grav 4=739 (LC 36), 6=908 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1330/893, 2-3=-1250/957, 3-4=-684/557, 1-6=-548/203, 1-7=0/0
BOT CHORD	5-6=-1016/1264, 4-5=-67/79
WEBS	2-5=-367/470, 3-5=-1021/1295, 2-6=-1236/1222

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 4 and 232 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-123, 2=-123-to-9=-101, 9=-101-to-3=-78

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M15	Flat	1	1	Job Reference (optional)	I73987939

Lumber Specialties, Dyersville, IA - 52040,

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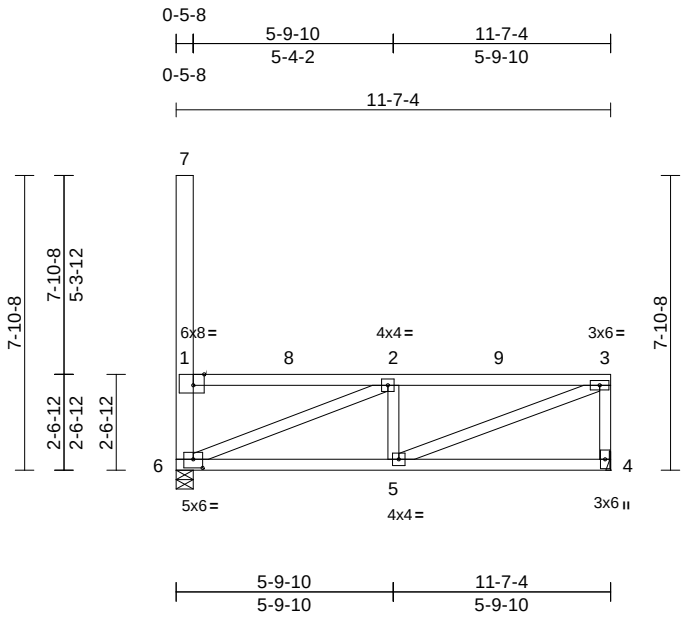

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.04	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 74 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-4-12 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=358 (LC 12)
Max Uplift 4=-232 (LC 10), 6=-232 (LC 9)
Max Grav 4=739 (LC 36), 6=908 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1302/875, 2-3=-1228/939, 3-4=-684/557, 1-6=-547/203, 1-7=0/0
BOT CHORD	5-6=-999/1241, 4-5=-66/76
WEBS	2-5=-367/470, 3-5=-1006/1275, 2-6=-1217/1203

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 4 and 232 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-123, 2=-123-to-9=-101, 9=-101-to-3=-78

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M16	Flat	1	1	Job Reference (optional)	I73987940

Lumber Specialties, Dyersville, IA - 52040,

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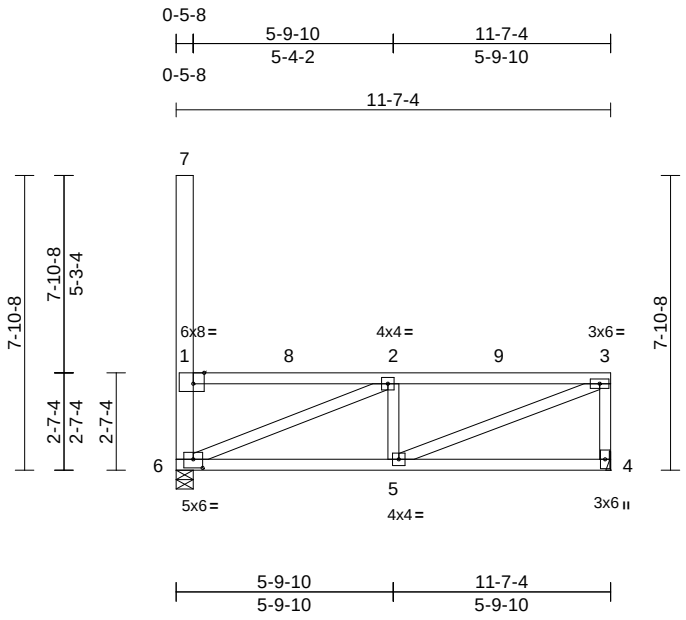

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.06	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 74 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-5-9 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-357 (LC 9)
Max Uplift 4=-232 (LC 10), 6=-232 (LC 9)
Max Grav 4=739 (LC 36), 6=908 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1276/858, 2-3=-1206/921, 3-4=-685/557, 1-6=-547/202, 1-7=0/0
BOT CHORD	5-6=-983/1220, 4-5=-66/74
WEBS	2-5=-367/470, 3-5=-991/1257, 2-6=-1200/1184

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 4 and 232 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-123, 2=-123-to-9=-101, 9=-101-to-3=-78

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M17	Flat	1	1	Job Reference (optional)	I73987941

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:05
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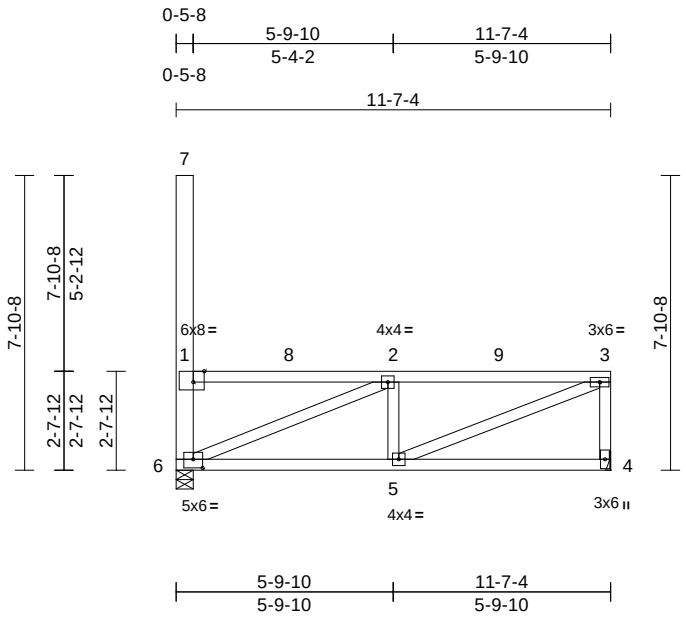


Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.06	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 75 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-6-4 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-356 (LC 11)
Max Uplift 4=-232 (LC 10), 6=-232 (LC 9)
Max Grav 4=739 (LC 36), 6=908 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1251/842, 2-3=-1185/904, 3-4=-685/557, 1-6=-547/202, 1-7=0/0
BOT CHORD	5-6=-967/1199, 4-5=-65/73
WEBS	2-5=-367/470, 3-5=-977/1239, 2-6=-1183/1166

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 4 and 232 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-123, 2=-123-to-9=-101, 9=-101-to-3=-78

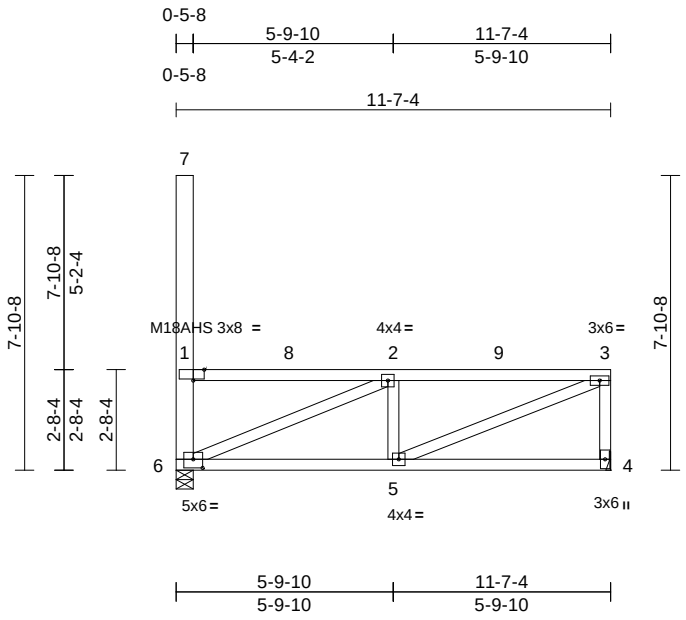
June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M18	Flat	1	1	Job Reference (optional)	I73987942

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:05 ID:TzhvaOCOYFhIBRX08c8AKfzEgpx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.03	5	>999	240	M18AHS	186/179
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	4-5	>999	180	MT20	244/190
TCDL	15.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 75 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-6-15 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-356 (LC 9)
Max Uplift 4=-231 (LC 10), 6=-231 (LC 9)
Max Grav 4=739 (LC 36), 6=908 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1227/826, 2-3=-1165/888, 3-4=-685/557, 1-6=-547/202, 1-7=0/0
BOT CHORD	5-6=-952/1179, 4-5=-65/71
WEBS	2-5=-367/470, 3-5=-964/1222, 2-6=-1166/1149

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 231 lb uplift at joint 4 and 231 lb uplift at joint 6.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-123, 2=-123-to-9=-101, 9=-101-to-3=-78

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M19	Flat	1	1	Job Reference (optional)	I73987943

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:05
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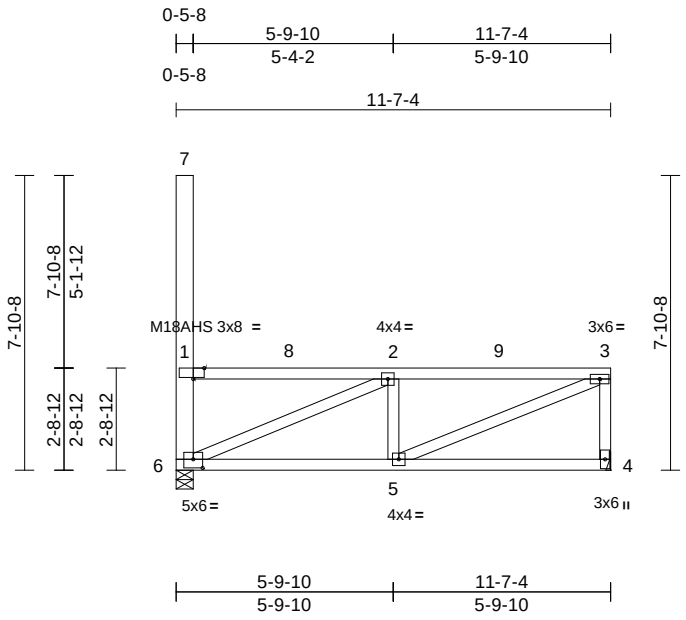

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.03	5	>999	240	M18AHS	186/179
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.05	4-5	>999	180	MT20	244/190
TCDL	15.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 75 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-7-12 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=355 (LC 12)
Max Uplift 4=-231 (LC 10), 6=-231 (LC 9)
Max Grav 4=739 (LC 36), 6=908 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1203/811, 2-3=-1145/872, 3-4=-685/557, 1-6=-546/202, 1-7=0/0
BOT CHORD 5-6=-937/1160, 4-5=-64/69
WEBS 2-5=-367/470, 3-5=-950/1205, 2-6=-1150/1132

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 231 lb uplift at joint 4 and 231 lb uplift at joint 6.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 4-6=-20
Concentrated Loads (lb)
Vert: 1=-1
Trapezoidal Loads (lb/ft)
Vert: 1=-168-to-8=-145, 8=-145-to-2=-123, 2=-123-to-9=-101, 9=-101-to-3=-78

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M20	Flat	1	1	Job Reference (optional)	I73987944

Lumber Specialties, Dyersville, IA - 52040,

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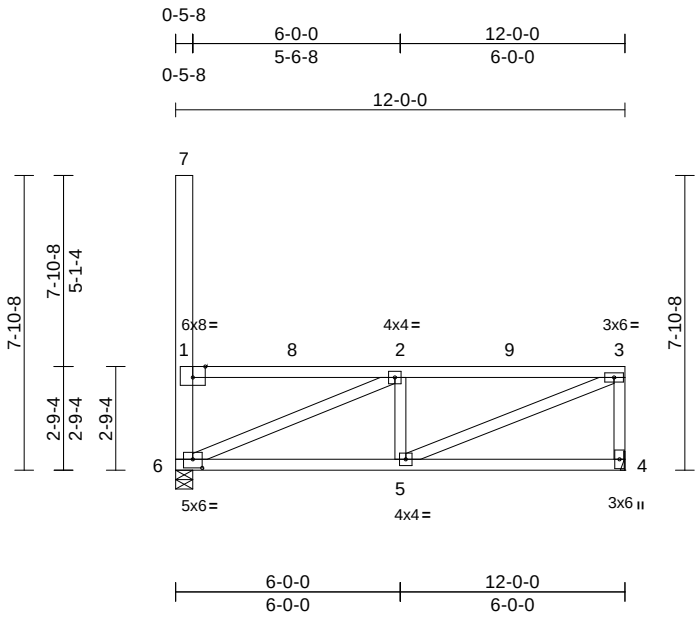

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.06	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 77 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-7-1 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-355 (LC 11)
Max Uplift 4=-230 (LC 10), 6=-230 (LC 9)
Max Grav 4=748 (LC 36), 6=927 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1183/799, 2-3=-1184/883, 3-4=-692/559, 1-6=-556/205, 1-7=0/0
BOT CHORD	5-6=-949/1199, 4-5=-66/71
WEBS	2-5=-370/471, 3-5=-959/1243, 2-6=-1185/1138

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 230 lb uplift at joint 4 and 230 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1, 3=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-99, 9=-99-to-3=-76

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M21	Flat	1	1	Job Reference (optional)	I73987945

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:06
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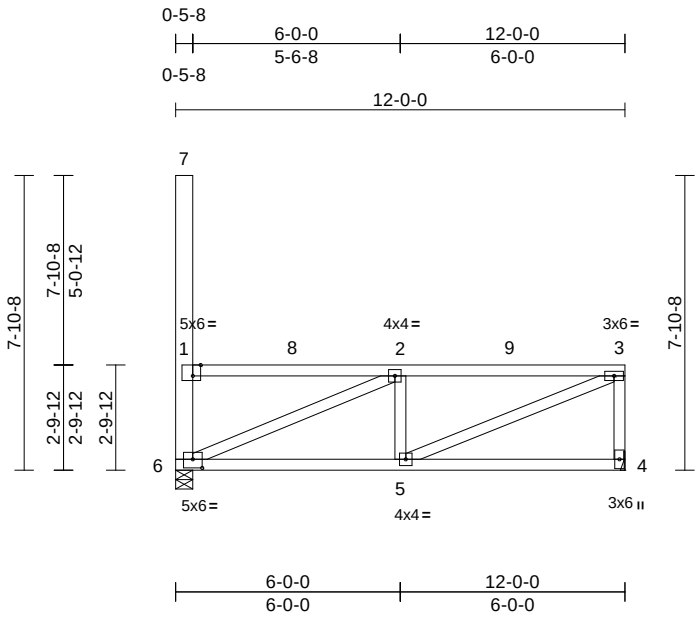

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.06	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 77 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-7-12 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-354 (LC 11)
Max Uplift 4=-230 (LC 10), 6=-230 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1154/780, 2-3=-1162/869, 3-4=-689/559, 1-6=-556/208, 1-7=0/0
BOT CHORD	5-6=-936/1177, 4-5=-63/69
WEBS	2-5=-369/472, 3-5=-950/1226, 2-6=-1163/1113

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 230 lb uplift at joint 4 and 230 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M22	Flat	1	1	Job Reference (optional)	I73987946

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:06
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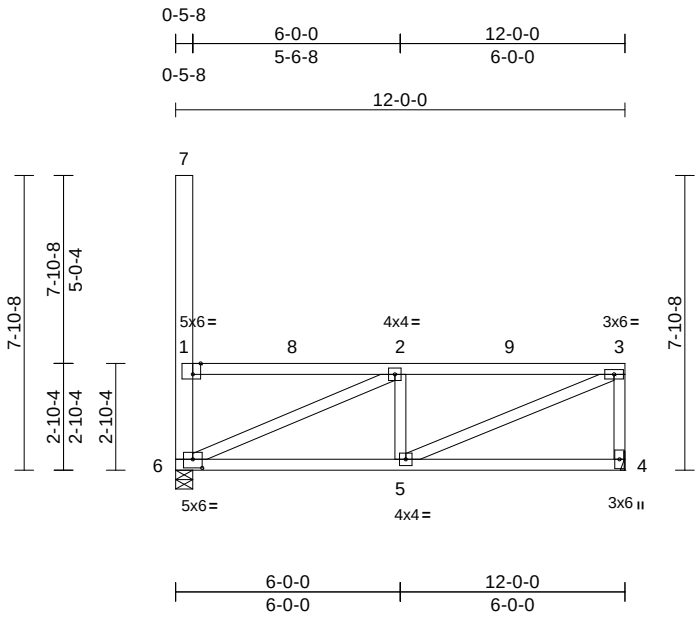

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 77 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-353 (LC 11)
Max Uplift 4=-230 (LC 10), 6=-230 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1133/766, 2-3=-1143/854, 3-4=-689/559, 1-6=-556/208, 1-7=0/0
BOT CHORD	5-6=-922/1158, 4-5=-63/69
WEBS	2-5=-369/472, 3-5=-938/1210, 2-6=-1148/1097

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 230 lb uplift at joint 4 and 230 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M23	Flat	1	1	Job Reference (optional)	I73987947

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:06
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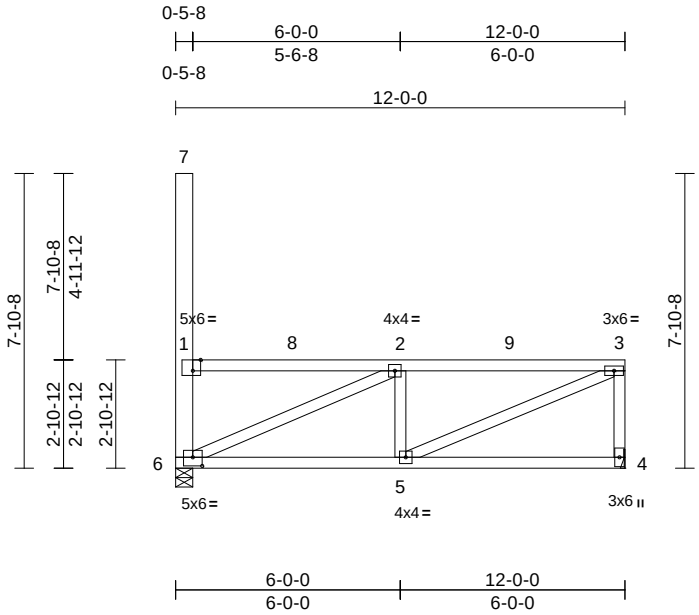

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 77 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-9-2 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-353 (LC 9)
Max Uplift 4=-230 (LC 10), 6=-230 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1112/753, 2-3=-1125/839, 3-4=-689/559, 1-6=-556/208, 1-7=0/0
BOT CHORD	5-6=-909/1141, 4-5=-63/69
WEBS	2-5=-369/472, 3-5=-926/1194, 2-6=-1133/1083

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 230 lb uplift at joint 4 and 230 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M24	Flat	1	1	Job Reference (optional)	I73987948

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:07
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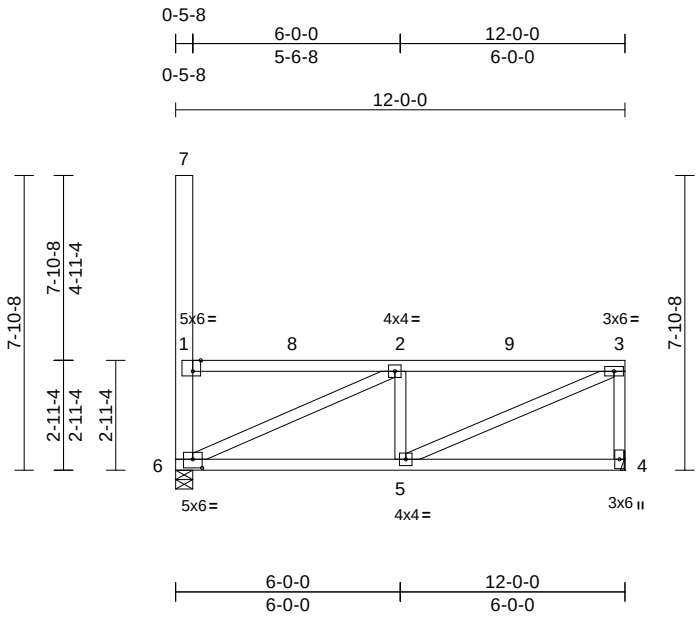

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 77 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-9-13 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-352 (LC 9)
Max Uplift 4=-230 (LC 10), 6=-230 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1092/740, 2-3=-1107/826, 3-4=-689/559, 1-6=-556/208, 1-7=0/0
BOT CHORD	5-6=-896/1123, 4-5=-63/69
WEBS	2-5=-369/472, 3-5=-915/1179, 2-6=-1119/1068

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 230 lb uplift at joint 4 and 230 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M25	Flat	1	1	Job Reference (optional)	I73987949

Lumber Specialties, Dyersville, IA - 52040,

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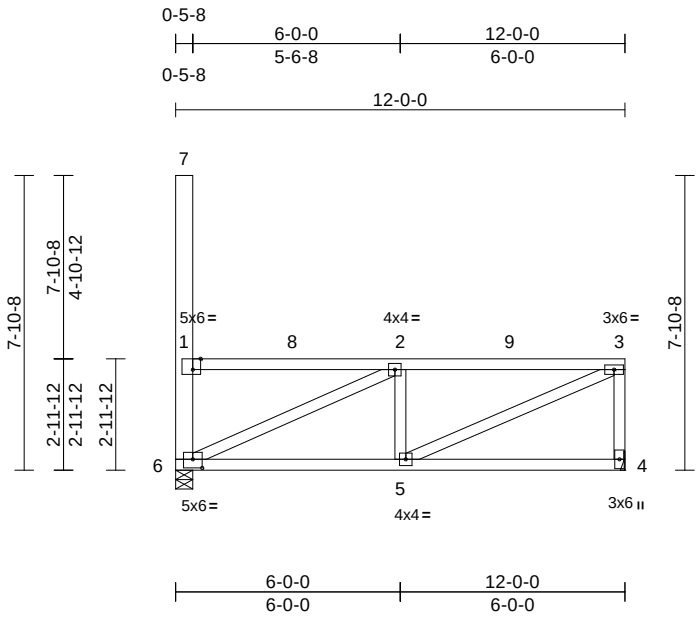

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 78 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-352 (LC 9)
Max Uplift 4=-230 (LC 10), 6=-230 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1072/727, 2-3=-1090/812, 3-4=-689/559, 1-6=-556/207, 1-7=0/0
BOT CHORD	5-6=-884/1106, 4-5=-62/69
WEBS	2-5=-369/473, 3-5=-904/1165, 2-6=-1105/1054

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 230 lb uplift at joint 4 and 230 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M26	Flat	1	1	Job Reference (optional)	I73987950

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:07
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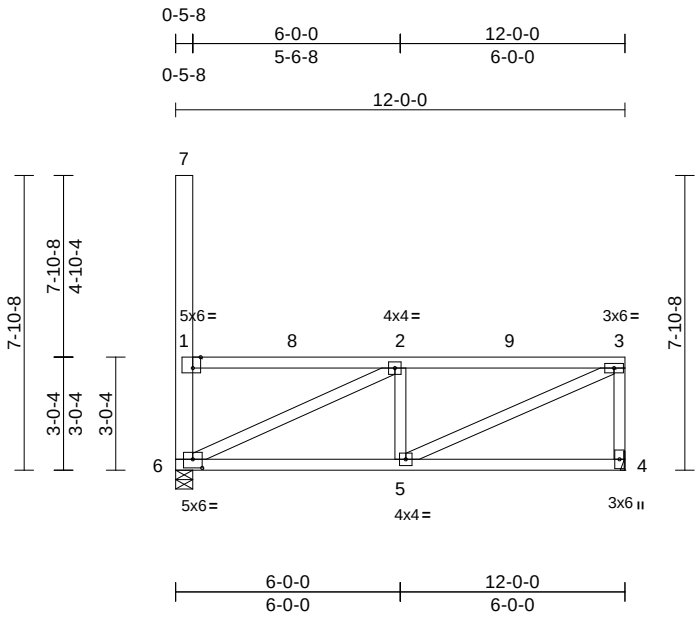

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.73	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 78 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-11-2 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-351 (LC 9)
Max Uplift 4=-229 (LC 10), 6=-229 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1053/715, 2-3=-1074/799, 3-4=-690/560, 1-6=-555/207, 1-7=0/0
BOT CHORD	5-6=-872/1090, 4-5=-62/69
WEBS	2-5=-369/473, 3-5=-893/1151, 2-6=-1092/1041

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 229 lb uplift at joint 4 and 229 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M27	Flat	1	1	Job Reference (optional)	I73987951

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:07
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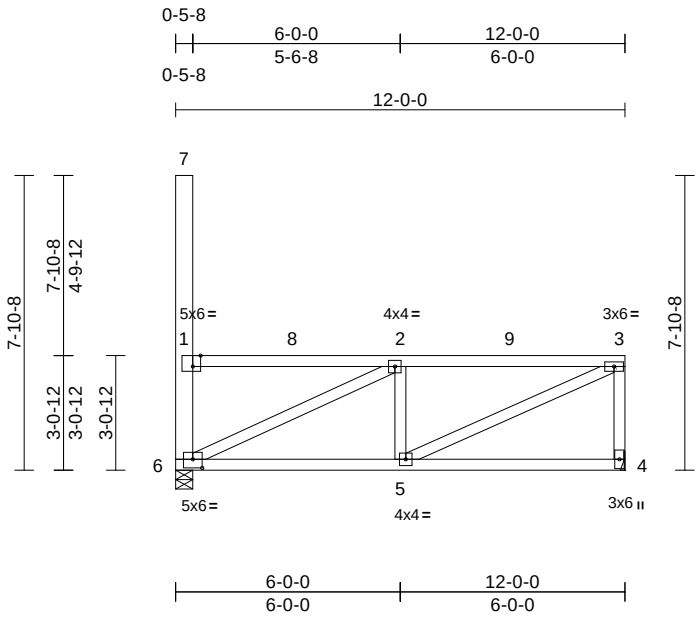

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.73	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 78 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-11-13 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=350 (LC 10)
Max Uplift 4=-229 (LC 10), 6=-229 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1035/703, 2-3=-1057/786, 3-4=-690/560, 1-6=-555/207, 1-7=0/0
BOT CHORD	5-6=-860/1074, 4-5=-62/69
WEBS	2-5=-369/473, 3-5=-883/1138, 2-6=-1079/1028

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 229 lb uplift at joint 4 and 229 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M28	Flat	1	1	Job Reference (optional)	I73987952

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:08
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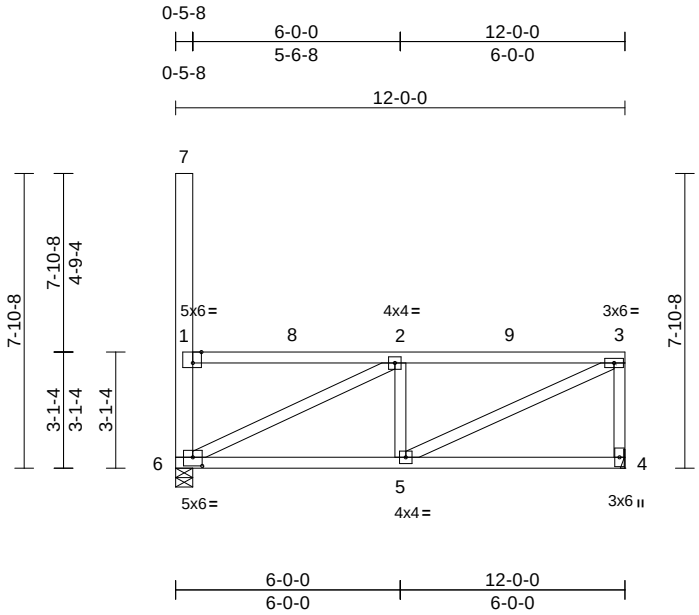

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 78 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=350 (LC 12)
Max Uplift 4=-229 (LC 10), 6=-229 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1017/692, 2-3=-1042/774, 3-4=-690/560, 1-6=-555/207, 1-7=0/0
BOT CHORD	5-6=-849/1059, 4-5=-62/68
WEBS	2-5=-369/473, 3-5=-873/1124, 2-6=-1067/1015

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 229 lb uplift at joint 4 and 229 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M29	Flat	1	1	Job Reference (optional)	I73987953

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:08
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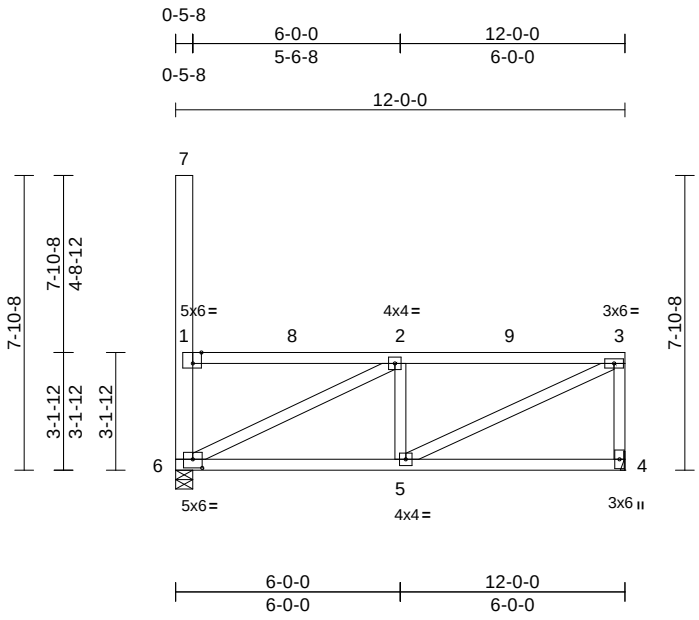

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 78 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-1-1 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-349 (LC 9)
Max Uplift 4=-229 (LC 10), 6=-229 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-999/681, 2-3=-1026/761, 3-4=-690/560, 1-6=-555/207, 1-7=0/0
BOT CHORD	5-6=-838/1044, 4-5=-62/68
WEBS	2-5=-369/473, 3-5=-863/1112, 2-6=-1055/1003

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 229 lb uplift at joint 4 and 229 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M30	Flat	1	1	Job Reference (optional)	I73987954

Lumber Specialties, Dyersville, IA - 52040,

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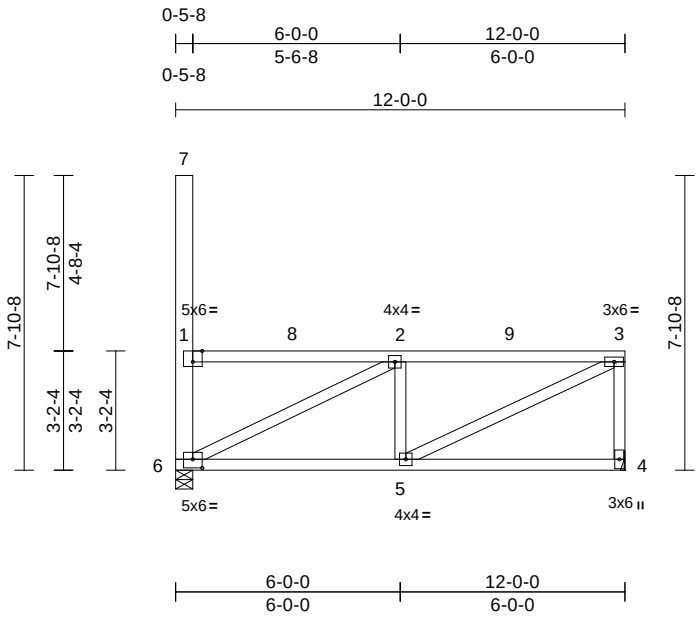

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 78 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-349 (LC 9)
Max Uplift 4=-229 (LC 10), 6=-229 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-982/670, 2-3=-1012/750, 3-4=-690/560, 1-6=-555/207, 1-7=0/0
BOT CHORD	5-6=-827/1029, 4-5=-62/68
WEBS	2-5=-369/473, 3-5=-853/1099, 2-6=-1043/991

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 229 lb uplift at joint 4 and 229 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M31	Flat	1	1	Job Reference (optional)	I73987955

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:08
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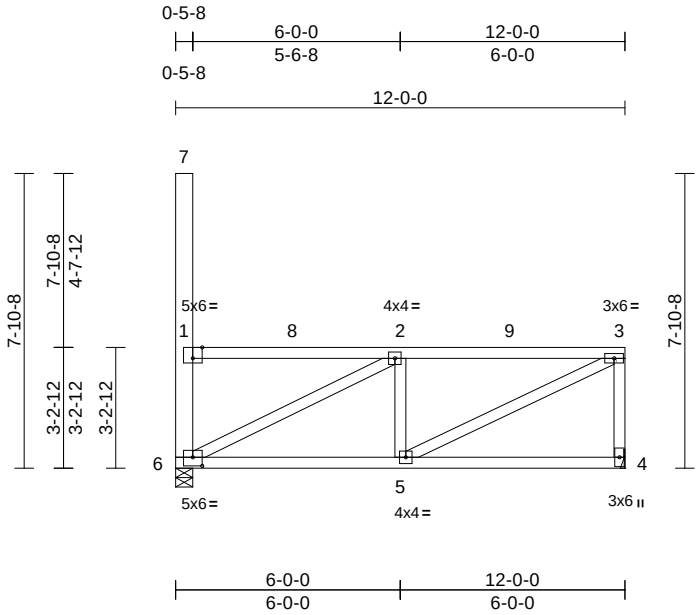

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.03	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 79 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-348 (LC 9)
Max Uplift 4=-229 (LC 10), 6=-229 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-965/659, 2-3=-997/738, 3-4=-690/560, 1-6=-555/206, 1-7=0/0
BOT CHORD	5-6=-817/1015, 4-5=-62/69
WEBS	2-5=-369/474, 3-5=-844/1087, 2-6=-1032/979

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 229 lb uplift at joint 4 and 229 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M32	Flat	1	1	Job Reference (optional)	I73987956

Lumber Specialties, Dyersville, IA - 52040,

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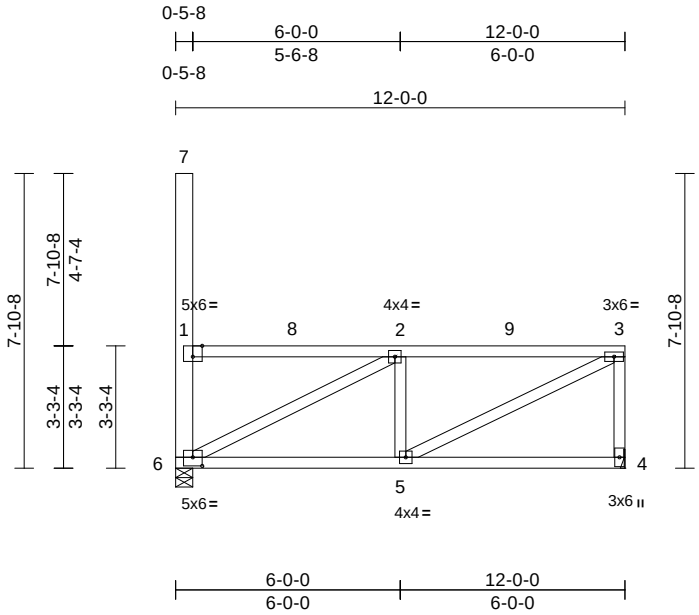

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.02	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 79 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-2-15 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-347 (LC 9)
Max Uplift 4=-229 (LC 10), 6=-229 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-949/649, 2-3=-983/727, 3-4=-690/560, 1-6=-554/206, 1-7=0/0
BOT CHORD	5-6=-807/1001, 4-5=-62/69
WEBS	2-5=-369/474, 3-5=-835/1076, 2-6=-1021/968

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 229 lb uplift at joint 4 and 229 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M33	Flat	1	1	Job Reference (optional)	I73987957

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:09
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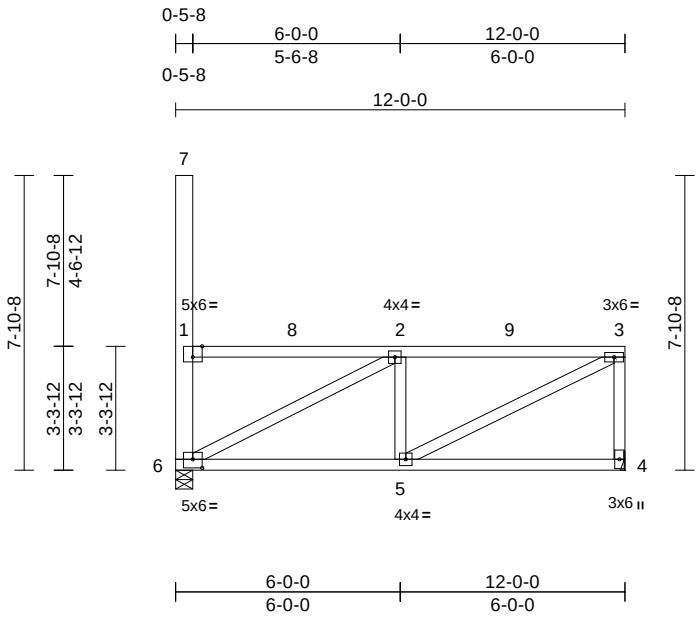

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.02	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 79 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-347 (LC 11)
Max Uplift 4=-228 (LC 10), 6=-228 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-934/639, 2-3=-969/716, 3-4=-690/560, 1-6=-554/206, 1-7=0/0
BOT CHORD	5-6=-797/988, 4-5=-62/69
WEBS	2-5=-369/474, 3-5=-827/1064, 2-6=-1010/957

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 228 lb uplift at joint 4 and 228 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M34	Flat	1	1	Job Reference (optional)	I73987958

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:09
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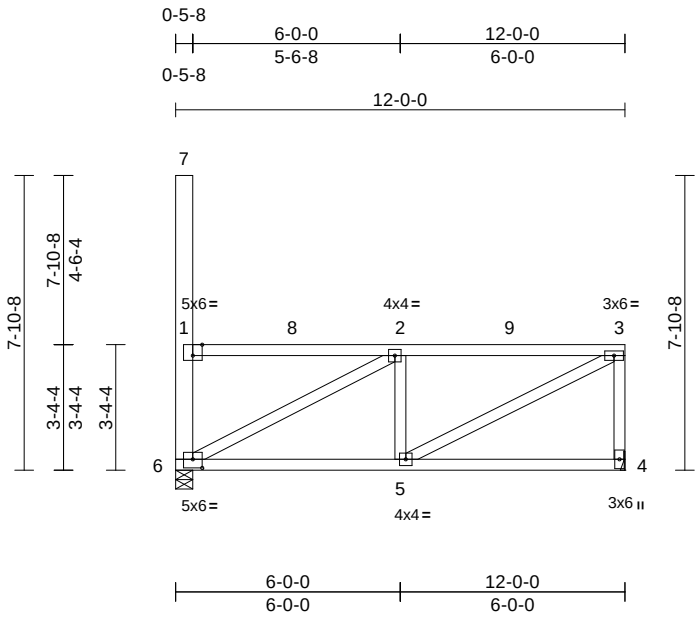

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.02	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 79 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-4-1 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-346 (LC 9)
Max Uplift 4=-228 (LC 10), 6=-228 (LC 9)
Max Grav 4=744 (LC 36), 6=925 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-918/629, 2-3=-956/705, 3-4=-690/560, 1-6=-554/206, 1-7=0/0
BOT CHORD	5-6=-787/974, 4-5=-62/69
WEBS	2-5=-369/474, 3-5=-818/1053, 2-6=-1000/947

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 228 lb uplift at joint 4 and 228 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-98, 9=-98-to-3=-75

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M35	Flat	1	1	Job Reference (optional)	I73987959

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:09
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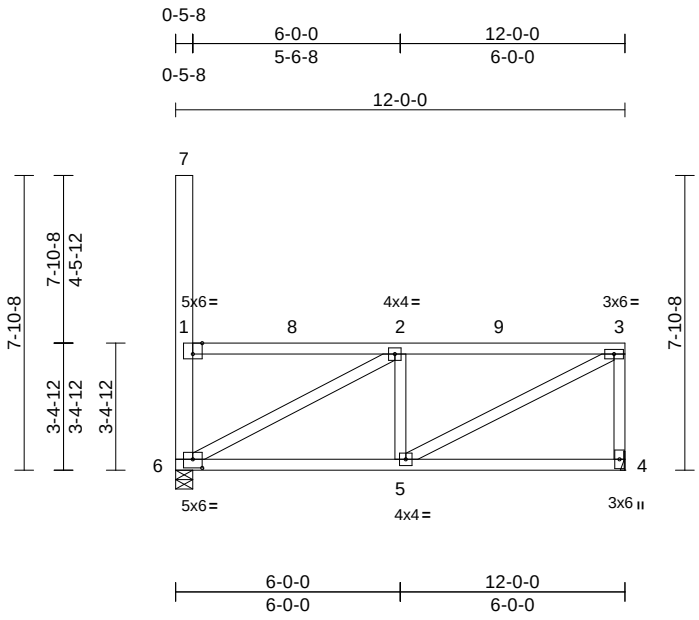

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.02	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.05	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 79 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-4-10 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-346 (LC 9)
Max Uplift 4=-228 (LC 10), 6=-228 (LC 9)
Max Grav 4=744 (LC 36), 6=926 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-903/620, 2-3=-944/695, 3-4=-690/560, 1-6=-555/205, 1-7=0/0
BOT CHORD	5-6=-778/962, 4-5=-62/69
WEBS	2-5=-369/474, 3-5=-810/1043, 2-6=-990/936

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 228 lb uplift at joint 4 and 228 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-2=-122, 2=-122-to-9=-101, 9=-98-to-3=-76

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M36	Flat	1	1	Job Reference (optional)	I73987960

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:10
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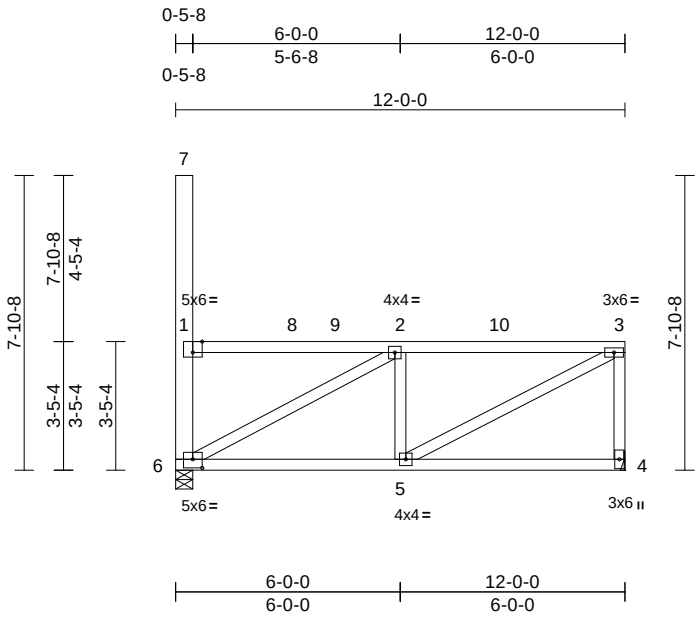

Scale = 1:61.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.02	5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.04	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 80 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-345 (LC 11)
Max Uplift 4=-228 (LC 10), 6=-228 (LC 9)
Max Grav 4=766 (LC 36), 6=929 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-889/610, 2-3=-937/685, 3-4=-712/560, 1-6=-552/205, 1-7=0/0
BOT CHORD	5-6=-769/956, 4-5=-62/69
WEBS	2-5=-371/474, 3-5=-802/1038, 2-6=-988/926

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 228 lb uplift at joint 4 and 228 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-6=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-8=-145, 8=-145-to-9=-137, 9=-131-to-2=-121, 2=-121-to-10=-106, 10=-104-to-3=-85

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M37	Flat	1	1	Job Reference (optional)	I73987961

Lumber Specialties, Dyersville, IA - 52040,

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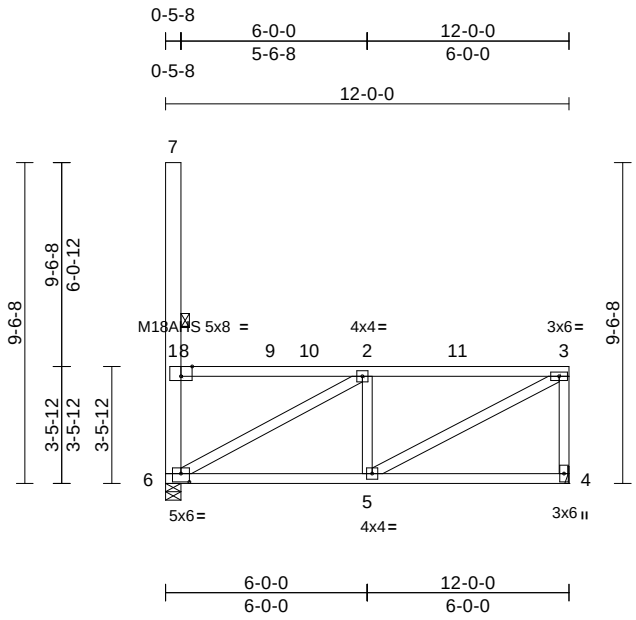

Scale = 1:68.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.02	5	>999	240	M18AHS	186/179
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	4-5	>999	180	MT20	244/190
TCDL	15.0	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 84 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

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

REACTIONS (size) 4= Mechanical, 6=0-5-8
Max Horiz 6=-430 (LC 9)
Max Uplift 4=-291 (LC 10), 6=-291 (LC 9)
Max Grav 4=810 (LC 18), 6=934 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1281/870, 2-3=-1037/817, 3-4=-753/635, 1-6=-538/220, 1-7=0/0
BOT CHORD 5-6=-903/1129, 4-5=-63/69
WEBS 2-5=-465/556, 3-5=-956/1206, 2-6=-1098/1135

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 291 lb uplift at joint 4 and 291 lb uplift at joint 6.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 4-6=-20
Concentrated Loads (lb)
Vert: 1=-1, 3=0
Trapezoidal Loads (lb/ft)
Vert: 1=-160-to-8=-155, 8=-156-to-9=-145, 9=-145-to-10=-140, 10=-137-to-2=-128, 2=-128-to-11=-114, 11=-111-to-3=-92

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M38	Flat	1	1	Job Reference (optional)	I73987962

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:10
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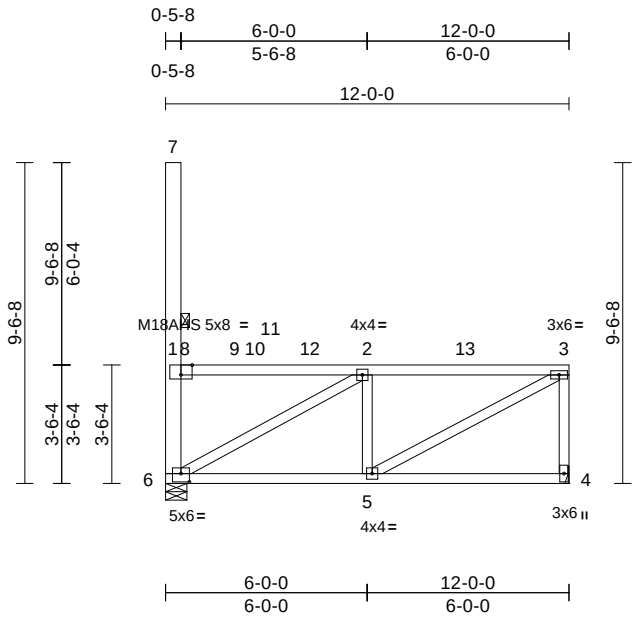

Scale = 1:68.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.03	5	>999	240	M18AHS	186/179
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	4-5	>999	180	MT20	244/190
TCDL	15.0	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 84 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 7-6:2x6 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
Except:
6-0-0 oc bracing: 1-6
7-2-0 oc bracing: 1-7
BOT CHORD Rigid ceiling directly applied or 7-9-15 oc bracing.
WEBS 1 Row at midpt 1-7

REACTIONS (size) 4= Mechanical, 6=0-7-9
Max Horiz 6=-430 (LC 11)
Max Uplift 4=-291 (LC 10), 6=-291 (LC 9)
Max Grav 4=859 (LC 36), 6=952 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1261/858, 2-3=-1068/806, 3-4=-805/635, 1-6=-524/220, 1-7=0/0
BOT CHORD 5-6=-892/1115, 4-5=-63/70
WEBS 2-5=-465/556, 3-5=-947/1194, 2-6=-1136/1123

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 291 lb uplift at joint 4 and 291 lb uplift at joint 6.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 4-6=-20
Concentrated Loads (lb)
Vert: 1=-1, 3=0
Trapezoidal Loads (lb/ft)
Vert: 1=-106-to-8=-103, 8=-116-to-9=-183, 9=-158-to-10=-159, 10=-159-to-11=-157, 11=-157-to-12=-150, 12=-149-to-2=-138, 2=-138-to-13=-120, 13=-120-to-3=-102

June 6,2025

MiTek®
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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M39	Flat	1	1	Job Reference (optional)	I73987963

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:10
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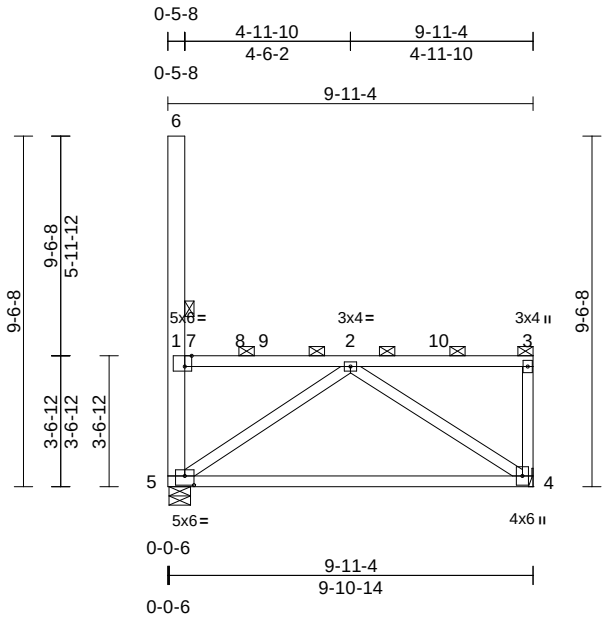

Scale = 1:62.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	0.02	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.25	4-5	>454	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 71 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

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

REACTIONS (size) 4= Mechanical, 5=0-7-0
Max Horiz 5=-429 (LC 9)
Max Uplift 4=-312 (LC 10), 5=-312 (LC 9)
Max Grav 4=779 (LC 36), 5=834 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1254/817, 2-3=-100/72, 3-4=-407/172, 1-5=-469/204, 1-6=0/0
BOT CHORD 4-5=-826/932
WEBS 2-4=-1030/948, 2-5=-810/1108

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 312 lb uplift at joint 4 and 312 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 4-5=-20
Concentrated Loads (lb)
Vert: 1=-1
Trapezoidal Loads (lb/ft)
Vert: 1=-96-to-7=-120, 7=-121-to-8=-179, 8=-157-to-9=-158, 9=-158-to-2=-143, 2=-143-to-10=-127, 10=-127-to-3=-111

June 6,2025

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M40	Flat	1	1	Job Reference (optional)	I73987964

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:11
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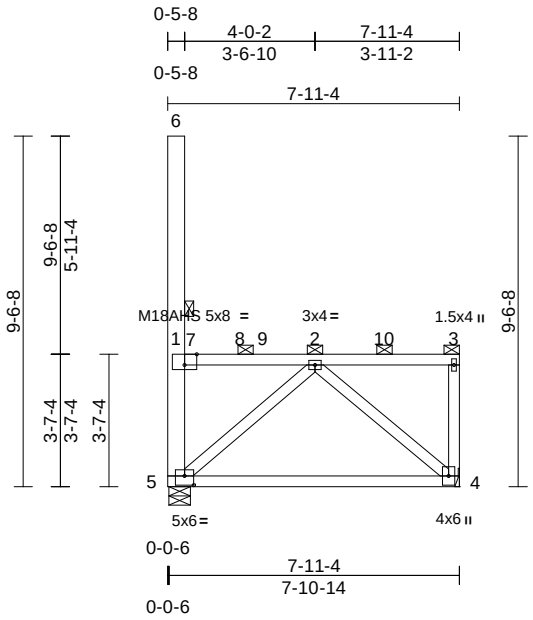

Scale = 1:62.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	n/a	-	n/a	999	M18AHS	186/179
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.17	4-5	>529	180	MT20	244/190
TCDL	15.0	Rep Stress Incr	NO	WB	0.45	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 63 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 4= Mechanical, 5=0-7-0
Max Horiz 5=429 (LC 12)
Max Uplift 4=-354 (LC 10), 5=-354 (LC 9)
Max Grav 4=708 (LC 18), 5=721 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1146/791, 2-3=-64/69, 3-4=-377/150, 1-5=-422/256, 1-6=0/0
BOT CHORD	4-5=-724/829
WEBS	2-4=-1036/903, 2-5=-621/963

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 354 lb uplift at joint 4 and 354 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-92-to-7=-117, 7=-118-to-8=-175, 8=-154-to-9=-155, 9=-155-to-2=-145, 2=-145-to-10=-133, 10=-133-to-3=-121

June 6,2025

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M41	Flat	1	1	Job Reference (optional)	I73987965

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:11 Page: 1
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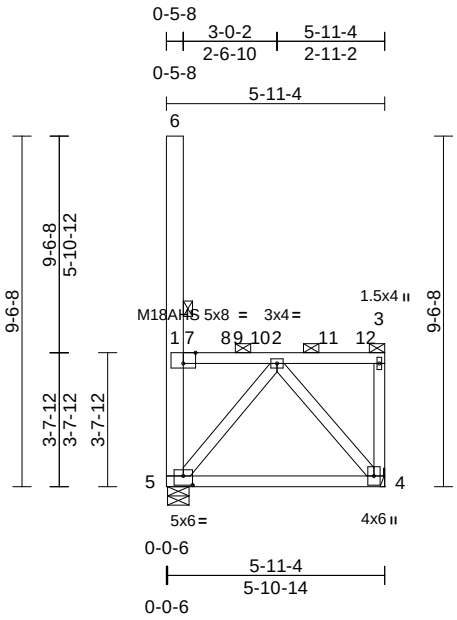

Scale = 1:62.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	n/a	-	n/a	999	M18AHS	186/179
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.05	4-5	>999	180	MT20	244/190
TCDL	15.0	Rep Stress Incr	NO	WB	0.37	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 55 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins: 1-3, 1-6, except end verticals. Except: 6-0-0 oc bracing: 1-5 7-8-0 oc bracing: 1-6
BOT CHORD	Rigid ceiling directly applied or 9-3-2 oc bracing.
WEBS	1 Row at midpt 1-6

REACTIONS (size) 4= Mechanical, 5=0-7-0
Max Horiz 5=428 (LC 10)
Max Uplift 4=-438 (LC 10), 5=-438 (LC 9)
Max Grav 4=670 (LC 18), 5=661 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1098/754, 2-3=-65/70, 3-4=-359/139, 1-5=-365/303, 1-6=0/0
BOT CHORD	4-5=-628/774
WEBS	2-4=-1133/913, 2-5=-613/942

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 438 lb uplift at joint 4 and 438 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 3=-17
   Trapezoidal Loads (lb/ft)
   Vert: 1=-92-to-7=-116, 7=-117-to-8=-158, 8=-158-to-9=-173, 9=-152-to-10=-153, 10=-152-to-2=-150, 2=-150-to-11=-140, 11=-140-to-12=-134, 12=-100-to-3=-99

June 6,2025

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M42	Flat	1	1	Job Reference (optional)	I73987966

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:11 Page: 1
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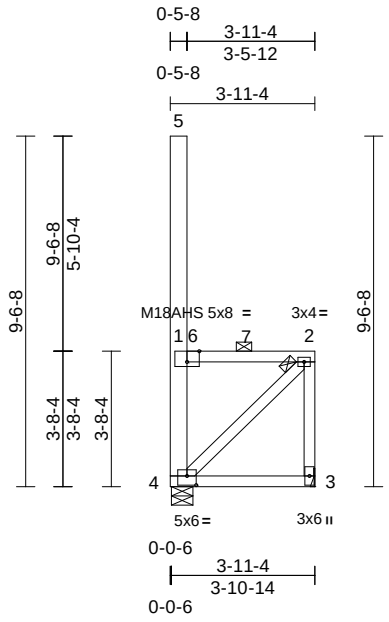

Scale = 1:62.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	n/a	-	n/a	999	M18AHS	186/179
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	3-4	>999	180	MT20	244/190
TCDL	15.0	Rep Stress Incr	NO	WB	0.45	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 44 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 5-4:2x6 SP 2400F 2.0E

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

REACTIONS (size) 3= Mechanical, 4=0-7-0
Max Horiz 4=427 (LC 10)
Max Uplift 3=-638 (LC 10), 4=-638 (LC 9)
Max Grav 3=765 (LC 18), 4=699 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1122/786, 2-3=-1269/988, 1-4=-481/300, 1-5=0/0
BOT CHORD 3-4=-65/71
WEBS 2-4=-1149/1620

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 638 lb uplift at joint 3 and 638 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 3-4=-20
Concentrated Loads (lb)
Vert: 1=0, 2=-44, 7=-13
Trapezoidal Loads (lb/ft)
Vert: 1=-92-to-6=-115, 6=-116-to-7=-177, 7=-174-to-2=-171

June 6,2025

MiTek®
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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M43G	Monopitch Girder	1	3	Job Reference (optional)	I73987967

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:12 Page: 1
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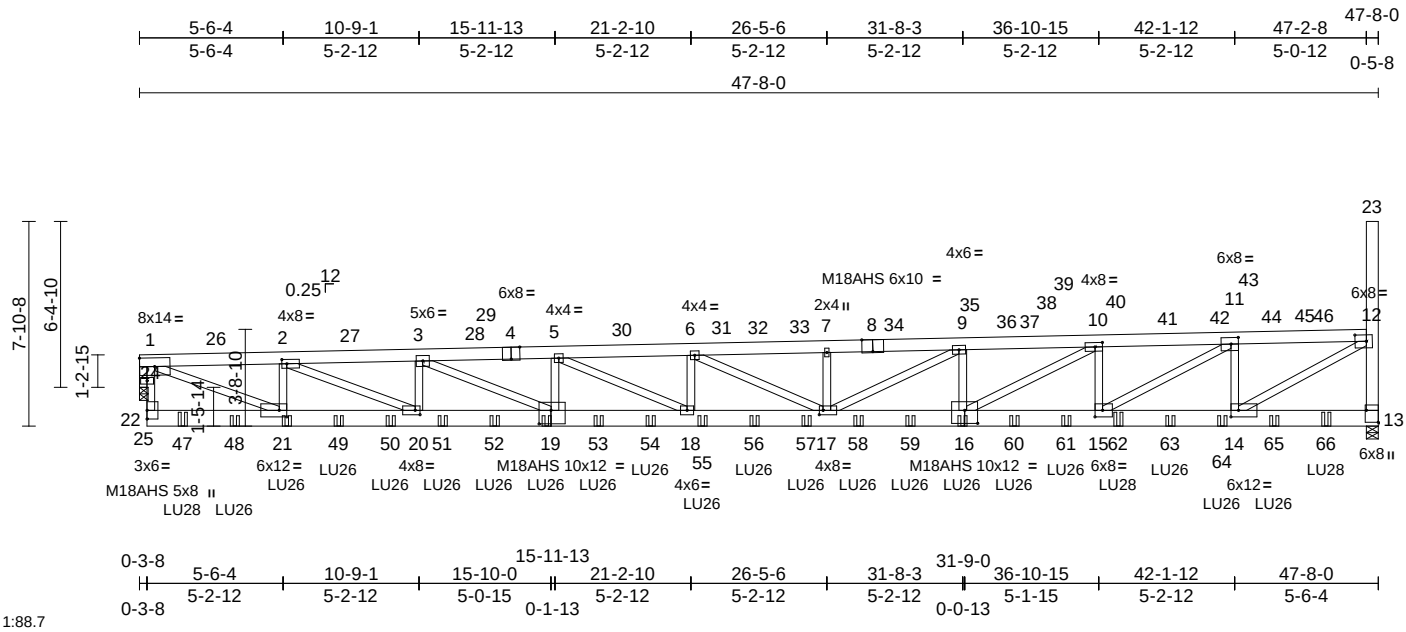

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Plate Offsets (X, Y): [2:0-2-4,0-2-0], [4:0-4-0,Edge], [8:0-5-0,Edge], [10:0-3-7,0-2-0], [11:0-3-7,0-3-0], [12:0-5-4,0-3-0], [13:Edge,0-5-8], [14:0-3-8,0-3-0], [15:0-3-8,0-3-0], [16:0-6-0,0-6-0], [17:0-1-12,0-2-0], [19:0-5-8,0-6-4], [20:0-2-4,0-2-0], [21:0-3-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-1.30	17-18	>436	240	M18AHS	186/179
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-2.19	17-18	>259	180	MT20	244/190
TCDL	15.0	Rep Stress Incr	NO	WB	0.93	Horz(CT)	0.12	13	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 1124 lb	FT = 12%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x8 SP M 23
WEBS 2x4 SP No.2 *Except* 21-1:2x4 SP 2400F 2.0E, 20-2,15-11,14-12:2x4 SP 1650F 1.6E, 23-13:2x6 SP 2400F 2.0E
OTHERS 2x4 SP No.2

BRACING

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

REACTIONS (size) 13=0-5-8, 25=0-4-0
Max Horiz 25=322 (LC 10)
Max Uplift 13=-3792 (LC 13), 25=-3082 (LC 13)
Max Grav 13=10160 (LC 18), 25=10355 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 22-24=-336/1028, 1-24=-336/1028, 1-2=-21615/7630, 2-3=-35327/12398, 3-5=-43234/15208, 5-6=-46286/16406, 6-7=-44408/15937, 7-9=-44407/15942, 9-10=-38555/14163, 10-11=-29178/11182, 11-12=-16169/6850, 12-13=-9434/3790, 12-23=0/0
BOT CHORD 21-22=-828/1694, 20-21=-7549/21607, 18-20=-14944/43331, 17-18=-16009/46273, 15-17=-13777/38627, 14-15=-6427/15931, 13-14=-323/519
WEBS 1-21=-7450/21718, 2-21=-6751/2414, 2-20=-5208/14995, 3-20=-4268/1595, 3-19=-3108/8763, 5-19=-1848/784, 5-18=-1274/3270, 6-18=-207/641, 6-17=-2104/617, 7-17=-373/222, 9-17=-2111/6577, 9-16=-3408/1173, 10-16=-3523/10821, 10-15=-5656/1944, 11-15=-5136/15388, 11-14=-7891/2641, 12-14=-7129/18082, 1-25=-10734/3684

NOTES

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-6-0 oc.
Bottom chords connected as follows: 2x8 - 2 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) 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=25ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-5-4 to 5-5-4, Exterior (2) 5-5-4 to 42-5-4, Corner (3) 42-5-4 to 47-5-4 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=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) Plates checked for a plus or minus 5 degree rotation about its center.
9) Bearing at joint(s) 25 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3792 lb uplift at joint 13 and 3082 lb uplift at joint 25.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

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Continued on page 2

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14) Use Simpson Strong-Tie LU28 (8-10dx1 1/2 Girder, 6-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 44-0-0 oc max. starting at 1-8-0 from the left end to 45-8-0 to connect truss(es) to front face of bottom chord.
15) Use Simpson Strong-Tie LU26 (6-16d Girder, 4-10dx1 1/2 Truss) or equivalent spaced at 4-0-0 oc max. starting at 3-8-0 from the left end to 39-8-0 to connect truss(es) to front face of bottom chord.
16) Use Simpson Strong-Tie LU28 (8-16d Girder, 6-10dx1 1/2 Truss) or equivalent at 37-8-0 from the left end to connect truss(es) to front face of bottom chord.
17) Use Simpson Strong-Tie LU26 (6-10d Girder, 4-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 41-8-0 from the left end to 43-8-0 to connect truss(es) to front face of bottom chord.
18) 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: 1-35=-61, 13-22=-20
   Concentrated Loads (lb)
   Vert: 1=0, 21=-711 (F), 19=-711 (F), 9=0, 16=-711 (F), 47=-715 (F), 48=-711 (F), 49=-711 (F), 50=-711 (F), 51=-711 (F), 52=-711 (F), 53=-711 (F), 54=-711 (F), 55=-711 (F), 56=-711 (F), 57=-711 (F), 58=-711 (F), 59=-711 (F), 60=-733 (F), 61=-771 (F), 62=-826 (F), 63=-705 (F), 64=-572 (F), 65=-436 (F), 66=-363 (F)
   Trapezoidal Loads (lb/ft)
   Vert: 35=-61-to-36=-63, 36=-64-to-37=-66, 37=-66-to-38=-67, 38=-67-to-39=-68, 39=-68-to-10=-71, 10=-71-to-40=-73, 40=-73-to-41=-78, 41=-78-to-42=-82, 42=-83-to-11=-84, 11=-84-to-43=-85, 43=-86-to-44=-88, 44=-89-to-45=-92, 45=-93-to-46=-95, 46=-97-to-12=-103

June 6,2025

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M44	Monopitch	20	1	Job Reference (optional)	I73987968

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:13 Page: 1
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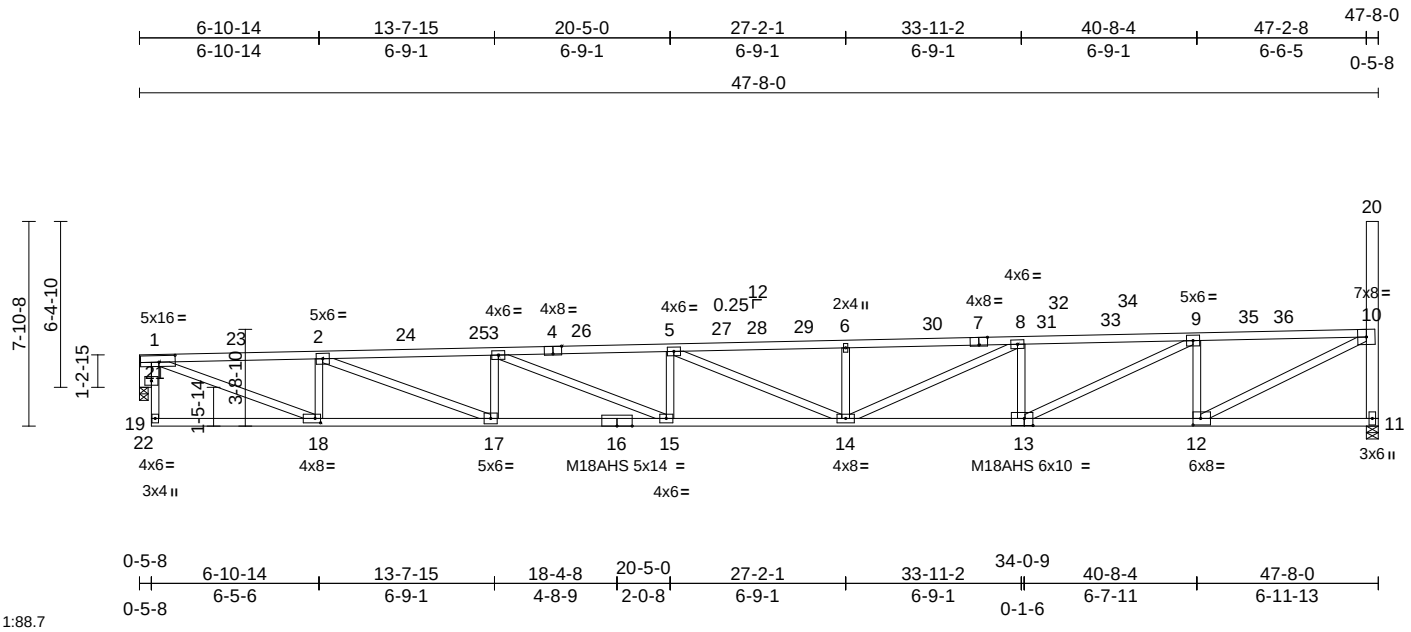

Scale = 1:88.7

Plate Offsets (X, Y): [1:0-7-8,0-3-0], [4:0-4-0,Edge], [7:0-4-0,Edge], [12:0-3-8,0-3-0], [13:0-4-0,0-3-4], [18:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.86	14-15	>663	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-1.86	14-15	>304	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	Yes	WB	0.85	Horz(CT)	0.16	11	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 255 lb	FT = 12%

LUMBER
TOP CHORD 2x4 DF-N 2850F 2.3E *Except* 1-4:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E *Except* 11-13:2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 19-1,10-12,1-18,13-9,14-8:2x4 SP 1650F 1.6E, 20-11:2x6 SP 2400F 2.0E
OTHERS 2x6 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-1-6 oc bracing.

REACTIONS (size) 11=0-5-8, 22=0-4-0
Max Horiz 22=324 (LC 10)
Max Uplift 11=-178 (LC 13), 22=-201 (LC 13)
Max Grav 11=2541 (LC 26), 22=2121 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 19-21=0/82, 1-21=0/82, 1-2=-4942/1760, 2-3=-7769/2656, 3-5=-8898/3031, 5-6=-8569/2952, 6-8=-8569/2960, 8-9=-6903/2475, 9-10=-4269/1686, 10-11=-2471/731, 10-20=0/0
BOT CHORD 18-19=-384/484, 17-18=-1645/4936, 15-17=-2406/7762, 14-15=-2658/8891, 12-14=-2073/6940, 11-12=-121/246
WEBS 2-18=-1632/629, 3-17=-945/422, 2-17=-952/3026, 5-15=-324/229, 3-15=-396/1218, 6-14=-479/269, 5-14=-487/204, 8-13=-1212/522, 9-12=-1976/686, 10-12=-1333/4651, 1-18=-1492/4798, 9-13=-992/3028, 8-14=-630/1844, 1-22=-2336/733

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=25ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-7-4 to 5-7-4, Exterior (2) 5-7-4 to 42-5-4, Corner (3) 42-5-4 to 47-5-4 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=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 11 and 201 lb uplift at joint 22.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

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

Uniform Loads (lb/ft)
Vert: 1-32=-61, 11-19=-20
Trapezoidal Loads (lb/ft)
Vert: 32=-59-to-33=-66, 33=-66-to-34=-70, 34=-73-to-9=-86, 9=-89-to-35=-104, 35=-107-to-36=-119, 36=-119-to-10=-148

June 6,2025

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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M44G	Monopitch Girder	2	**2**	Job Reference (optional)	I73987969

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:14 Page: 1
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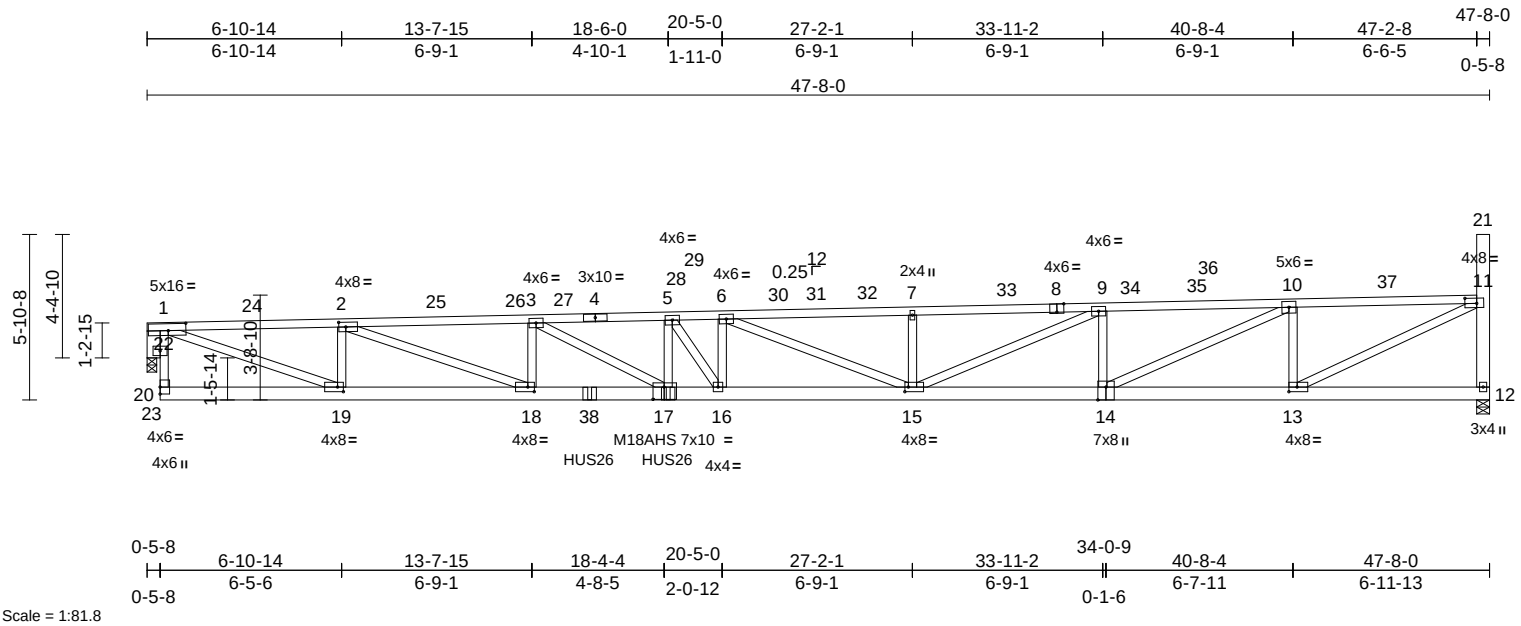

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Plate Offsets (X, Y): [1:0-7-8,0-3-0], [2:0-3-0,0-2-0], [8:0-3-0,Edge], [11:0-5-0,0-2-4], [13:0-3-8,0-2-0], [14:0-5-8,Edge], [15:0-1-8,0-2-0], [17:0-4-12,0-5-4], [18:0-2-12,0-2-0], [19:0-2-8,0-2-0]

Loading	(psf)	**Spacing**	2-0-0	**CSI**		**DEFL**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.72	15-16	>789	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-1.67	15-16	>340	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.08	12	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 586 lb	FT = 12%

LUMBER

TOP CHORD	2x4 DF-N 2850F 2.3E *Except* 8-11:2x4 SP 2400F 2.0E
BOT CHORD	2x6 SP 2400F 2.0E
WEBS	2x4 SP No.2 *Except* 11-13,1-19,14-10:2x4 SP 1650F 1.6E, 21-12:2x6 SP 2400F 2.0E
OTHERS	2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 12=0-5-8, 23=0-4-0
Max Horiz 23=219 (LC 55)
Max Uplift 12=-219 (LC 13), 23=-243 (LC 13)
Max Grav 12=3577 (LC 26), 23=3982 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

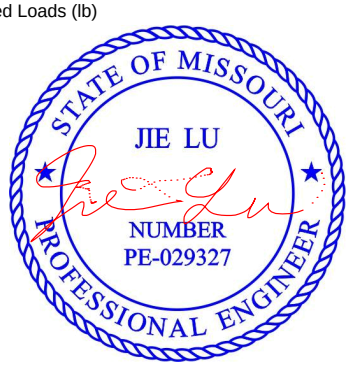
TOP CHORD	20-22=-4/171, 1-22=-4/171, 1-2=-10013/1826, 2-3=-17447/2819, 3-5=-20098/3188, 5-6=-19257/3250, 6-7=-16017/3044, 7-9=-16017/3052, 9-10=-11623/2452, 10-11=-6525/1541, 11-12=-3467/733, 11-21=0/0
BOT CHORD	19-20=-359/956, 18-19=-1786/10007, 16-18=-3060/20037, 15-16=-3099/19253, 13-15=-2224/11704, 12-13=-15/158
WEBS	2-19=-3417/668, 3-18=-2004/416, 2-18=-1052/7925, 6-16=-19/1162, 7-15=-488/276, 6-15=-3513/265, 9-14=-2331/535, 10-13=-3061/719, 11-13=-1409/7096, 1-19=-1611/9672, 10-14=-1055/5701, 9-15=-692/4727, 5-17=-208/1194, 3-17=-415/3043, 5-16=-1549/106, 1-23=-4353/773

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 0-4-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 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) 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=25ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-7-4 to 5-7-4, Exterior (2) 5-7-4 to 42-5-4, Corner (3) 42-5-4 to 47-5-4 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=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) Plates checked for a plus or minus 5 degree rotation about its center.
9) Bearing at joint(s) 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 219 lb uplift at joint 12 and 243 lb uplift at joint 23.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-9-8 oc max. starting at 15-8-8 from the left end to 18-6-0 to connect truss(es) to back face of bottom chord.
15) 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: 1-27=-61, 4-27=-104, 5-28=-70, 28-36=-61, 12-20=-20
Concentrated Loads (lb)



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Vert: 17=-1736 (B), 5=-8, 38=-1103 (B)

Trapezoidal Loads (lb/ft)

Vert: 4=-71-to-5=-73, 36=-61-to-10=-87, 10=-87-to-37=-117, 37=-117-to-11=-147

June 6,2025

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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M45	Monopitch	3	1	Job Reference (optional)	I73987970

Lumber Specialties, Dyersville, IA - 52040,

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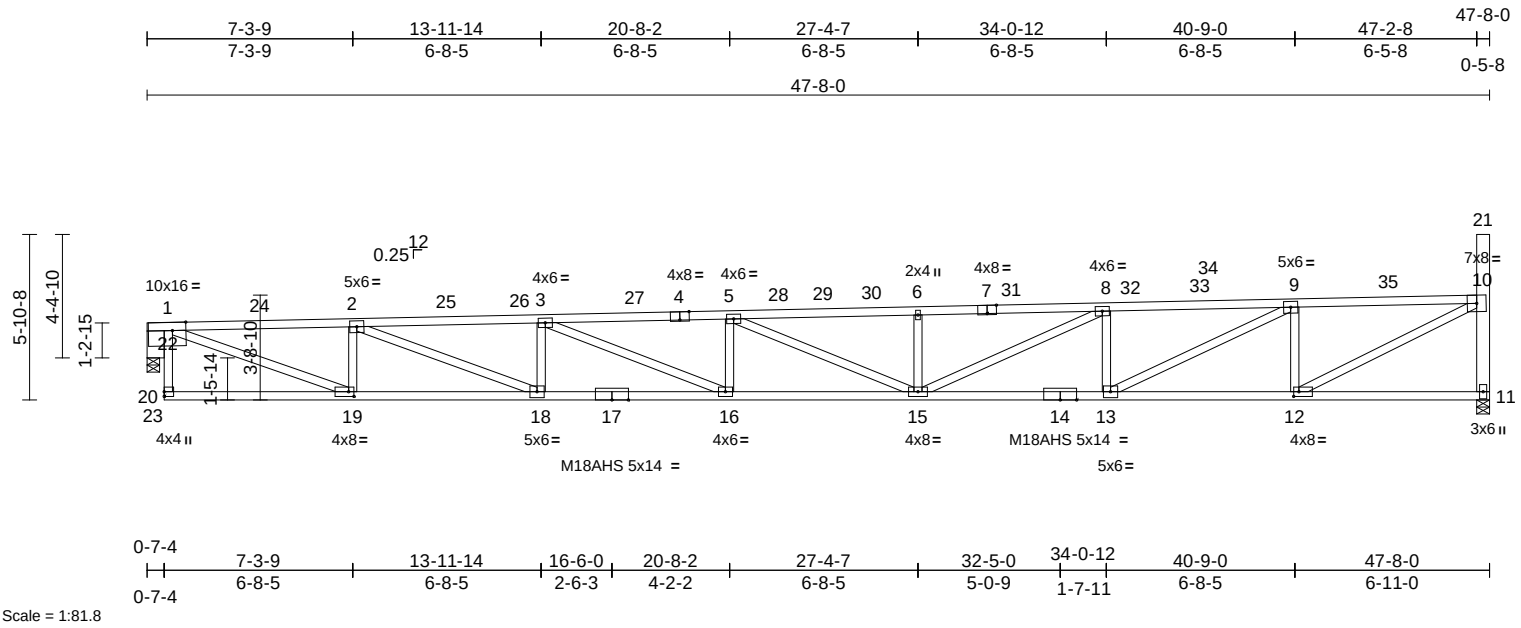

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Plate Offsets (X, Y): [1:0-5-12,Edge], [4:0-4-0,Edge], [7:0-4-0,Edge], [12:0-2-4,0-2-0], [19:0-2-4,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.82	15-16	>692	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-1.80	15-16	>315	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	Yes	WB	0.78	Horz(CT)	0.17	11	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 249 lb	FT = 12%

LUMBER
TOP CHORD 2x4 DF-N 2850F 2.3E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 20-1,10-12,19-1,15-8,13-9:2x4 SP 1650F 1.6E, 21-11:2x6 SP 2400F 2.0E
OTHERS 2x8 SP M 23

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-0-12 oc bracing.

REACTIONS (size) 11=0-5-8, 23=0-5-4
Max Horiz 23=222 (LC 10)
Max Uplift 11=-185 (LC 13), 23=-192 (LC 13)
Max Grav 11=2459 (LC 26), 23=2102 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 20-22=0/86, 1-22=0/86, 1-2=-5099/1711, 2-3=-7788/2541, 3-5=-8829/2864, 5-6=-8446/2750, 6-8=-8446/2757, 8-9=-6803/2262, 9-10=-4134/1439, 10-11=-2388/704, 10-21=0/0
BOT CHORD 19-20=-326/551, 18-19=-1664/5094, 16-18=-2438/7781, 15-16=-2711/8822, 13-15=-2013/6797, 12-13=-1149/4125, 11-12=-1/116
WEBS 10-12=-1304/4518, 2-19=-1598/612, 1-19=-1480/4853, 2-18=-882/2883, 3-18=-905/397, 3-16=-342/1124, 5-16=-295/210, 5-15=-527/173, 6-15=-475/266, 8-15=-597/1854, 8-13=-1217/505, 9-13=-963/3054, 9-12=-1932/682, 1-23=-2412/748

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=25ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-9-0 to 5-9-0, Exterior (2) 5-9-0 to 42-5-4, Corner (3) 42-5-4 to 47-5-4 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=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Bearing at joint(s) 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 185 lb uplift at joint 11 and 192 lb uplift at joint 23.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-34=-61, 11-20=-20
Trapezoidal Loads (lb/ft)
Vert: 34=-61-to-9=-84, 9=-84-to-35=-109, 35=-109-to-10=-135

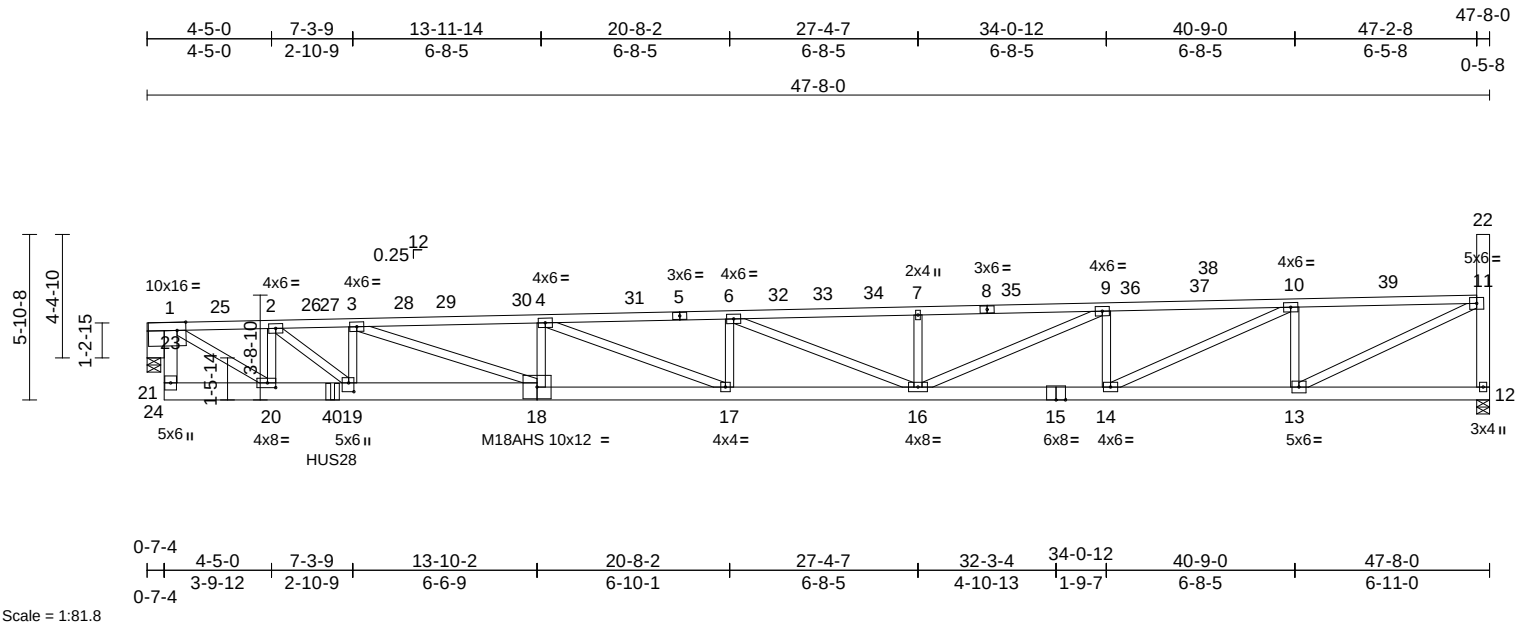
June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M45G	Monopitch Girder	2	**2**	Job Reference (optional)	I73987971

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:15 ID:gfjaXGfHXVrZijW8nyiG4XzEg69-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:81.8

Plate Offsets (X, Y): [1:0-3-12,Edge], [19:0-3-12,0-2-4], [20:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.59	16-17	>957	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-1.36	16-17	>417	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.02	12	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 613 lb	FT = 12%

LUMBER

TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x6 SP 2400F 2.0E *Except* 18-21:2x8 SP M 23
WEBS 2x4 SP No.2 *Except* 21-1,22-12:2x6 SP 2400F 2.0E
OTHERS 2x8 SP M 23

BRACING

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

REACTIONS (size) 12=0-5-8, 24=0-5-13
Max Horiz 24=218 (LC 10)
Max Uplift 12=-156 (LC 13)
Max Grav 12=2822 (LC 26), 24=4551 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 21-23=-8/341, 1-23=-8/341, 1-2=-7388/697, 2-3=-11015/1328, 3-4=-12269/2191, 4-6=-12385/2648, 6-7=-10970/2592, 7-9=-10970/2599, 9-10=-8489/2180, 10-11=-4945/1397, 11-12=-2718/669, 11-22=0/0
BOT CHORD 20-21=-262/1543, 19-20=-691/7381, 17-19=-2125/12289, 16-17=-2501/12377, 14-16=-1932/8483, 13-14=-1110/4936, 12-13=-15/144
WEBS 10-13=-2306/654, 3-19=-1011/748, 4-18=-523/688, 3-18=-1704/1341, 6-17=-29/475, 4-17=-1084/348, 7-16=-468/265, 6-16=-1574/107, 9-14=-1566/468, 9-16=-517/2760, 10-14=-912/3998, 11-13=-1253/5361, 2-20=-3496/324, 1-20=-587/6941, 2-19=-817/4706, 1-24=-5238/276

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.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-10-0 to 5-10-0, Exterior (2) 5-10-0 to 42-5-4, Corner (3) 42-5-4 to 47-5-4 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=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) Plates checked for a plus or minus 5 degree rotation about its center.
9) Bearing at joint(s) 24 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 156 lb uplift at joint 12.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
14) Use Simpson Strong-Tie HUS28 (22-10d Girder, 8-10d Truss) or equivalent at 6-7-0 from the left end to connect truss(es) to back face of bottom chord.
15) 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: 1-27=-145, 27-28=-88, 28-38=-61, 12-21=-20
Concentrated Loads (lb)
Vert: 27=-6, 40=-2248 (B)

June 6,2025

Continued on page 2

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Trapezoidal Loads (lb/ft)
Vert: 38=-61-to-10=-85, 10=-85-to-39=-111, 39=-111-to-11=-138

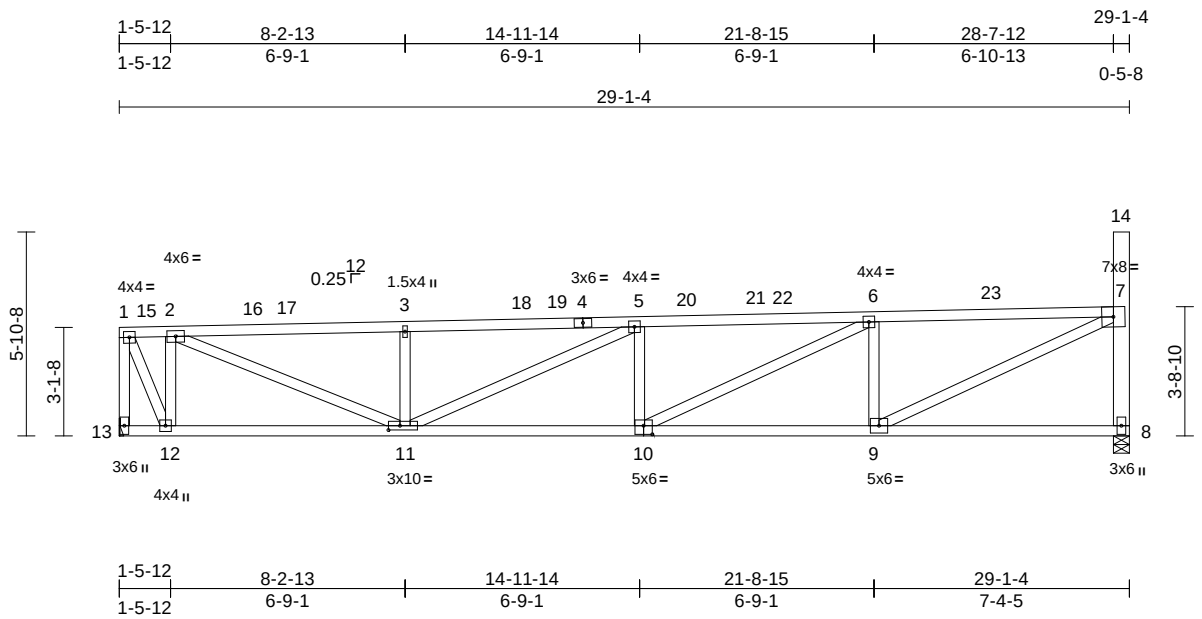
June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M46	Monopitch	2	1	Job Reference (optional)	I73987972

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:15 ID:35GjH_BtkoXh9vLS1pLMc_zEfx9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:66.4

Plate Offsets (X, Y): [10:0-3-0,0-3-0], [11:0-4-0,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.16	10-11	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.36	10-11	>957	180		
TCDL	15.0	Rep Stress Incr	Yes	WB	0.85	Horz(CT)	0.06	8	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 164 lb	FT = 12%

LUMBER

TOP CHORD 2x4 SP 1650F 1.6E *Except* 4-7:2x4 DF-N 2850F 2.3E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 14-8:2x6 SP 2400F 2.0E, 10-6,11-5,9-7:2x4 SP 1650F 1.6E

BRACING

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

REACTIONS (size) 8=0-5-8, 13= Mechanical
Max Horiz 13=246 (LC 10)
Max Uplift 8=-184 (LC 10), 13=-162 (LC 9)
Max Grav 8=1655 (LC 26), 13=1357 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 7-8=-1584/612, 7-14=0/0, 1-2=-692/301, 2-3=-2738/1107, 3-5=-2739/1116, 5-6=-3251/1369, 6-7=-2565/1114, 1-13=-1378/503
BOT CHORD 12-13=-441/332, 11-12=-680/773, 9-11=-1398/3254, 8-9=-6/126
WEBS 2-12=-1339/690, 3-11=-486/332, 2-11=-923/2214, 6-9=-1037/553, 6-10=-481/910, 5-11=-624/278, 5-10=-271/291, 1-12=-668/1608, 7-9=-1067/2709

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=25ft; B=45ft; L=29ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 162 lb uplift at joint 13 and 184 lb uplift at joint 8.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 8-13=-20, 1-22=-61
Concentrated Loads (lb)
Vert: 1=-18
Trapezoidal Loads (lb/ft)
Vert: 22=-61-to-6=-83, 6=-83-to-23=-113, 23=-113-to-7=-145

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

June 6,2025

MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M47	Monopitch	2	1	Job Reference (optional)	I73987973

Lumber Specialties, Dyersville, IA - 52040,

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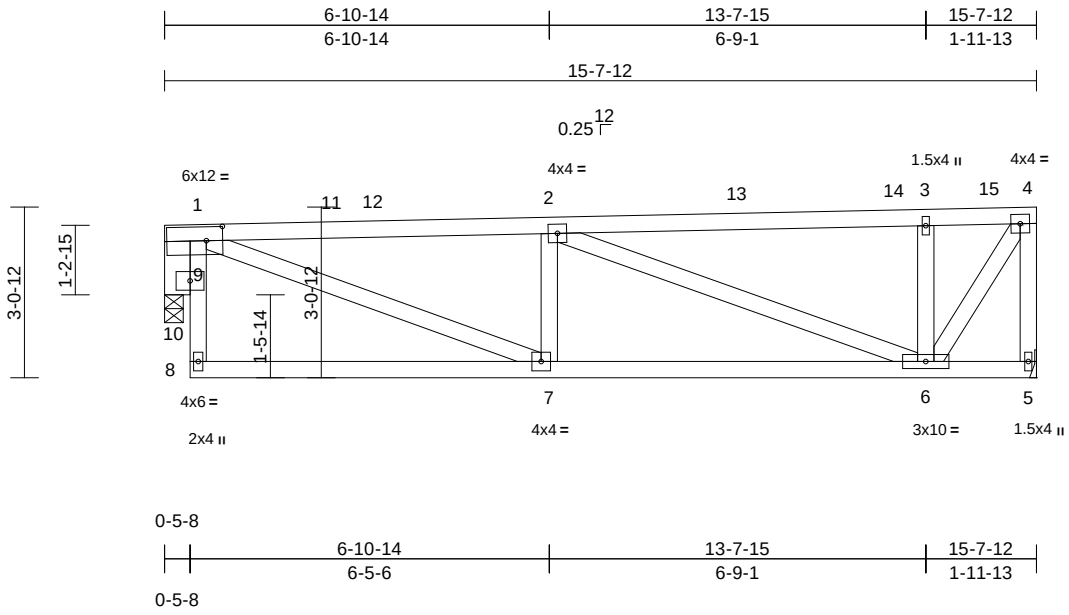

Scale = 1:41.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	0.04	6-7	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.09	6-7	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 86 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2
OTHERS	2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-5-15 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-10-1 oc bracing.

REACTIONS (size) 5= Mechanical, 10=0-4-0
Max Horiz 10=44 (LC 13)
Max Uplift 5=-85 (LC 10), 10=-124 (LC 9)
Max Grav 5=737 (LC 2), 10=652 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	8-9=0/64, 1-9=0/64, 1-2=-1143/681, 2-3=-517/297, 3-4=-516/306
BOT CHORD	7-8=-133/188, 6-7=-700/1138, 5-6=0/0
WEBS	2-7=-244/323, 3-6=-429/370, 2-6=-672/423, 1-7=-621/1028, 4-5=-752/369, 4-6=-550/925, 1-10=-741/462

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 5 and 124 lb uplift at joint 10.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 1-15=-61, 4-15=-132, 5-8=-20

June 6,2025

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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M48G	Flat Girder	1	1	Job Reference (optional)	I73987974

Lumber Specialties, Dyersville, IA - 52040,

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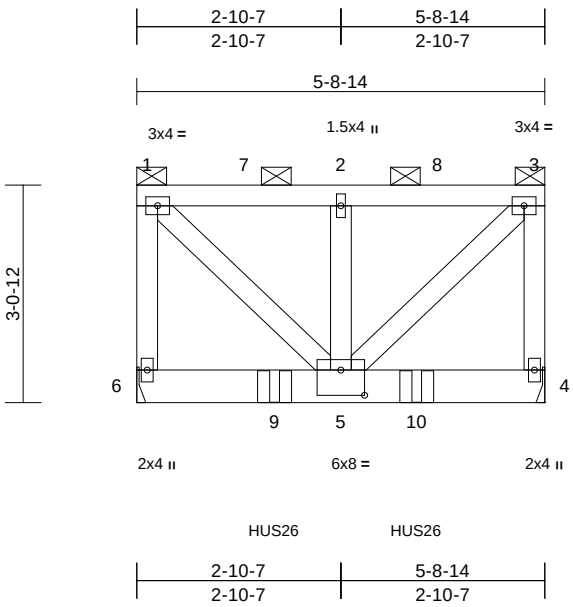

Scale = 1:32.4

Plate Offsets (X, Y): [5:0-4-0,0-4-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	0.01	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 42 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING
TOP CHORD 2-0-0 oc purlins: 1-3, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 6= Mechanical
Max Horiz 6=-97 (LC 9)
Max Uplift 4=-32 (LC 10), 6=-33 (LC 9)
Max Grav 4=1123 (LC 1), 6=1082 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-892/222, 1-2=-770/138, 2-3=-770/138, 3-4=-898/216
BOT CHORD 5-6=-144/148, 4-5=-52/56
WEBS 1-5=-244/1081, 2-5=-505/163, 3-5=-244/1081

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 6 and 32 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-11-4 from the left end to 3-11-4 to connect truss(es) to front face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 4-6=-20
Concentrated Loads (lb)
Vert: 3=-3, 9=-717 (F), 10=-717 (F)
Trapezoidal Loads (lb/ft)
Vert: 1=-120-to-7=-120, 7=-120-to-2=-121, 2=-121-to-8=-121, 8=-121-to-3=-122

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M49G	Flat Girder	1	1	Job Reference (optional)	I73987975

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:16
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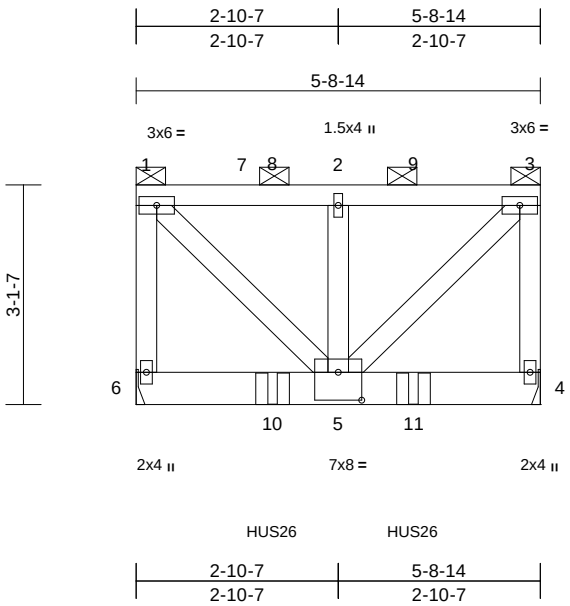

Scale = 1:32.7

Plate Offsets (X, Y): [5:0-4-0,0-4-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.01	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.03	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 43 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING
TOP CHORD 2-0-0 oc purlins: 1-3, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 6= Mechanical
Max Horiz 6=99 (LC 12)
Max Uplift 4=-114 (LC 10), 6=-96 (LC 9)
Max Grav 4=1756 (LC 1), 6=1698 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-1379/271, 1-2=-1220/192, 2-3=-1220/192, 3-4=-1370/279
BOT CHORD 5-6=-147/151, 4-5=-53/57
WEBS 1-5=-325/1732, 2-5=-501/167, 3-5=-325/1732

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 6 and 114 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-11-4 from the left end to 3-11-4 to connect truss(es) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 4-6=-20
Concentrated Loads (lb)
Vert: 1=-11, 10=-1337 (B), 11=-1337 (B)
Trapezoidal Loads (lb/ft)
Vert: 1=-120-to-7=-121, 7=-121-to-8=-121, 8=-122-to-2=-122, 2=-122-to-9=-121, 9=-121-to-3=-123

June 6,2025

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M50	Monopitch	18	1	Job Reference (optional)	I73987976

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:16 Page: 1
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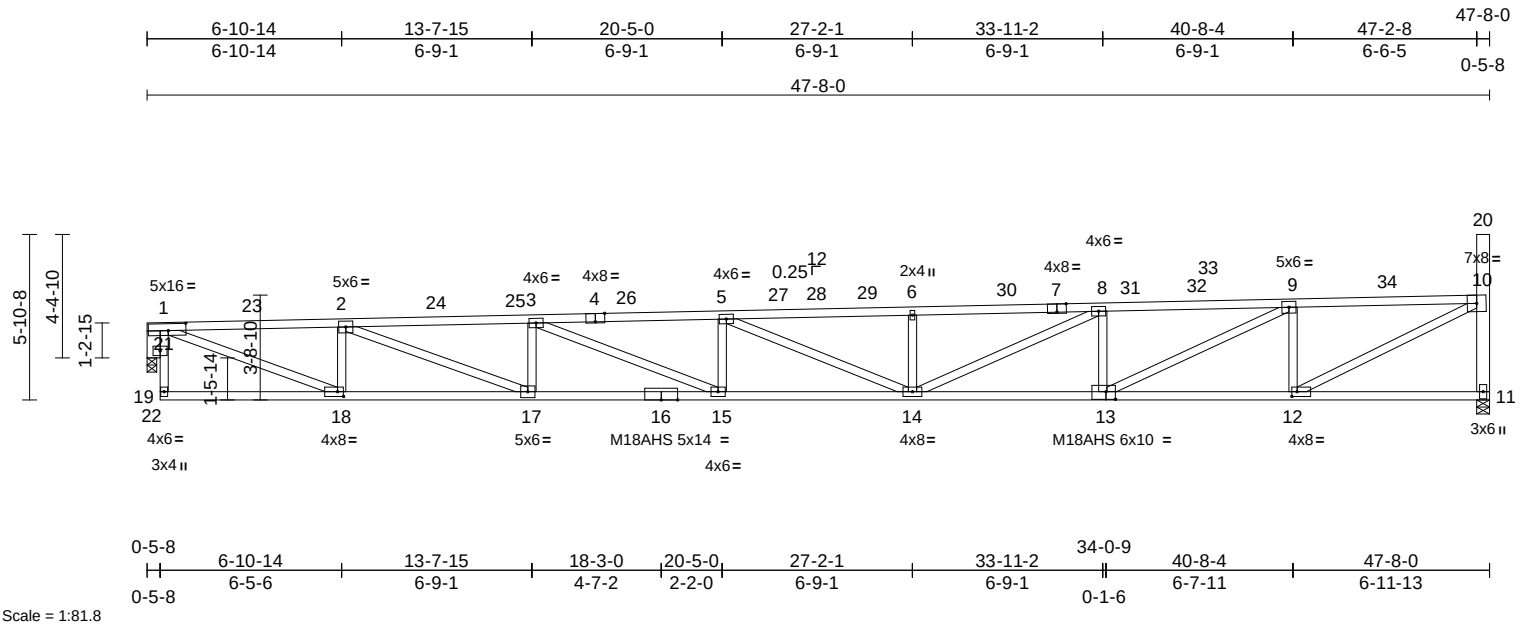

Scale = 1:81.8

Plate Offsets (X, Y): [1:0-7-8,0-3-0], [4:0-4-0,Edge], [7:0-4-0,Edge], [12:0-2-4,0-2-0], [13:0-4-0,0-3-4], [18:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.84	14-15	>674	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-1.85	14-15	>307	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	Yes	WB	0.82	Horz(CT)	0.16	11	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 250 lb	FT = 12%

LUMBER
TOP CHORD 2x4 DF-N 2850F 2.3E *Except* 1-4:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E *Except* 13-11:2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 19-1,1-18,10-12,14-8,13-9:2x4 SP 1650F 1.6E, 20-11:2x6 SP 2400F 2.0E
OTHERS 2x6 SP 2400F 2.0E

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

REACTIONS (size) 11=0-5-8, 22=0-4-0
Max Horiz 22=222 (LC 10)
Max Uplift 11=-186 (LC 13), 22=-193 (LC 13)
Max Grav 11=2465 (LC 26), 22=2113 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 19-21=0/81, 1-21=0/81, 1-2=-4921/1657, 2-3=-7729/2522, 3-5=-8842/2868, 5-6=-8497/2764, 6-8=-8497/2772, 8-9=-6816/2263, 9-10=-4176/1451, 10-11=-2395/705, 10-20=0/0
BOT CHORD 18-19=-302/465, 17-18=-1612/4916, 15-17=-2421/7723, 14-15=-2716/8835, 12-14=-2032/6854, 11-12=-1/117
WEBS 1-18=-1458/4777, 10-12=-1315/4555, 2-18=-1625/619, 2-17=-918/3006, 3-17=-938/409, 3-15=-366/1200, 5-15=-317/218, 5-14=-504/162, 6-14=-480/268, 8-14=-590/1844, 8-13=-1212/503, 9-13=-952/3028, 9-12=-1932/683, 1-22=-2327/719

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=25ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-7-4 to 5-7-4, Exterior (2) 5-7-4 to 42-5-4, Corner (3) 42-5-4 to 47-5-4 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=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 186 lb uplift at joint 11 and 193 lb uplift at joint 22.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

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

Uniform Loads (lb/ft)
Vert: 1-33=-61, 11-19=-20
Trapezoidal Loads (lb/ft)
Vert: 33=-61-to-9=-84, 9=-84-to-34=-109, 34=-109-to-10=-135

June 6,2025

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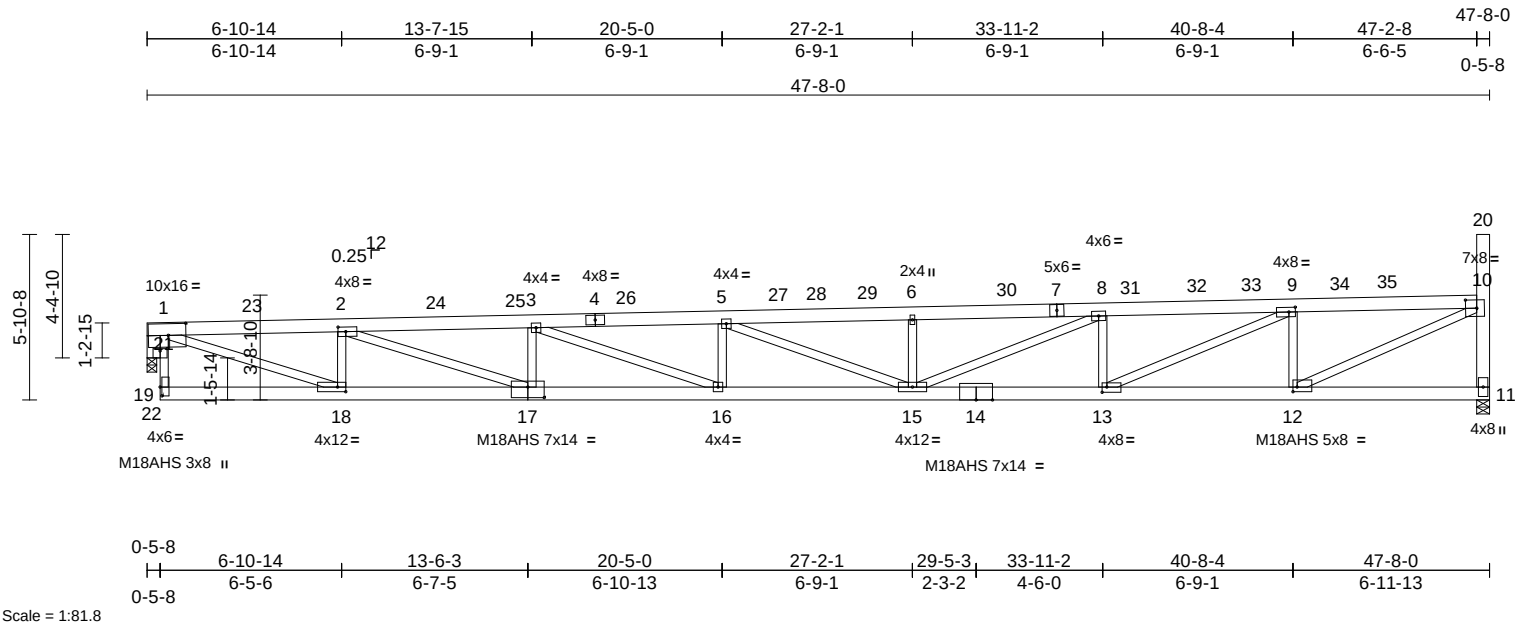
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M50A	Monopitch	2	1	Job Reference (optional)	I73987977

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:17 ID:qcgJIW8tz55JCVT7yCzyWAzEg86-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:81.8

Plate Offsets (X, Y): [1:0-7-8,0-5-0], [2:0-3-4,0-2-0], [9:0-2-12,0-2-0], [10:0-4-12,0-3-8], [12:0-1-12,0-2-0], [13:0-2-0,0-2-4], [17:0-7-0,0-4-8], [18:0-3-8,0-2-0], [19:0-3-12,0-0-12], [21:0-3-0,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-1.15	15-16	>495	240	M18AHS	186/179
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-1.93	15-16	>293	180	MT20	244/190
TCDL	15.0	Rep Stress Incr	Yes	WB	0.91	Horz(CT)	0.13	11	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 329 lb	FT = 12%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 19-1,10-12,17-2,13-9:2x4 SP 1650F 1.6E, 1-18:2x4 SP 2400F 2.0E, 20-11:2x6 SP 2400F 2.0E
OTHERS 2x6 SP 2400F 2.0E

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-3-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-2-8 oc bracing.

REACTIONS (size) 11=0-5-8, 22=0-4-0, (req. 0-4-8)
Max Horiz 22=222 (LC 10)
Max Uplift 11=-186 (LC 13), 22=-193 (LC 13)
Max Grav 11=3002 (LC 26), 22=2854 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 19-21=0/130, 1-21=0/130, 1-2=-7005/1743, 2-3=-10885/2635, 3-5=-12465/3014, 5-6=-11866/2896, 6-8=-11866/2903, 8-9=-9479/2387, 9-10=-5512/1510, 10-11=-2902/700, 10-20=0/0
BOT CHORD 18-19=-310/704, 16-18=-2550/10948, 15-16=-2851/12455, 13-15=-2123/9470, 12-13=-1210/5503, 11-12=-19/165
WEBS 1-18=-1510/6697, 10-12=-1333/5930, 2-18=-2227/621, 2-17=-943/4128, 3-17=-1282/406, 3-16=-373/1612, 5-16=-440/215, 5-15=-760/176, 6-15=-688/266, 8-15=-618/2608, 8-13=-1690/506, 9-13=-1018/4371, 9-12=-2478/676, 1-22=-3165/733

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=25ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-7-4 to 5-7-4, Exterior (2) 5-7-4 to 42-5-4, Corner (3) 42-5-4 to 47-5-4 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=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) WARNING: Required bearing size at joint(s) 22 greater than input bearing size.
8) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 186 lb uplift at joint 11 and 193 lb uplift at joint 22.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-33=-93, 11-19=-20
Concentrated Loads (lb)
Vert: 1=-6
Trapezoidal Loads (lb/ft)
Vert: 33=-94-to-9=-88, 9=-90-to-34=-91, 34=-94-to-35=-109, 35=-109-to-10=-139

June 6,2025

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M50G	Roof Special Girder	1	3	Job Reference (optional)	I73987978

Lumber Specialties, Dyersville, IA - 52040,

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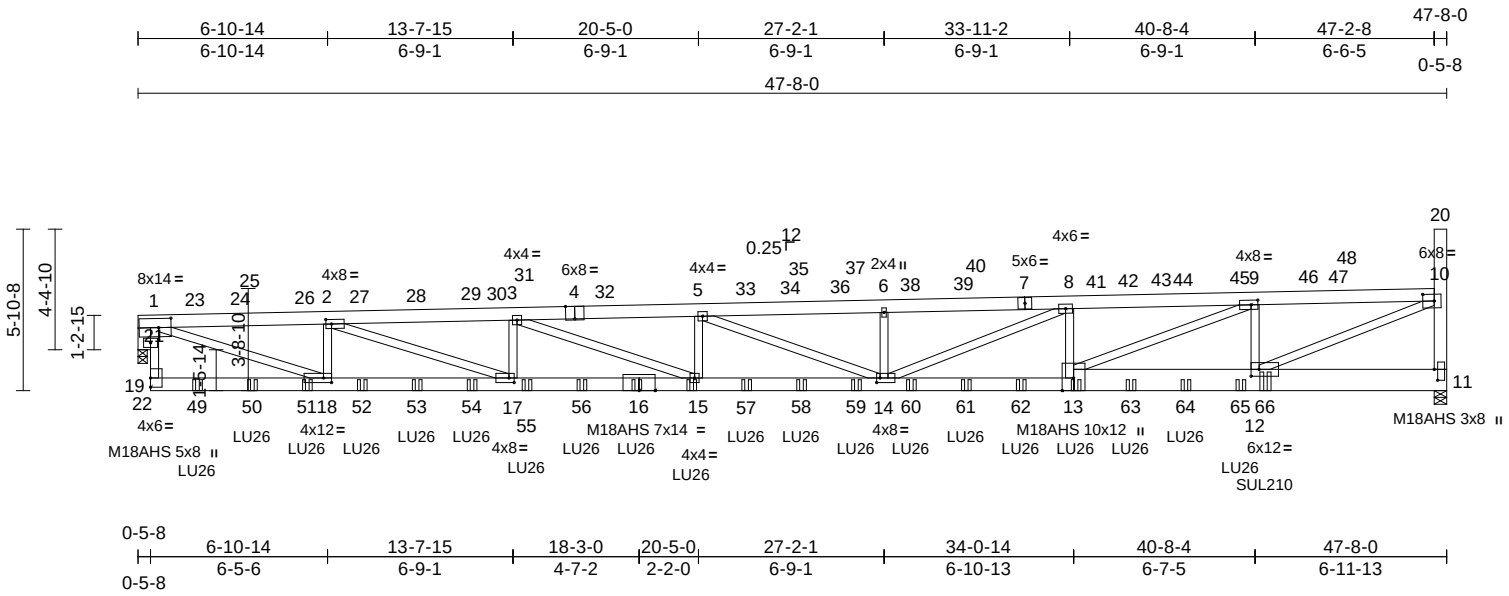
Page: 1



Scale = 1:83.9

Plate Offsets (X, Y): [1:0-5-8,0-4-0], [2:0-2-8,0-2-0], [4:0-4-0,Edge], [9:0-3-0,0-2-0], [10:0-5-0,0-3-0], [11:0-4-12,0-1-8], [12:0-3-8,0-3-0], [14:0-1-8,0-2-0], [17:0-2-4,0-2-0], [18:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-1.23	14-15	>461	240	M18AHS	186/179
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-1.87	14-15	>304	180	MT20	244/190
TCDL	15.0	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.10	11	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 1048 lb	FT = 12%

LUMBER

TOP CHORD	2x6 SP 2400F 2.0E
BOT CHORD	2x6 SP 2400F 2.0E *Except* 13-11:2x10 SP M 23
WEBS	2x4 SP No.2 *Except* 19-1,10-12,1-18:2x4 SP 1650F 1.6E, 20-11:2x6 SP 2400F 2.0E
OTHERS	2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-9-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 11=0-5-8, 22=0-4-0
Max Horiz 22=220 (LC 10)
Max Uplift 11=-2417 (LC 13), 22=-2402 (LC 13)
Max Grav 11=7781 (LC 26), 22=7933 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	19-21=-256/755, 1-21=-256/755, 1-2=-19793/7294, 2-3=-30999/11372, 3-5=-35372/13008, 5-6=-33800/12520, 6-8=-33799/12527, 8-9=-26804/10119, 9-10=-16232/6429, 10-11=-7419/2816, 10-20=0/0
BOT CHORD	18-19=-863/1991, 17-18=-7249/19783, 15-17=-11261/30986, 14-15=-12842/35358, 12-14=-9913/26964, 11-12=-176/503
WEBS	2-18=-4882/1813, 3-17=-2333/906, 2-17=-4323/11900, 5-15=-248/439, 3-15=-1742/4675, 6-14=-606/277, 5-14=-1692/575, 8-13=-3509/1288, 9-12=-5386/1910, 10-12=-6592/17306, 1-18=-6828/18932, 9-13=-4124/11692, 8-14=-2618/7459, 1-22=-8753/3164

NOTES

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-6-0 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=25ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-7-4 to 5-7-4, Exterior (2) 5-7-4 to 42-5-4, Corner (3) 42-5-4 to 47-5-4 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=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) Plates checked for a plus or minus 5 degree rotation about its center.
9) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2417 lb uplift at joint 11 and 2402 lb uplift at joint 22.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
14) Use Simpson Strong-Tie LU26 (6-10d Girder, 4-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-2-0 from the left end to 40-2-0 to connect truss(es) to back face of bottom chord.
15) Use Simpson Strong-Tie SUL210 (10-10d Girder, 10-10dx1 1/2 Truss) or equivalent at 41-0-12 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
16) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

June 6,2025

Continued on page 2

MiTek®
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Chesterfield, MO 63017
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1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 28-29=-83, 4-33=-83, 37-38=-83, 7-8=-83, 11-19=-20
Concentrated Loads (lb)
Vert: 1=0, 13=-465 (B), 16=-466 (B), 15=-466 (B), 46=-6, 49=-466 (B), 50=-466 (B), 51=-466 (B), 52=-467 (B), 53=-468 (B), 54=-465 (B), 55=-467 (B), 56=-468 (B), 57=-465 (B), 58=-467 (B), 59=-468 (B), 60=-465 (B), 61=-467 (B), 62=-465 (B), 63=-469 (B), 64=-467 (B), 65=-455 (B), 66=-942 (B)
Trapezoidal Loads (lb/ft)
Vert: 1=-84-to-23=-83, 23=-84-to-24=-84, 24=-84-to-25=-83, 25=-84-to-26=-83, 26=-84-to-2=-84, 2=-84-to-27=-83, 27=-84-to-28=-83, 29=-84-to-30=-84, 30=-84-to-3=-84, 3=-84-to-31=-83, 31=-84-to-4=-83, 33=-84-to-34=-83, 34=-83-to-35=-83, 35=-84-to-36=-84, 36=-84-to-37=-83, 38=-84-to-39=-83, 39=-84-to-40=-84, 40=-84-to-7=-83, 8=-84-to-41=-84, 41=-84-to-42=-83, 42=-84-to-43=-84, 43=-84-to-44=-83, 44=-84-to-45=-83, 45=-83-to-9=-90, 9=-83-to-46=-97, 46=-99-to-47=-103, 47=-104-to-48=-106, 48=-106-to-10=-135

June 6,2025

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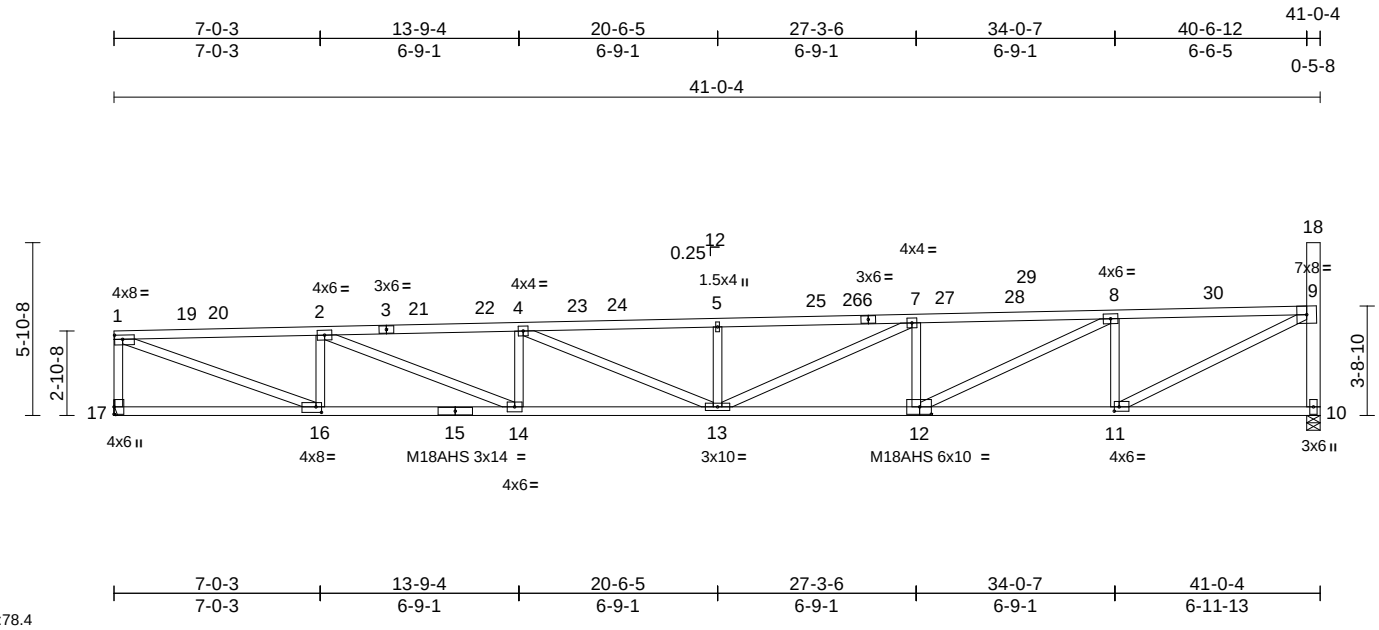
Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M51	Jack-Closed	2	1	Job Reference (optional)	I73987979

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:18 ID:nLRCYGCRTp2z8tdrZz1MYWzEg6l-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:78.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.53	13-14	>914	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-1.17	13-14	>418	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	Yes	WB	0.75	Horz(CT)	0.19	10	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 221 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 16-1,9-11,12-8,13-7:2x4 SP 1650F 1.6E, 18-10:2x6 SP 2400F 2.0E

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

REACTIONS (size) 10=0-5-8, 17= Mechanical
Max Horiz 17=245 (LC 10)
Max Uplift 10=-152 (LC 13), 17=-42 (LC 13)
Max Grav 10=2170 (LC 26), 17=1989 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4086/1181, 2-4=-6039/1852, 4-5=-6501/2037, 5-7=-6501/2044, 7-8=-5554/1803, 8-9=-3571/1230, 1-17=-1918/485, 9-10=-2100/630, 9-18=0/0
BOT CHORD 16-17=-446/390, 14-16=-1490/4078, 13-14=-2012/6032, 11-13=-1710/5580, 10-11=-2/116
WEBS 2-16=-1366/546, 1-16=-1286/4263, 4-14=-657/346, 2-14=-715/2108, 5-13=-485/269, 4-13=-193/593, 7-12=-892/421, 8-11=-1625/605, 9-11=-1145/3879, 8-12=-767/2305, 7-13=-389/1059

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=25ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-1-12 to 5-1-12, Exterior (2) 5-1-12 to 35-9-8, Corner (3) 35-9-8 to 40-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 152 lb uplift at joint 10 and 42 lb uplift at joint 17.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-19=-118, 19-29=-61, 10-17=-20
Concentrated Loads (lb)
Vert: 1=-1
Trapezoidal Loads (lb/ft)
Vert: 29=-61-to-8=-84, 8=-84-to-30=-110, 30=-110-to-9=-136

June 6,2025

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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M52G	Flat Girder	1	1	Job Reference (optional)	I73987980

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:19
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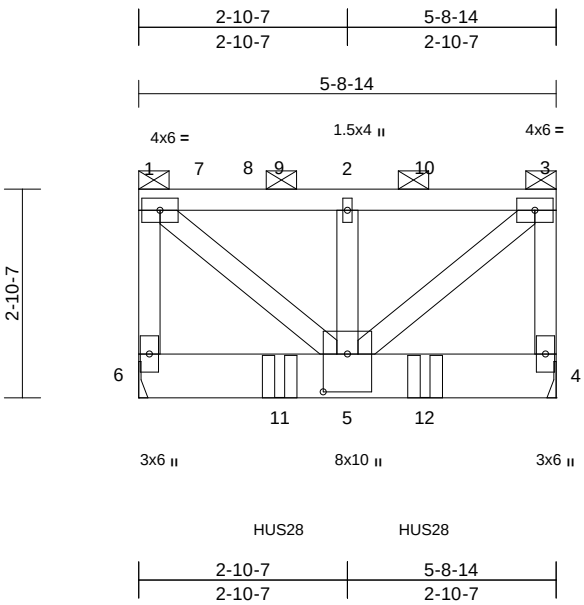

Scale = 1:31.7

Plate Offsets (X, Y): [5:0-6-4,0-4-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.01	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.03	4-5	>999	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.56	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 44 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x8 SP M 23
WEBS 2x4 SP No.2

BRACING
TOP CHORD 2-0-0 oc purlins (5-6-13 max.): 1-3, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 6= Mechanical
Max Horiz 6=-87 (LC 11)
Max Uplift 4=-120 (LC 10), 6=-116 (LC 9)
Max Grav 4=2268 (LC 1), 6=2172 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-1599/290, 1-2=-1690/182, 2-3=-1690/182, 3-4=-1598/292
BOT CHORD 5-6=-130/134, 4-5=-47/51
WEBS 1-5=-287/2263, 2-5=-328/340, 3-5=-287/2263

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 116 lb uplift at joint 6 and 120 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use Simpson Strong-Tie HUS28 (22-10d Girder, 8-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-11-4 from the left end to 3-11-4 to connect truss(es) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 3-10=-71, 4-6=-20
Concentrated Loads (lb)
Vert: 11=-1969 (B), 12=-1969 (B)
Trapezoidal Loads (lb/ft)
Vert: 1=-72-to-7=-72, 7=-72-to-8=-72, 8=-72-to-9=-73, 9=-73-to-2=-72, 2=-72-to-10=-71

June 6,2025

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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M53G	Roof Special Girder	1	3	Job Reference (optional)	I73987981

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:19
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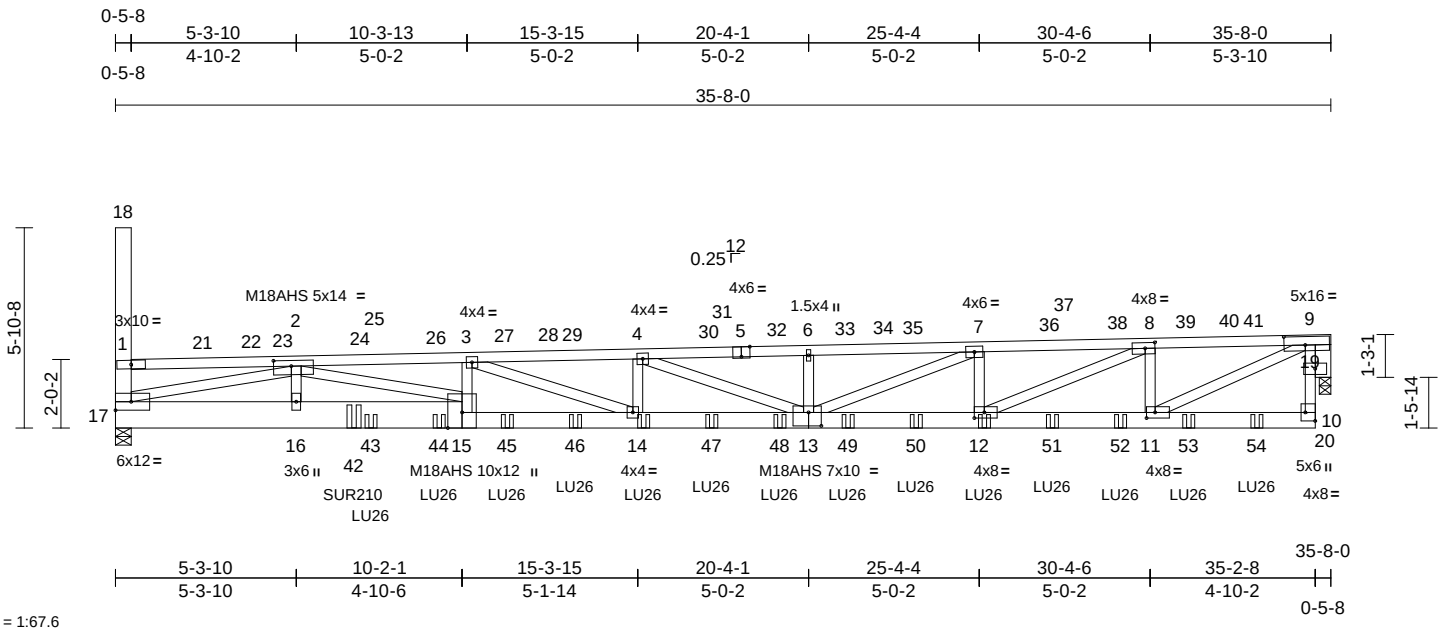

Scale = 1:67.6

Plate Offsets (X, Y): [2:0-6-4,0-2-0], [5:0-3-0,Edge], [8:0-3-7,0-2-0], [9:0-7-8,0-3-0], [10:Edge,0-3-8], [11:0-3-0,0-2-0], [12:0-3-8,0-2-0], [13:0-4-8,0-4-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.95	13-14	>445	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-1.45	13-14	>291	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	NO	WB	1.00	Horz(CT)	0.02	20	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 700 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x6 SP 2400F 2.0E *Except* 17-15:2x10 SP M 23
WEBS	2x4 SP No.2 *Except* 18-17:2x6 SP 2400F 2.0E
OTHERS	2x6 SP 2400F 2.0E

BRACING

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

REACTIONS (size) 17=0-5-8, 20=0-4-0
Max Horiz 17=272 (LC 10)
Max Uplift 17=-1866 (LC 9), 20=-1825 (LC 10)
Max Grav 17=5863 (LC 26), 20=6035 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-1907/1251, 2-3=-24908/9981, 3-4=-28395/10914, 4-6=-26626/10027, 6-7=-26625/10033, 7-8=-21318/7930, 8-9=-12394/4561, 10-19=-194/616, 9-19=-194/616, 1-17=-576/150, 1-18=0/0
BOT CHORD	16-17=-6994/16213, 14-16=-10086/25034, 12-14=-10970/28386, 11-12=-4596/12386, 10-11=-555/1439
WEBS	2-16=-425/684, 2-15=-3606/9242, 3-15=-1730/646, 3-14=-1184/3570, 4-14=-303/569, 4-13=-2010/957, 6-13=-472/216, 7-13=-2294/5776, 7-12=-2617/1073, 8-12=-3700/9786, 8-11=-4307/1673, 9-11=-4520/12245, 2-17=-15411/6386, 9-20=-6579/2412

NOTES

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 2 rows staggered at 0-6-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 3 rows staggered at 0-8-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-2-12 to 15-2-12, Exterior (2) 15-2-12 to 20-0-12, Corner (3) 20-0-12 to 35-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) Plates checked for a plus or minus 5 degree rotation about its center.
9) Bearing at joint(s) 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1866 lb uplift at joint 17 and 1825 lb uplift at joint 20.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
14) Use Simpson Strong-Tie SUR210 (10-10d Girder, 10-10dx1 1/2 Truss) or equivalent spaced at 7-0-0 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
15) Use Simpson Strong-Tie LU26 (6-10d Girder, 4-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 7-6-0 from the left end to 33-6-0 to connect truss(es) to back face of bottom chord.
16) Fill all nail holes where hanger is in contact with lumber.

June 6,2025

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 24-25=-79, 10-17=-20
   Concentrated Loads (lb)
   Vert: 9=-6, 2=-10, 14=-490 (B), 12=-490 (B), 24=0, 42=-988 (B), 43=-470 (B), 44=-490 (B), 45=-490 (B), 46=-490 (B), 47=-490 (B), 48=-490 (B), 49=-490 (B), 50=-490 (B), 51=-490 (B), 52=-490 (B), 53=-490 (B), 54=-504 (B)
   Trapezoidal Loads (lb/ft)
   Vert: 1=-145-to-21=-126, 21=-126-to-22=-114, 22=-113-to-23=-107, 23=-107-to-2=-104, 2=-100-to-24=-81, 25=-80-to-26=-79, 26=-80-to-3=-80, 3=-80-to-27=-79, 27=-80-to-28=-80, 28=-80-to-29=-79, 29=-80-to-4=-79, 4=-80-to-30=-79, 30=-80-to-31=-80, 31=-80-to-5=-80, 5=-80-to-32=-79, 32=-80-to-6=-80, 6=-80-to-33=-79, 33=-80-to-34=-80, 34=-80-to-35=-79, 35=-80-to-7=-79, 7=-80-to-36=-79, 36=-80-to-37=-80, 37=-80-to-38=-79, 38=-80-to-8=-80, 8=-80-to-39=-79, 39=-80-to-40=-80, 40=-80-to-41=-79, 41=-80-to-9=-80

June 6,2025

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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M54	Monopitch	18	1	Job Reference (optional)	I73987982

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:20
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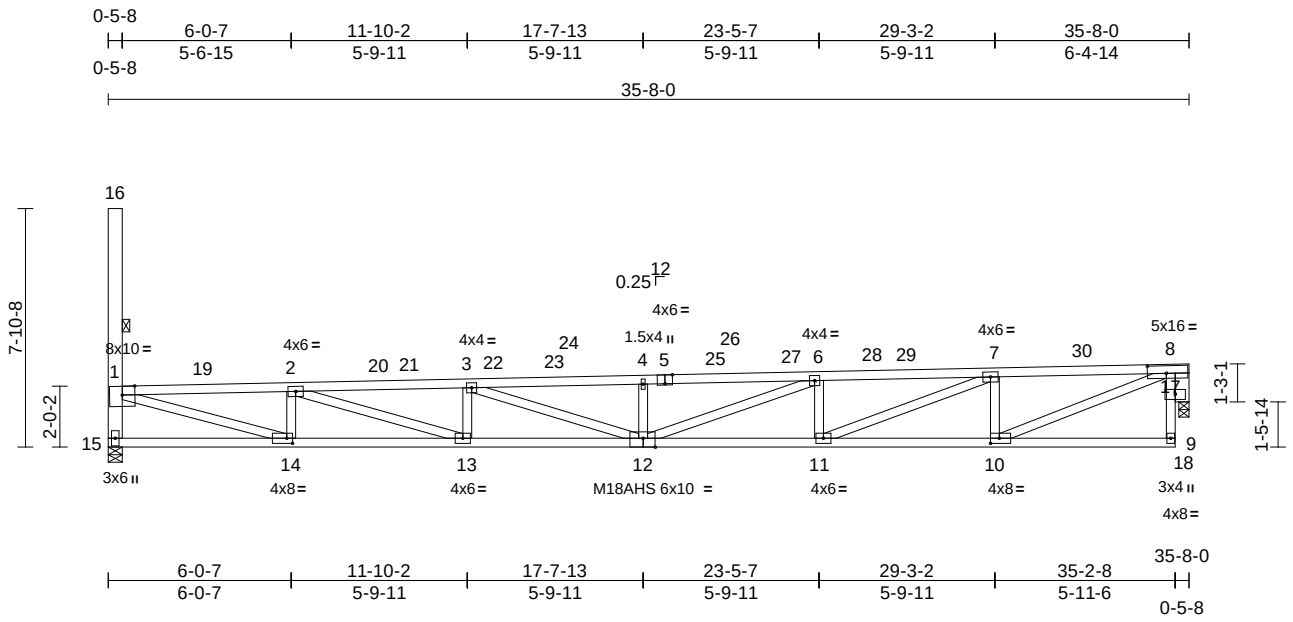

Scale = 1:76

Plate Offsets (X, Y): [5:0-3-0,Edge], [8:0-7-8,0-3-0], [10:0-3-8,0-2-0], [12:0-4-12,Edge], [14:0-2-4,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.59	12-13	>720	240	MT20	220/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-1.24	12-13	>341	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	Yes	WB	0.89	Horz(CT)	0.07	18	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 190 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E *Except* 1-5:2x4 DF-N 2850F 2.3E
BOT CHORD	2x4 SP 2400F 2.0E
WEBS	2x4 SP No.2 *Except* 1-14:2x4 SP 1650F 1.6E, 16-15:2x6 SP 2400F 2.0E
OTHERS	2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals. Except: 6-0-0 oc bracing: 1-15 7-5-0 oc bracing: 1-16
BOT CHORD	Rigid ceiling directly applied or 4-11-6 oc bracing.
WEBS	1 Row at midpt 1-16

REACTIONS (size) 15=0-5-8, 18=0-4-0
Max Horiz 15=381 (LC 10)
Max Uplift 15=-181 (LC 9), 18=-181 (LC 10)
Max Grav 15=1966 (LC 26), 18=1587 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-4910/2305, 2-3=-6856/2775, 3-4=-7144/2716, 4-6=-7144/2722, 6-7=-6013/2219, 7-8=-3712/1339, 9-17=0/77, 8-17=0/77, 1-15=-1889/642, 1-16=0/0
BOT CHORD	14-15=-1238/1853, 13-14=-2376/4901, 11-13=-2839/6848, 10-11=-1377/3706, 9-10=-158/362
WEBS	1-14=-1778/4877, 8-10=-1322/3627, 2-14=-1285/574, 2-13=-1081/2211, 3-13=-549/396, 3-12=-444/509, 4-12=-423/243, 6-12=-545/1208, 6-11=-800/420, 7-11=-955/2478, 7-10=-1309/600, 8-18=-1757/641

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=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-2-12 to 15-2-12, Exterior (2) 15-2-12 to 20-0-12, Corner (3) 20-0-12 to 35-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 15 and 181 lb uplift at joint 18.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

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

Uniform Loads (lb/ft)
Vert: 8-21=-61, 9-15=-20
Trapezoidal Loads (lb/ft)
Vert: 1=-147-to-19=-121, 19=-121-to-2=-95, 2=-95-to-20=-70, 20=-70-to-21=-61

June 6,2025

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16023 Swingley Ridge Rd.
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314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M54A	Monopitch	2	1	Job Reference (optional)	I73987983

Lumber Specialties, Dyersville, IA - 52040,

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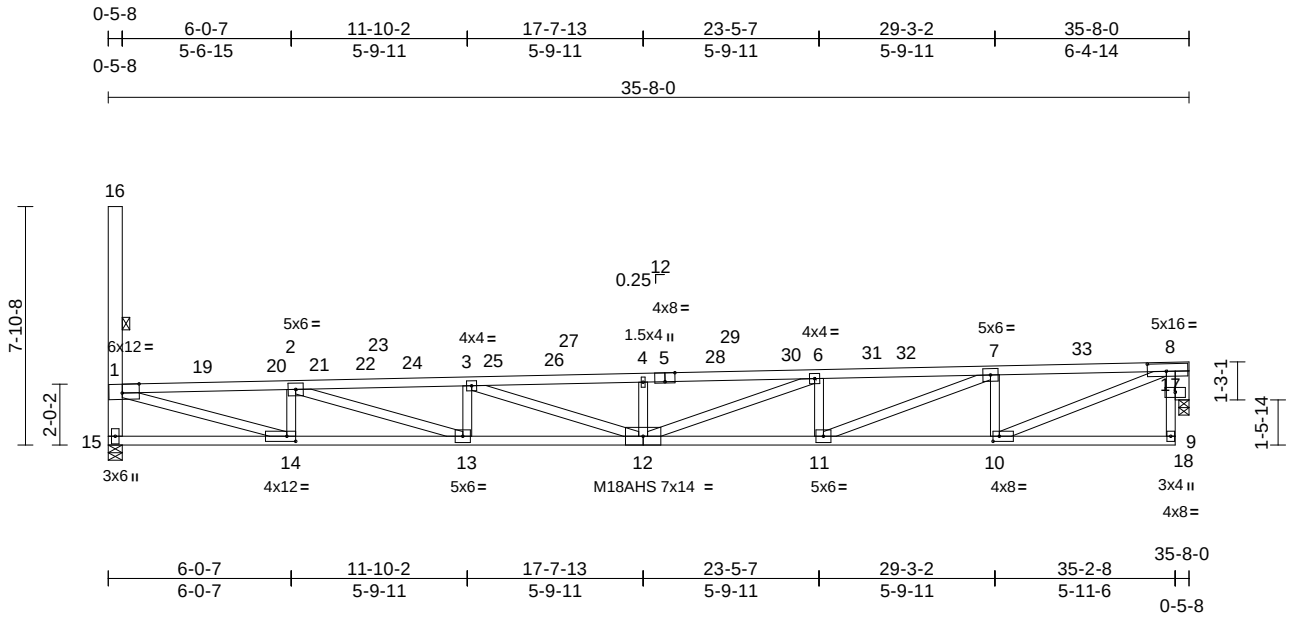

Scale = 1:76

Plate Offsets (X, Y): [1:0-6-12,Edge], [5:0-4-0,Edge], [8:0-7-8,0-3-0], [10:0-2-8,0-2-0], [14:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.88	12-13	>481	240	MT20	220/195
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-1.51	12-13	>281	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	Yes	WB	0.90	Horz(CT)	0.09	18	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 188 lb	FT = 12%

LUMBER
TOP CHORD 2x4 DF-N 2850F 2.3E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 8-9,1-14,8-10:2x4 SP 1650F 1.6E, 16-15:2x6 SP 2400F 2.0E
OTHERS 2x6 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals. Except:
6-0-0 oc bracing: 1-15
7-5-0 oc bracing: 1-16
BOT CHORD Rigid ceiling directly applied or 4-11-6 oc bracing.
WEBS 1 Row at midpt 1-16

REACTIONS (size) 15=0-5-8, 18=0-4-0
Max Horiz 15=381 (LC 10)
Max Uplift 15=-181 (LC 9), 18=-181 (LC 10)
Max Grav 15=2261 (LC 26), 18=2060 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5860/2305, 2-3=-8575/2775, 3-4=-9098/2716, 4-6=-9098/2722, 6-7=-7723/2218, 7-8=-4802/1340, 9-17=0/81, 8-17=0/81, 1-15=-2181/642, 1-16=0/0
BOT CHORD 14-15=-1238/1853, 13-14=-2376/5851, 11-13=-2839/8566, 10-11=-1378/4795, 9-10=-156/466
WEBS 1-14=-1778/5857, 8-10=-1326/4695, 2-14=-1564/574, 2-13=-1081/2848, 3-13=-741/397, 3-12=-443/696, 4-12=-593/243, 6-12=-546/1469, 6-11=-1048/419, 7-11=-952/3146, 7-10=-1727/600, 8-18=-2282/640

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=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-2-12 to 15-2-12, Exterior (2) 15-2-12 to 20-0-12, Corner (3) 20-0-12 to 35-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 15 and 181 lb uplift at joint 18.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 8-22=-90, 9-15=-20
Concentrated Loads (lb)
Vert: 8=-4
Trapezoidal Loads (lb/ft)
Vert: 1=-144-to-19=-119, 19=-119-to-20=-99, 20=-97-to-2=-95, 2=-95-to-21=-91, 21=-89-to-22=-91

June 6,2025

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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M55	Monopitch	7	1	Job Reference (optional)	I73987984

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:21 Page: 1
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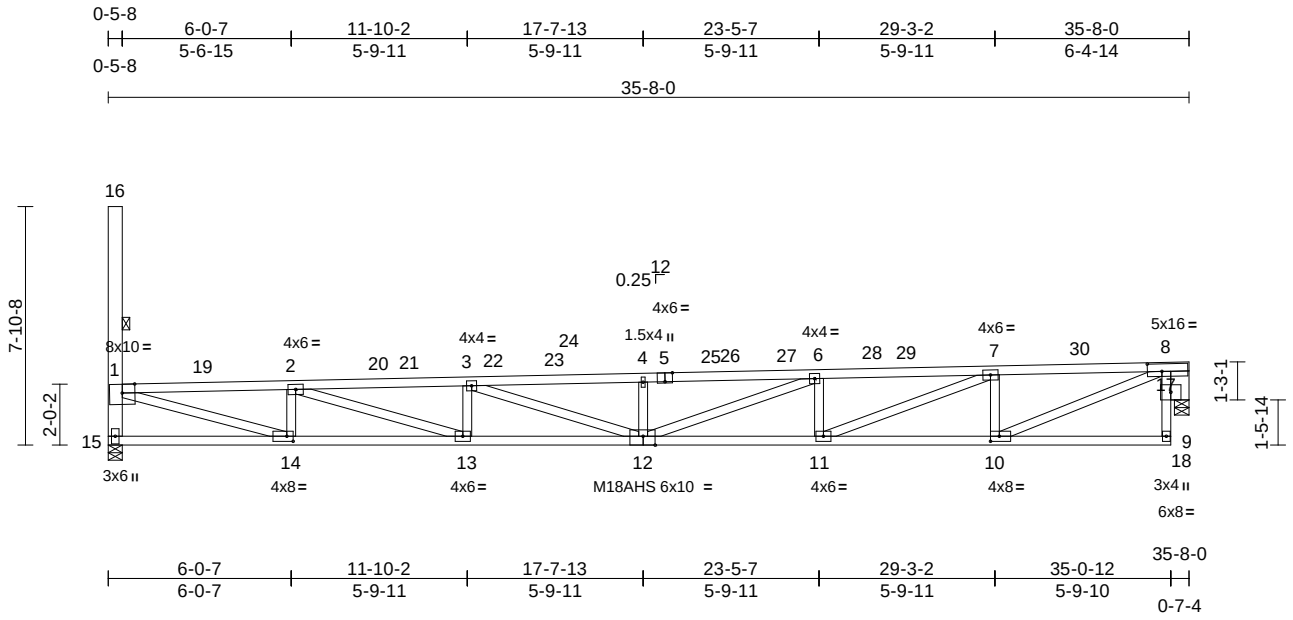

Scale = 1:76

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.62	12-13	>676	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-1.32	12-13	>321	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	Yes	WB	0.87	Horz(CT)	0.08	18	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 193 lb	FT = 12%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E *Except* 12-9:2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 8-9,1-14:2x4 SP 1650F 1.6E, 16-15:2x6 SP 2400F 2.0E
OTHERS 2x8 SP M 23

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
Except:
6-0-0 oc bracing: 1-15
7-5-0 oc bracing: 1-16
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 1-16

REACTIONS (size) 15=0-5-8, 18=0-5-13
Max Horiz 15=381 (LC 10)
Max Uplift 15=-181 (LC 9), 18=-181 (LC 10)
Max Grav 15=1963 (LC 26), 18=1577 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4902/2301, 2-3=-6836/2769, 3-4=-7116/2706, 4-6=-7116/2713, 6-7=-5977/2206, 7-8=-3667/1323, 9-17=0/73, 8-17=0/73, 1-15=-1885/642, 1-16=0/0
BOT CHORD 14-15=-1242/1858, 13-14=-2372/4893, 11-13=-2832/6829, 10-11=-1361/3662, 9-10=-171/400
WEBS 2-14=-1284/576, 7-10=-1307/597, 1-14=-1787/4872, 3-13=-548/395, 2-13=-1076/2200, 4-12=-424/242, 3-12=-441/502, 6-11=-802/421, 6-12=-548/1217, 7-11=-958/2487, 8-10=-1296/3551, 8-18=-1803/660

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=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-2-12 to 15-2-12, Exterior (2) 15-2-12 to 19-11-0, Corner (3) 19-11-0 to 34-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 15 and 181 lb uplift at joint 18.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

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

Uniform Loads (lb/ft)
Vert: 8-21=-61, 9-15=-20
Trapezoidal Loads (lb/ft)
Vert: 1=-147-to-19=-121, 19=-121-to-2=-95, 2=-95-to-20=-70, 20=-70-to-21=-61

June 6,2025

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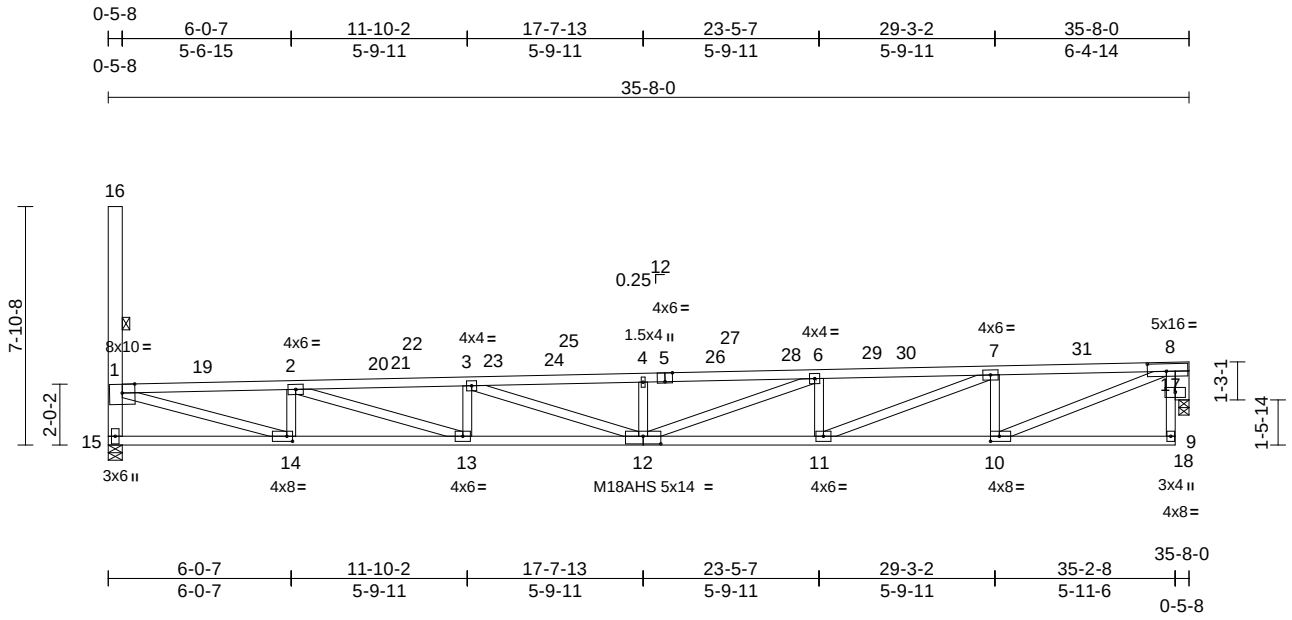
Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M58	Monopitch	24	1	Job Reference (optional)	I73987985

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:21 ID:SZuc2QtmJ1ty5w6HCJniZqzEgPF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:76

Plate Offsets (X, Y): [5:0-3-0,Edge], [8:0-7-8,0-3-0], [10:0-3-8,0-2-0], [12:0-7-0,0-3-0], [14:0-2-4,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.63	12-13	>668	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-1.33	12-13	>318	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	Yes	WB	0.89	Horz(CT)	0.08	18	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 193 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 2400F 2.0E *Except* 12-9:2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 1-14:2x4 SP 1650F 1.6E, 16-15:2x6 SP 2400F 2.0E
OTHERS	2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals. Except: 6-0-0 oc bracing: 1-15 7-5-0 oc bracing: 1-16
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 1-16

REACTIONS (size) 15=0-5-8, 18=0-4-0
Max Horiz 15=381 (LC 10)
Max Uplift 15=-181 (LC 9), 18=-181 (LC 10)
Max Grav 15=1981 (LC 26), 18=1590 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-4939/2305, 2-3=-6880/2776, 3-4=-7165/2716, 4-6=-7165/2722, 6-7=-6027/2219, 7-8=-3721/1340, 9-17=0/74, 8-17=0/74, 1-15=-1903/642, 1-16=0/0
BOT CHORD	14-15=-1242/1858, 13-14=-2375/4929, 11-13=-2839/6873, 10-11=-1378/3716, 9-10=-155/358
WEBS	1-14=-1790/4908, 8-10=-1326/3643, 2-14=-1294/577, 2-13=-1078/2209, 3-13=-551/396, 3-12=-444/510, 4-12=-424/242, 6-12=-545/1216, 6-11=-801/419, 7-11=-954/2483, 7-10=-1311/600, 8-18=-1760/641

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=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-2-12 to 15-2-12, Exterior (2) 15-2-12 to 20-0-12, Corner (3) 20-0-12 to 35-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 15 and 181 lb uplift at joint 18.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)
Vert: 8-22=-61, 9-15=-20
Concentrated Loads (lb)
Vert: 21=-1
Trapezoidal Loads (lb/ft)
Vert: 1=-150-to-19=-123, 19=-123-to-2=-97, 2=-97-to-20=-70, 20=-70-to-21=-63, 21=-62-to-22=-60

June 6,2025

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Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M58G	Roof Special Girder	1	3	Job Reference (optional)	I73987986

Lumber Specialties, Dyersville, IA - 52040,

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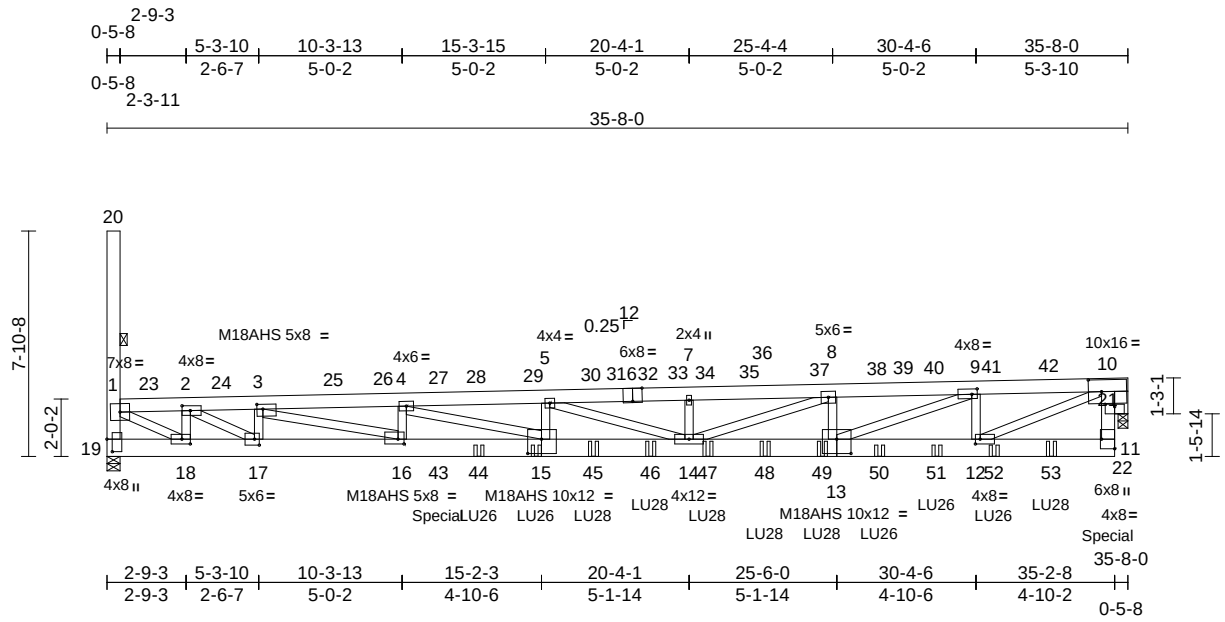

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Plate Offsets (X, Y): [2:0-3-7,0-2-0], [3:0-2-8,0-2-0], [6:0-4-0,Edge], [9:0-2-4,0-2-4], [10:0-5-8,0-5-0], [11:Edge,0-5-8], [12:0-2-0,0-2-0], [13:0-6-0,0-6-0], [15:0-5-12,0-6-0], [16:0-2-8,0-2-0], [17:0-2-0,0-2-8], [18:0-3-8,0-2-0], [19:0-5-4,0-2-4], [21:0-4-0,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.93	14-15	>458	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-1.54	14-15	>275	180	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	Yes	WB	0.96	Horz(CT)	0.04	22	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 831 lb	FT = 12%

LUMBER

TOP CHORD	2x6 SP 2400F 2.0E
BOT CHORD	2x8 SP M 23
WEBS	2x4 SP No.2 *Except* 10-11,20-19:2x6 SP 2400F 2.0E, 16-3,13-9,12-10:2x4 SP 1650F 1.6E
OTHERS	2x6 SP 2400F 2.0E

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-8-11 oc purlins, except end verticals. Except: 6-0-0 oc bracing: 1-19 10-0-0 oc bracing: 1-20
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 1-20

REACTIONS (size) 19=0-5-8, 22=0-4-0
Max Horiz 19=358 (LC 66)
Max Uplift 19=-2403 (LC 9), 22=-2754 (LC 10)
Max Grav 19=6734 (LC 19), 22=8178 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-10884/5363, 2-3=-21106/9583, 3-4=-36005/15884, 4-5=-41057/17398, 5-7=-37163/15184, 7-8=-37162/15189, 8-9=-28936/11560, 9-10=-16743/6543, 11-21=-522/1566, 10-21=-522/1566, 1-19=-6227/2770, 1-20=0/0
BOT CHORD	18-19=-1641/2487, 17-18=-5398/10871, 16-17=-9605/21076, 14-16=-17371/40954, 12-14=-11679/29168, 11-12=-1052/2734
WEBS	3-17=-5923/2739, 3-16=-7129/15864, 4-16=-2163/784, 4-15=-2096/5881, 5-15=-687/1162, 5-14=-4035/2305, 7-14=-352/223, 8-14=-3789/8640, 8-13=-3358/1561, 9-13=-5469/13388, 9-12=-5240/2230, 10-12=-6083/15510, 2-17=-5332/12122, 2-18=-5989/2587, 1-18=-4475/10622, 10-22=-9308/3580

NOTES

1) 3-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.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-4-0 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=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner (3) 0-2-12 to 15-2-12, Exterior (2) 15-2-12 to 19-11-12, Corner (3) 19-11-12 to 34-11-12 zone; cantilever left and right exposed ; end vertical left 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=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) Plates checked for a plus or minus 5 degree rotation about its center.
9) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2403 lb uplift at joint 19 and 2754 lb uplift at joint 22.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.

June 6,2025

Continued on page 2

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14) Use Simpson Strong-Tie LU26 (6-16d Girder, 4-10dx1 1/2 Truss) or equivalent spaced at 12-0-0 oc max. starting at 13-0-0 from the left end to 31-0-0 to connect truss(es) to front face of bottom chord.
15) Use Simpson Strong-Tie LU28 (8-10dx1 1/2 Girder, 6-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 8-0-0 oc max. starting at 17-0-0 from the left end to 33-0-0 to connect truss(es) to front face of bottom chord.
16) Fill all nail holes where hanger is in contact with lumber.
17) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3547 lb down and 1872 lb up at 11-7-4, and 702 lb down and 241 lb up at 34-11-12 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: 27-28=-62, 7-33=-62, 11-19=-20
   Concentrated Loads (lb)
   Vert: 10=0, 11=-702 (F), 15=-698 (F), 26=-3, 43=-2870 (F), 44=-706 (F), 45=-698 (F), 46=-698 (F), 47=-698 (F), 48=-698 (F), 49=-698 (F), 50=-698 (F), 51=-698 (F), 52=-698 (F), 53=-698 (F)
   Trapezoidal Loads (lb/ft)
   Vert: 1=-147-to-23=-136, 23=-136-to-2=-124, 2=-124-to-24=-113, 24=-113-to-3=-102, 3=-102-to-25=-79, 25=-77-to-26=-68, 26=-66-to-4=-64, 4=-64-to-27=-62, 28=-62-to-29=-62, 29=-62-to-5=-62, 5=-62-to-30=-62, 30=-62-to-31=-62, 31=-62-to-6=-62, 6=-62-to-32=-62, 32=-62-to-33=-62, 7=-62-to-34=-62, 34=-62-to-35=-62, 35=-62-to-36=-62, 36=-62-to-37=-62, 37=-62-to-8=-62, 8=-62-to-38=-62, 38=-62-to-39=-62, 39=-62-to-40=-62, 40=-62-to-9=-62, 9=-62-to-41=-62, 41=-62-to-42=-62, 42=-62-to-10=-62

June 6,2025

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M64	Flat	1	1	Job Reference (optional)	I73987987

Lumber Specialties, Dyersville, IA - 52040,

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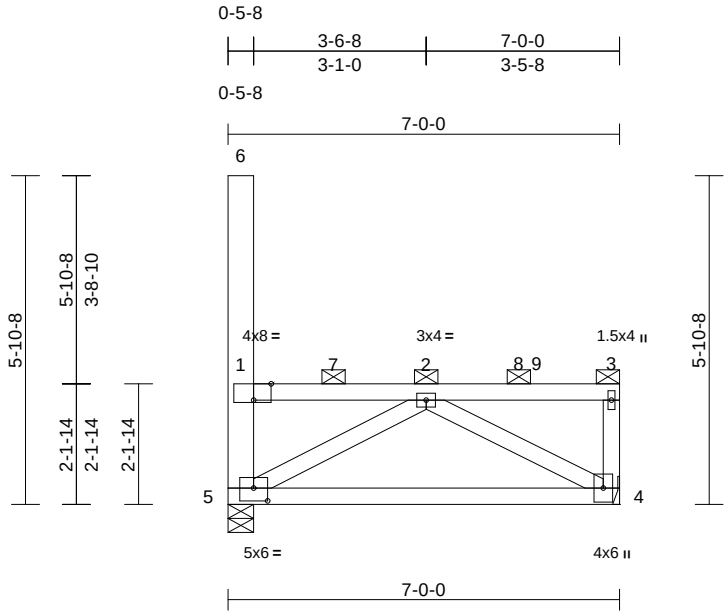
Page: 1



Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 46 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-11-7 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-261 (LC 11)
Max Uplift 4=-180 (LC 10), 5=-180 (LC 9)
Max Grav 4=605 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-854/588, 2-3=-36/39, 3-4=-341/127, 1-5=-448/182, 1-6=0/0
BOT CHORD	4-5=-657/657
WEBS	2-4=-722/725, 2-5=-585/772

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 4 and 180 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-1, 3=0, 9=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-169-to-7=-156, 7=-156-to-2=-143, 2=-143-to-8=-130, 8=-130-to-9=-127, 9=-112-to-3=-96

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M65	Flat	1	1	Job Reference (optional)	I73987988

Lumber Specialties, Dyersville, IA - 52040,

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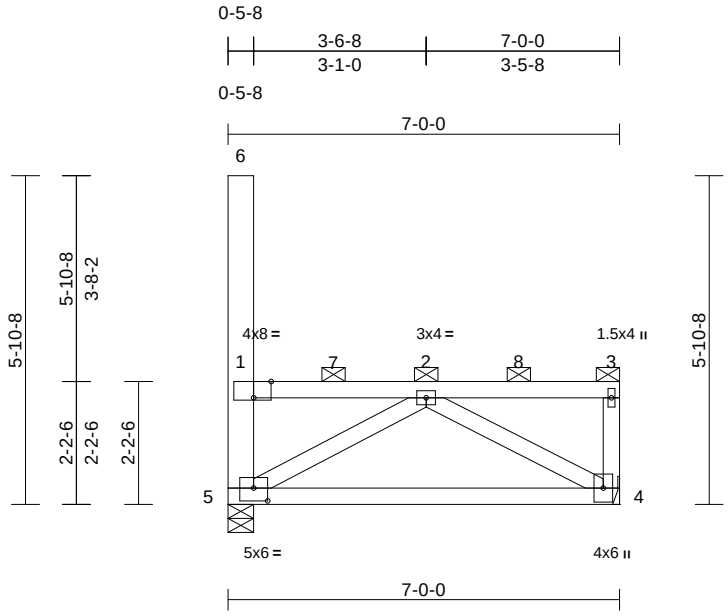

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 46 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-0-8 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-260 (LC 9)
Max Uplift 4=-180 (LC 10), 5=-180 (LC 9)
Max Grav 4=625 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-832/574, 2-3=-37/40, 3-4=-358/127, 1-5=-446/181, 1-6=0/0
BOT CHORD	4-5=-644/643
WEBS	2-4=-709/714, 2-5=-582/759

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 4 and 180 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-142, 2=-142-to-8=-130, 8=-130-to-3=-117

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M66	Flat	1	1	Job Reference (optional)	I73987989

Lumber Specialties, Dyersville, IA - 52040,

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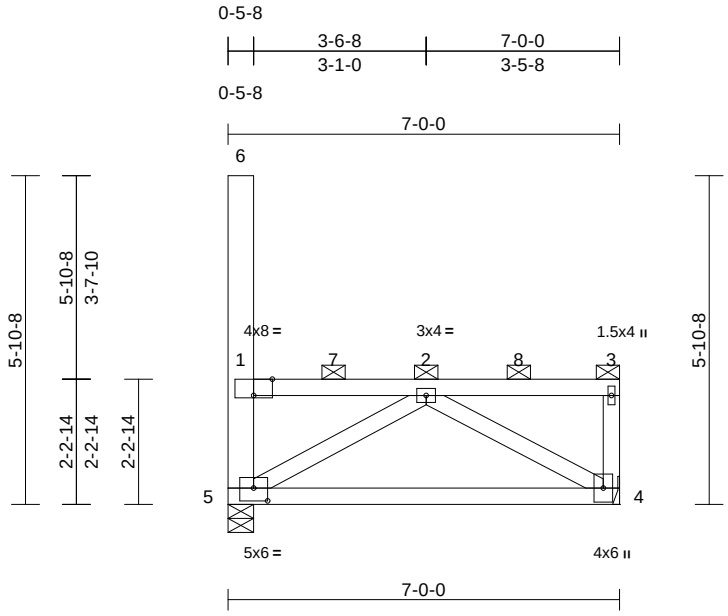

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 46 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-1-8 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-260 (LC 9)
Max Uplift 4=-180 (LC 10), 5=-180 (LC 9)
Max Grav 4=625 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-812/561, 2-3=-37/41, 3-4=-358/127, 1-5=-445/181, 1-6=0/0
BOT CHORD	4-5=-632/630
WEBS	2-4=-697/702, 2-5=-574/747

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 4 and 180 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-142, 2=-142-to-8=-130, 8=-130-to-3=-117

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M67	Flat	1	1	Job Reference (optional)	I73987990

Lumber Specialties, Dyersville, IA - 52040,

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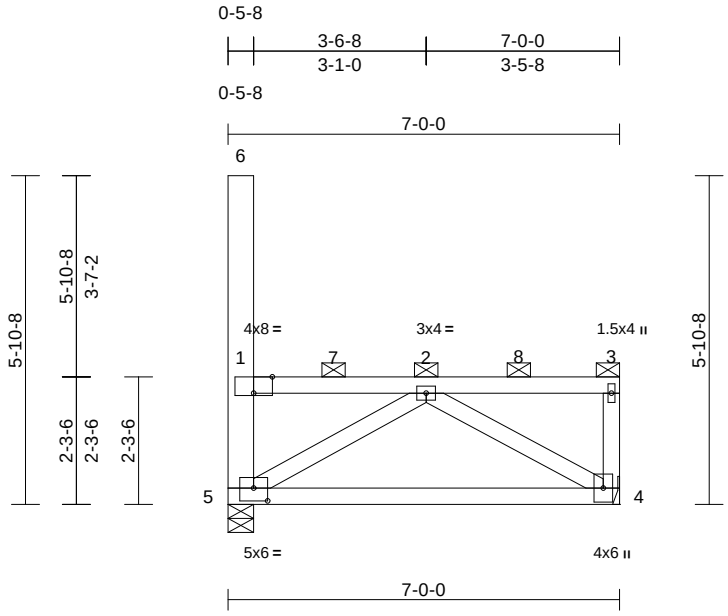

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 46 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-2-9 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-259 (LC 9)
Max Uplift 4=-179 (LC 10), 5=-179 (LC 9)
Max Grav 4=625 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-792/548, 2-3=-38/42, 3-4=-358/127, 1-5=-445/180, 1-6=0/0
BOT CHORD	4-5=-620/617
WEBS	2-4=-685/692, 2-5=-566/735

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 4 and 179 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-142, 2=-142-to-8=-130, 8=-130-to-3=-117

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M68	Flat	1	1	Job Reference (optional)	I73987991

Lumber Specialties, Dyersville, IA - 52040,

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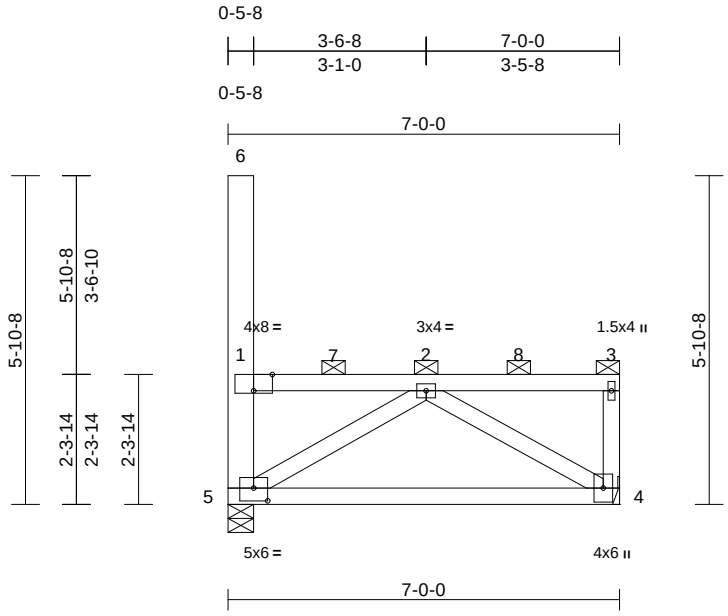

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 46 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-3-9 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=259 (LC 10)
Max Uplift 4=-179 (LC 10), 5=-179 (LC 9)
Max Grav 4=625 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-774/536, 2-3=-39/42, 3-4=-358/127, 1-5=-445/180, 1-6=0/0
BOT CHORD	4-5=-608/605
WEBS	2-4=-674/681, 2-5=-558/724

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 4 and 179 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-142, 2=-142-to-8=-130, 8=-130-to-3=-117

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M69	Flat	1	1	Job Reference (optional)	I73987992

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:24
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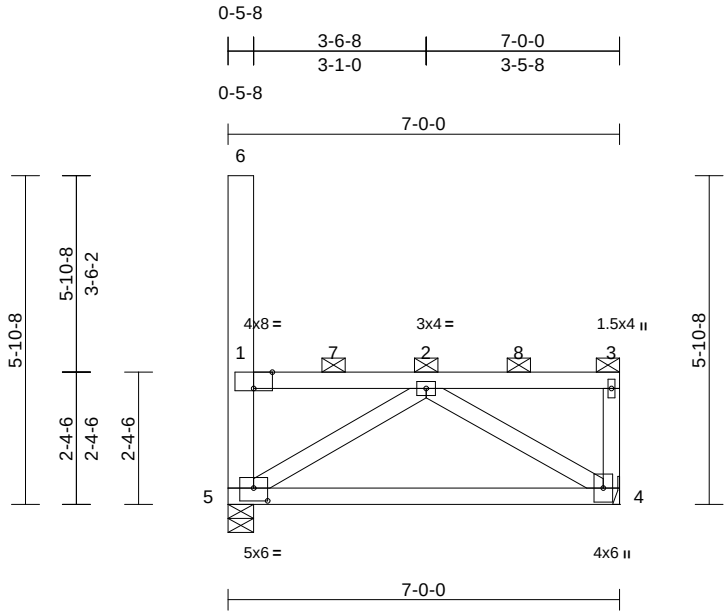

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-4-10 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=258 (LC 10)
Max Uplift 4=-179 (LC 10), 5=-179 (LC 9)
Max Grav 4=625 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-756/524, 2-3=-40/43, 3-4=-358/127, 1-5=-445/179, 1-6=0/0
BOT CHORD	4-5=-597/593
WEBS	2-4=-663/672, 2-5=-551/714

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 4 and 179 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-142, 2=-142-to-8=-130, 8=-130-to-3=-117

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M70	Flat	1	1	Job Reference (optional)	I73987993

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:24
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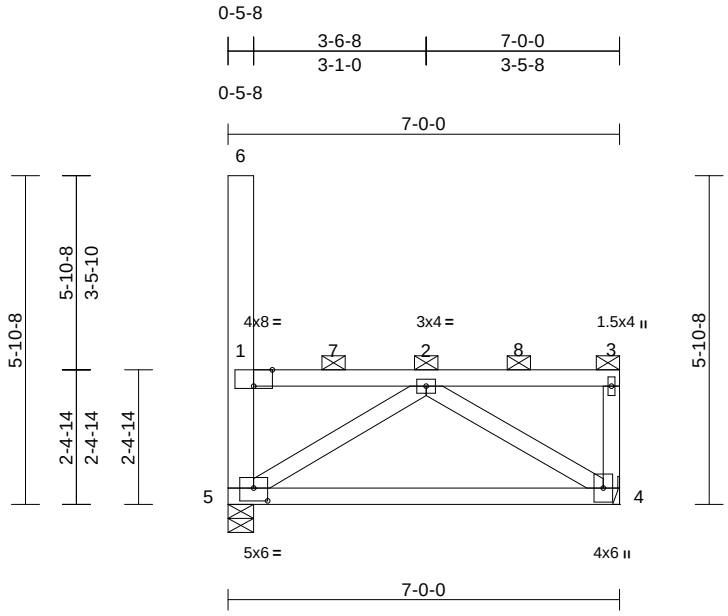

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-5-9 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-257 (LC 9)
Max Uplift 4=-179 (LC 10), 5=-179 (LC 9)
Max Grav 4=625 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-738/513, 2-3=-41/44, 3-4=-358/127, 1-5=-444/178, 1-6=0/0
BOT CHORD	4-5=-587/582
WEBS	2-4=-653/662, 2-5=-544/704

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 4 and 179 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-142, 2=-142-to-8=-130, 8=-130-to-3=-117

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M71	Flat	1	1	Job Reference (optional)	I73987994

Lumber Specialties, Dyersville, IA - 52040,

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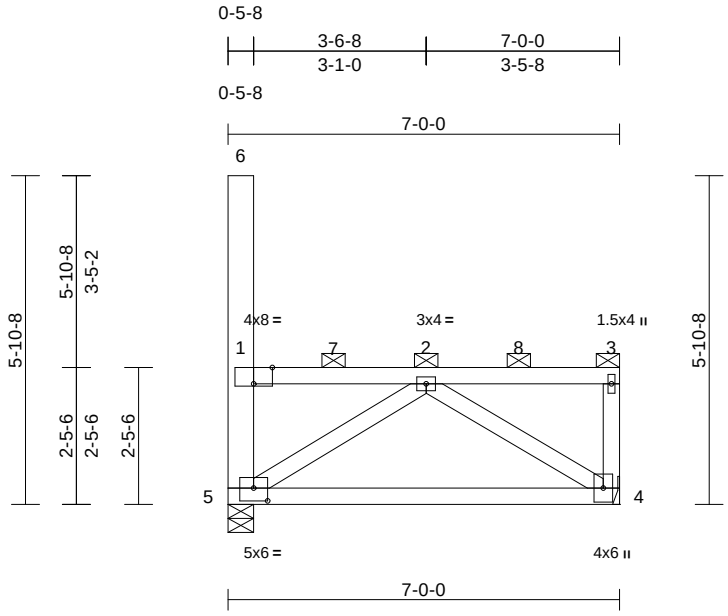

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-6-9 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-257 (LC 9)
Max Uplift 4=-179 (LC 10), 5=-179 (LC 9)
Max Grav 4=625 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-722/502, 2-3=-42/45, 3-4=-358/127, 1-5=-444/178, 1-6=0/0
BOT CHORD	4-5=-576/571
WEBS	2-4=-643/653, 2-5=-537/694

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) The Fabrication Tolerance at joint 1 = 8%
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 4 and 179 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-142, 2=-142-to-8=-130, 8=-130-to-3=-117

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M72	Flat	1	1	Job Reference (optional)	I73987995

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:24
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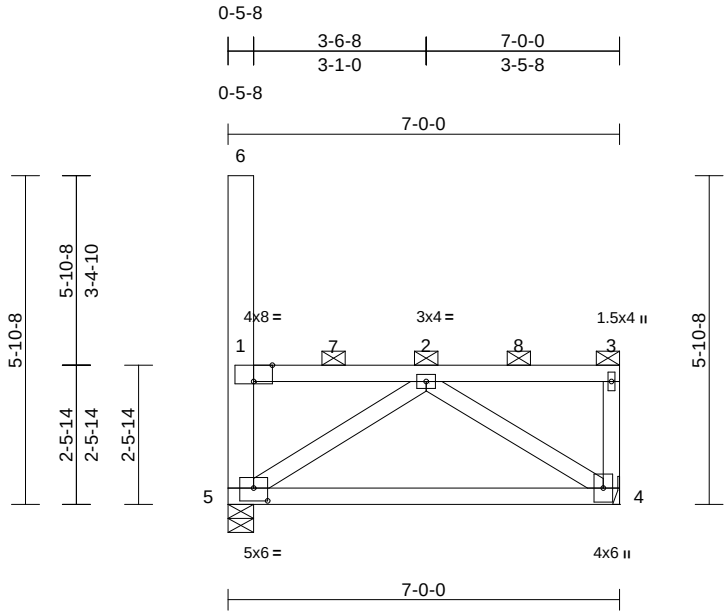

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-7-8 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-256 (LC 9)
Max Uplift 4=-178 (LC 10), 5=-178 (LC 9)
Max Grav 4=625 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-706/492, 2-3=-42/46, 3-4=-358/126, 1-5=-444/177, 1-6=0/0
BOT CHORD	4-5=-567/561
WEBS	2-4=-633/645, 2-5=-530/685

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 4 and 178 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-142, 2=-142-to-8=-130, 8=-130-to-3=-117

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M73	Flat	1	1	Job Reference (optional)	I73987996

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:25
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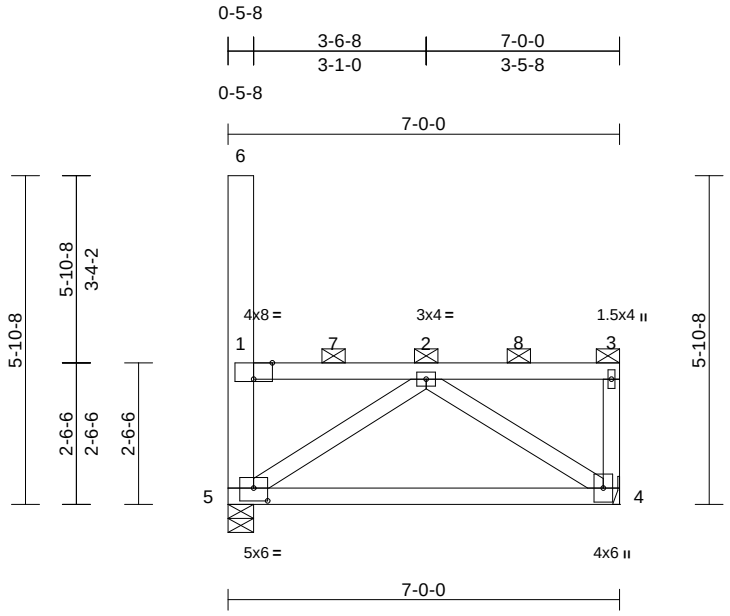

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-8-9 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=256 (LC 10)
Max Uplift 4=-178 (LC 10), 5=-178 (LC 9)
Max Grav 4=625 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-690/481, 2-3=-43/47, 3-4=-357/126, 1-5=-444/177, 1-6=0/0
BOT CHORD	4-5=-557/551
WEBS	2-4=-624/637, 2-5=-524/676

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 4 and 178 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-142, 2=-142-to-8=-130, 8=-130-to-3=-117

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M74	Flat	1	1	Job Reference (optional)	I73987997

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:25
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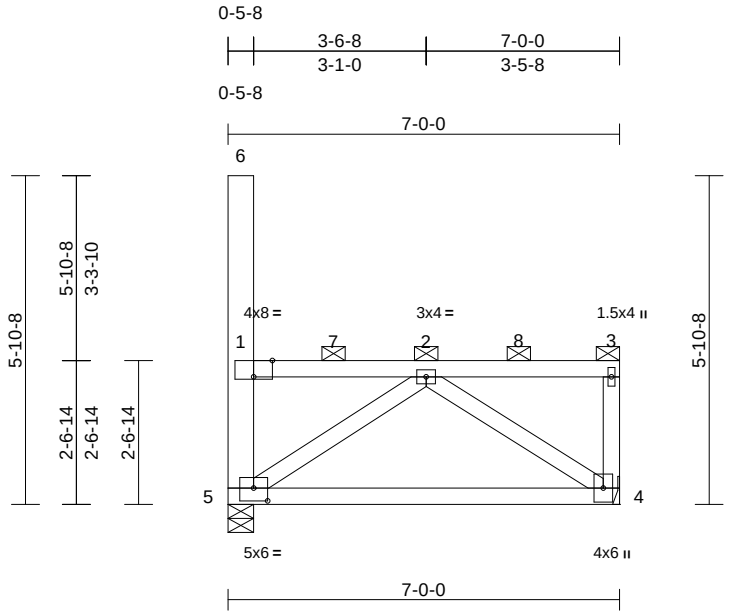

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-9-7 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=255 (LC 10)
Max Uplift 4=-178 (LC 10), 5=-178 (LC 9)
Max Grav 4=625 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-675/472, 2-3=-44/48, 3-4=-357/126, 1-5=-443/176, 1-6=0/0
BOT CHORD	4-5=-548/541
WEBS	2-4=-616/629, 2-5=-518/668

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 4 and 178 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-142, 2=-142-to-8=-130, 8=-130-to-3=-117

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M75	Flat	1	1	Job Reference (optional)	I73987998

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:25
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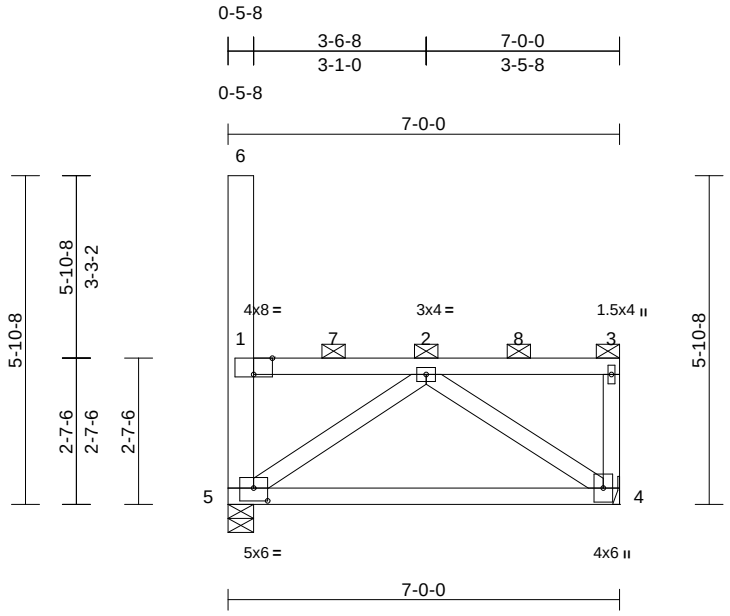

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-10-6 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-255 (LC 11)
Max Uplift 4=-178 (LC 10), 5=-178 (LC 9)
Max Grav 4=625 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-660/462, 2-3=-45/49, 3-4=-357/126, 1-5=-443/176, 1-6=0/0
BOT CHORD	4-5=-540/532
WEBS	2-4=-607/621, 2-5=-512/660

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 4 and 178 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-142, 2=-142-to-8=-130, 8=-130-to-3=-117

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M76	Flat	1	1	Job Reference (optional)	I73987999

Lumber Specialties, Dyersville, IA - 52040,

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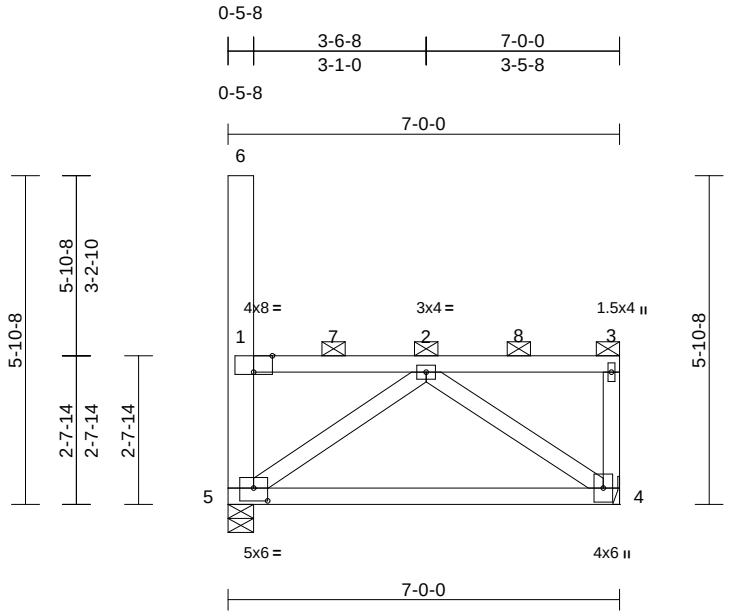
Page: 1



Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-11-5 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=254 (LC 10)
Max Uplift 4=-178 (LC 10), 5=-178 (LC 9)
Max Grav 4=625 (LC 36), 5=682 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-646/453, 2-3=-46/49, 3-4=-357/126, 1-5=-443/175, 1-6=0/0
BOT CHORD	4-5=-531/523
WEBS	2-4=-599/614, 2-5=-507/652

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 4 and 178 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-142, 2=-142-to-8=-130, 8=-130-to-3=-117

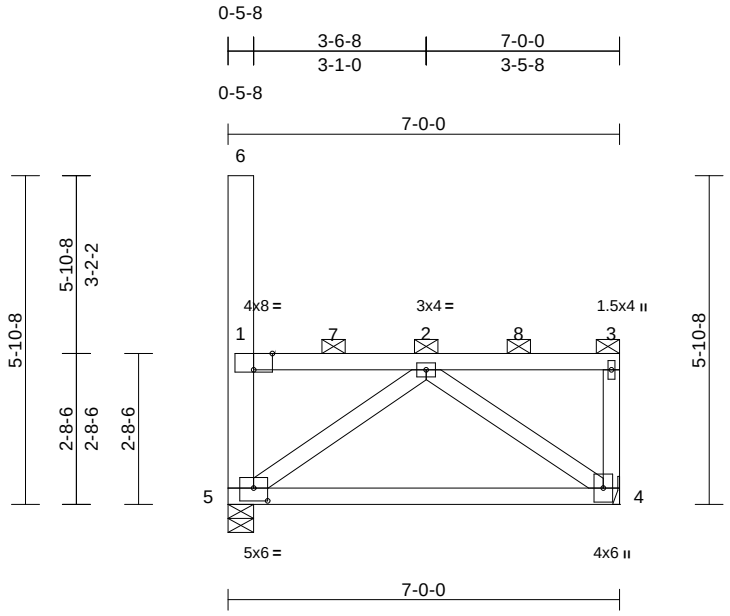
June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M77	Flat	1	1	Job Reference (optional)	I73988000

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:25 ID:dLfydzLfnf2zAAZ?6Pc9UEzEuKo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.10	4-5	>786	180		
TCDL	15.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 48 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=253 (LC 10)
Max Uplift 4=-177 (LC 10), 5=-177 (LC 9)
Max Grav 4=639 (LC 36), 5=683 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-633/445, 2-3=-46/50, 3-4=-370/126, 1-5=-443/174, 1-6=0/0
BOT CHORD	4-5=-523/514
WEBS	2-4=-591/607, 2-5=-503/645

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 4 and 177 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2, 3=-12
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-143, 2=-143-to-8=-130, 8=-130-to-3=-118

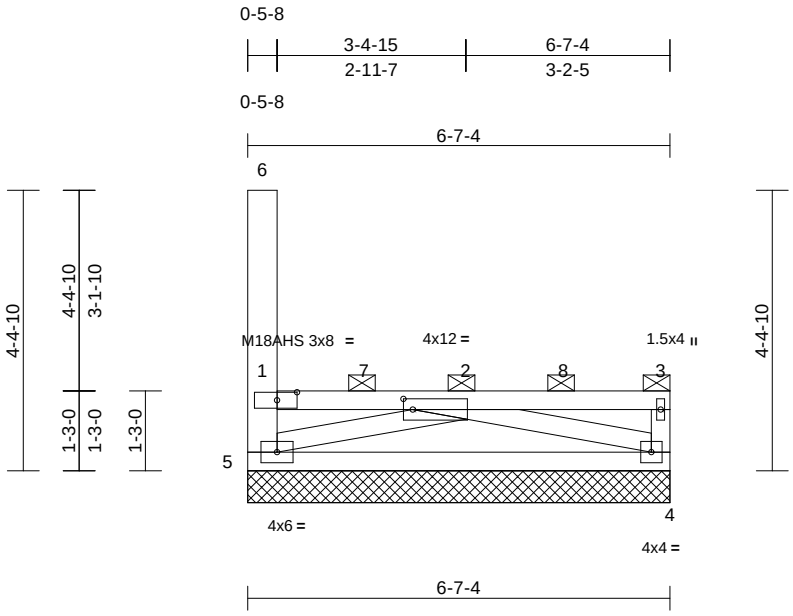
June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M78	Flat Supported Gable	1	1	Job Reference (optional)	I73988001

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:26 ID:krysLPVpjfh7EA3VNeLCW_zEuKb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:36

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.42	Vert(TL)	n/a	-	n/a	999	M18AHS	186/179
TCDL	15.0	Rep Stress Incr	NO	WB	0.22	Horiz(TL)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 40 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-6-13 oc bracing.

REACTIONS (size) 4=6-7-4, 5=6-7-4
Max Horiz 5=-190 (LC 11)
Max Uplift 4=-121 (LC 10), 5=-125 (LC 9)
Max Grav 4=597 (LC 37), 5=668 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-973/781, 2-3=-55/19, 1-5=-457/179, 1-6=0/0
BOT CHORD	4-5=-927/1001
WEBS	2-4=-1026/949, 2-5=-894/919, 3-4=-365/124

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=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
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=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) Plates checked for a plus or minus 5 degree rotation about its center.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 125 lb uplift at joint 5 and 121 lb uplift at joint 4.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
14) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
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

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-155, 7=-155-to-2=-143, 2=-143-to-8=-132, 8=-132-to-3=-120

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M79	Flat	1	1	Job Reference (optional)	I73988002

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:26
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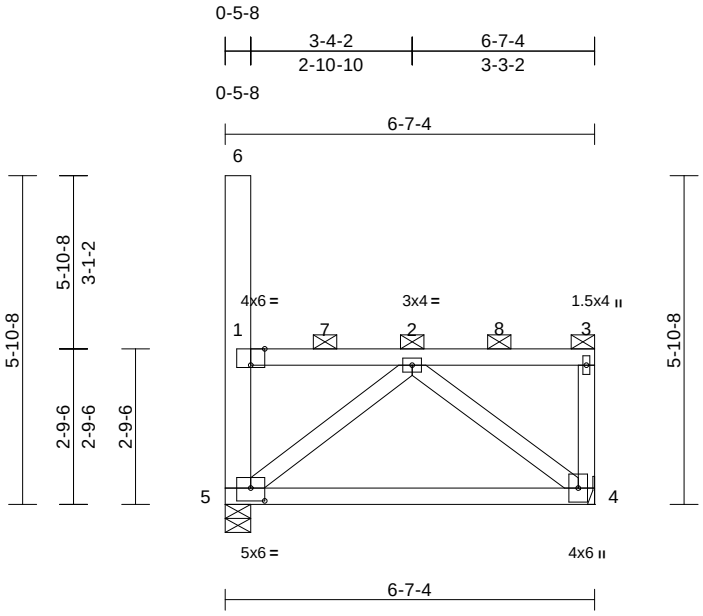

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 46 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-252 (LC 11)
Max Uplift 4=-181 (LC 10), 5=-181 (LC 9)
Max Grav 4=609 (LC 36), 5=660 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-604/424, 2-3=-48/52, 3-4=-354/121, 1-5=-431/171, 1-6=0/0
BOT CHORD	4-5=-484/485
WEBS	2-4=-573/577, 2-5=-461/615

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 4 and 181 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-156, 7=-156-to-2=-144, 2=-144-to-8=-132, 8=-132-to-3=-120

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M80	Flat	1	1	Job Reference (optional)	I73988003

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:26
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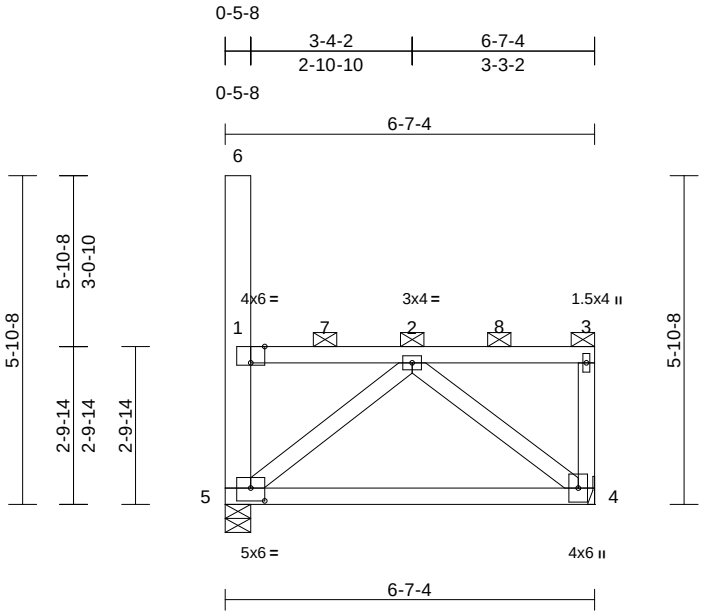

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 46 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-252 (LC 9)
Max Uplift 4=-181 (LC 10), 5=-181 (LC 9)
Max Grav 4=609 (LC 36), 5=660 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-591/416, 2-3=-49/53, 3-4=-354/121, 1-5=-431/170, 1-6=0/0
BOT CHORD	4-5=-477/477
WEBS	2-4=-566/571, 2-5=-457/609

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 4 and 181 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-156, 7=-156-to-2=-144, 2=-144-to-8=-132, 8=-132-to-3=-120

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M81	Flat	1	1	Job Reference (optional)	I73988004

Lumber Specialties, Dyersville, IA - 52040,

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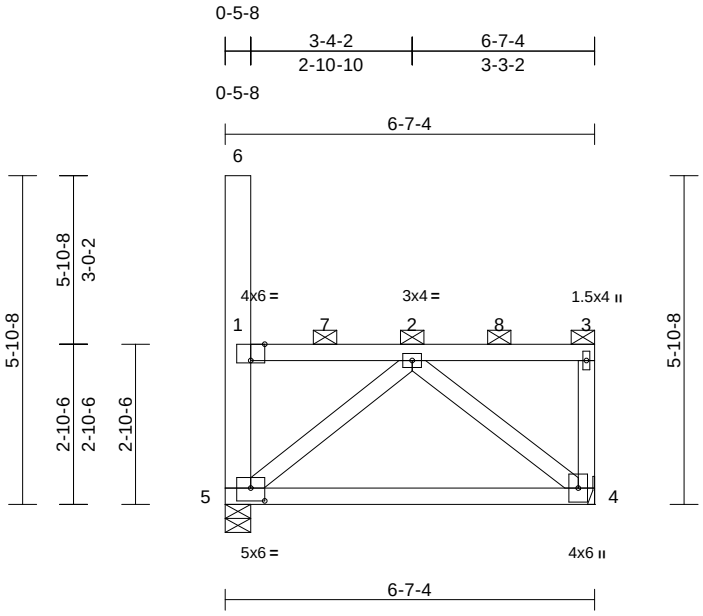

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 46 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-251 (LC 9)
Max Uplift 4=-180 (LC 10), 5=-180 (LC 9)
Max Grav 4=609 (LC 36), 5=660 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-579/409, 2-3=-50/54, 3-4=-354/121, 1-5=-431/170, 1-6=0/0
BOT CHORD	4-5=-471/470
WEBS	2-4=-559/566, 2-5=-453/603

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 4 and 180 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-2
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-156, 7=-156-to-2=-144, 2=-144-to-8=-132, 8=-132-to-3=-120

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M82	Flat	1	1	Job Reference (optional)	I73988005

Lumber Specialties, Dyersville, IA - 52040,

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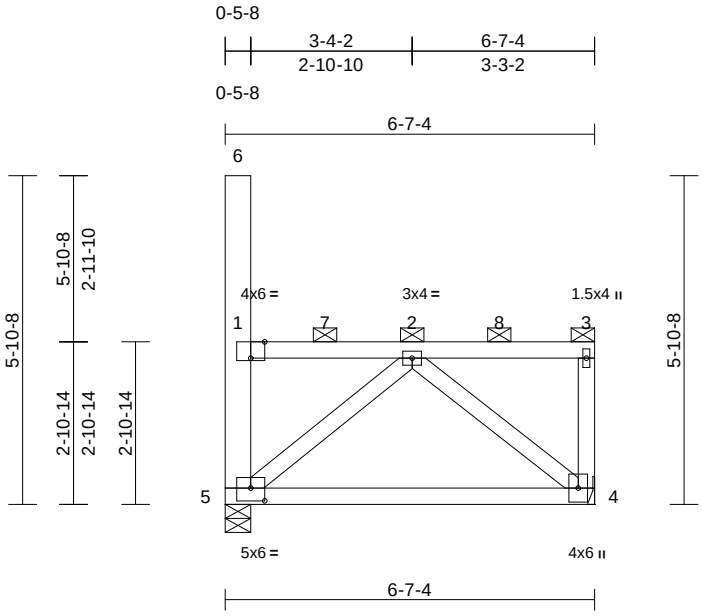

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-250 (LC 9)
Max Uplift 4=-180 (LC 10), 5=-180 (LC 9)
Max Grav 4=610 (LC 36), 5=658 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-568/402, 2-3=-50/55, 3-4=-355/121, 1-5=-428/169, 1-6=0/0
BOT CHORD	4-5=-464/463
WEBS	2-4=-553/560, 2-5=-449/598

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 4 and 180 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-167-to-7=-155, 7=-155-to-2=-144, 2=-144-to-8=-133, 8=-133-to-3=-121

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M83	Flat	1	1	Job Reference (optional)	I73988006

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:27
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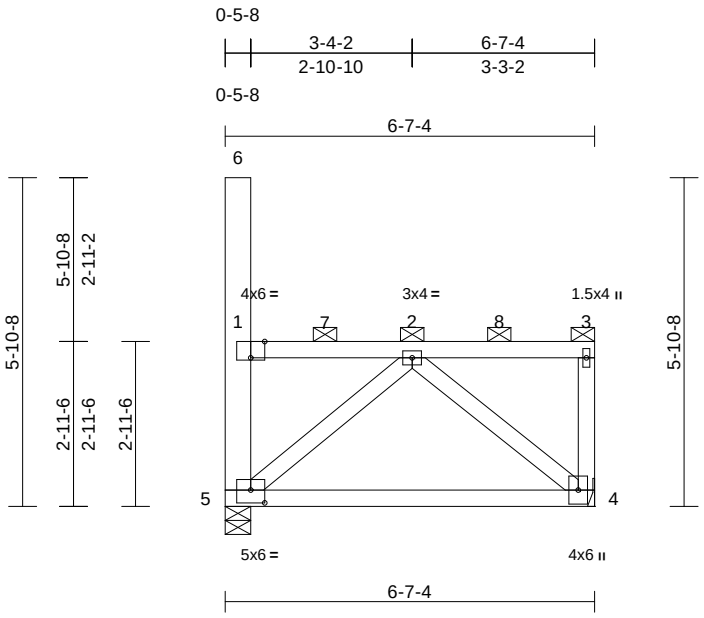

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=250 (LC 10)
Max Uplift 4=-180 (LC 10), 5=-180 (LC 9)
Max Grav 4=611 (LC 36), 5=657 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-557/395, 2-3=-51/55, 3-4=-356/121, 1-5=-427/168, 1-6=0/0
BOT CHORD	4-5=-458/456
WEBS	2-4=-546/555, 2-5=-445/592

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 4 and 180 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 3=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-167-to-7=-155, 7=-155-to-2=-144, 2=-144-to-8=-133, 8=-133-to-3=-121

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M84	Flat	1	1	Job Reference (optional)	I73988007

Lumber Specialties, Dyersville, IA - 52040,

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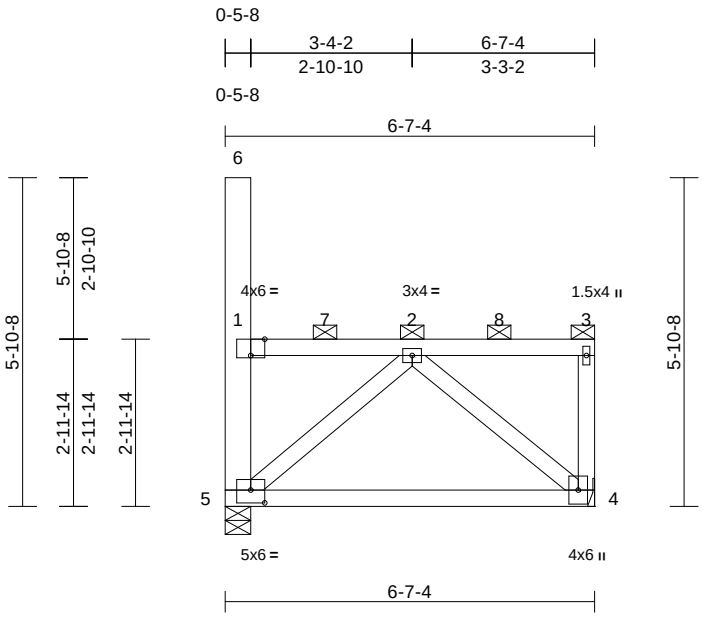

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=249 (LC 12)
Max Uplift 4=-180 (LC 10), 5=-180 (LC 9)
Max Grav 4=608 (LC 36), 5=660 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-546/388, 2-3=-52/56, 3-4=-353/121, 1-5=-430/168, 1-6=0/0
BOT CHORD	4-5=-452/449
WEBS	2-4=-540/550, 2-5=-441/587

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 4 and 180 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-169-to-7=-156, 7=-156-to-2=-144, 2=-144-to-8=-132, 8=-132-to-3=-119

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M85	Flat	1	1	Job Reference (optional)	I73988008

Lumber Specialties, Dyersville, IA - 52040,

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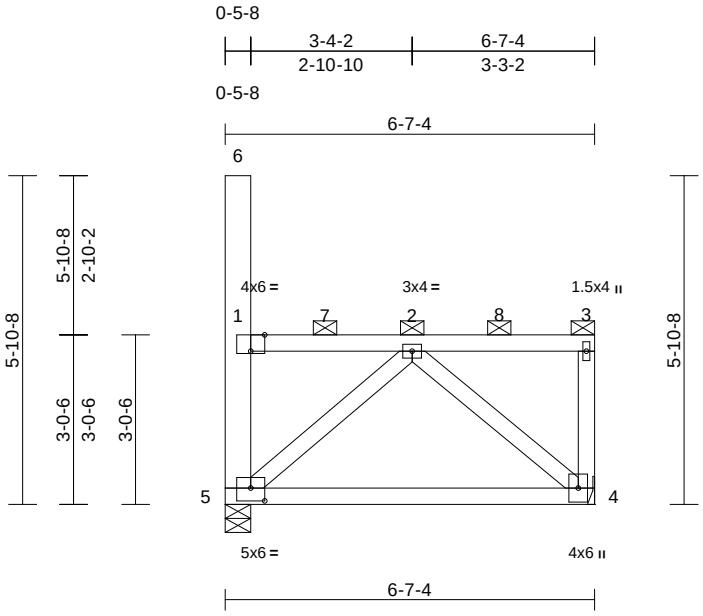
Page: 1



Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD 2x4 SP 1650F 1.6E
BOT CHORD 2x4 SP 1650F 1.6E
WEBS 2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-249 (LC 9)
Max Uplift 4=-179 (LC 10), 5=-179 (LC 9)
Max Grav 4=610 (LC 36), 5=658 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-535/381, 2-3=-53/57, 3-4=-354/120, 1-5=-428/167, 1-6=0/0
BOT CHORD 4-5=-446/442
WEBS 2-4=-534/545, 2-5=-438/582

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 4 and 179 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 3=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-156, 7=-156-to-2=-144, 2=-144-to-8=-132, 8=-132-to-3=-120

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M86	Flat	1	1	Job Reference (optional)	I73988009

Lumber Specialties, Dyersville, IA - 52040,

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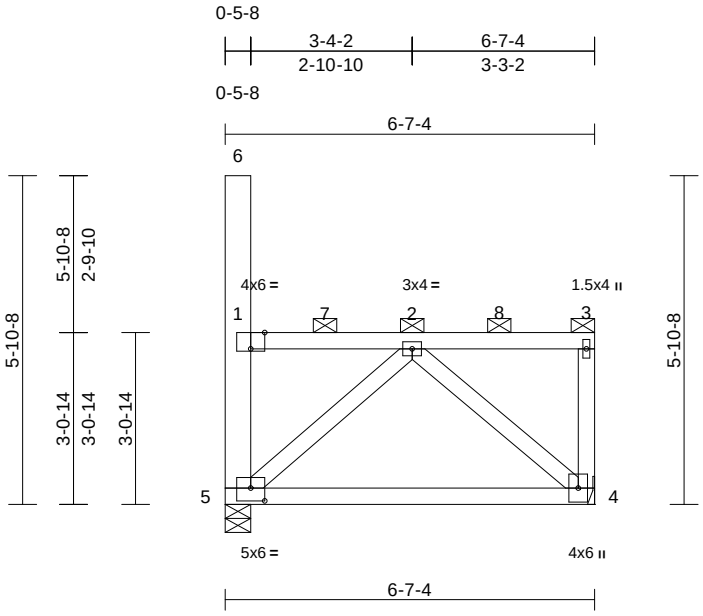

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=248 (LC 12)
Max Uplift 4=-179 (LC 10), 5=-179 (LC 9)
Max Grav 4=611 (LC 36), 5=657 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-525/375, 2-3=-54/58, 3-4=-355/120, 1-5=-427/166, 1-6=0/0
BOT CHORD	4-5=-441/436
WEBS	2-4=-529/541, 2-5=-435/577

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 4 and 179 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 3=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-167-to-7=-155, 7=-155-to-2=-144, 2=-144-to-8=-133, 8=-133-to-3=-121

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M87	Flat	1	1	Job Reference (optional)	I73988010

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:28
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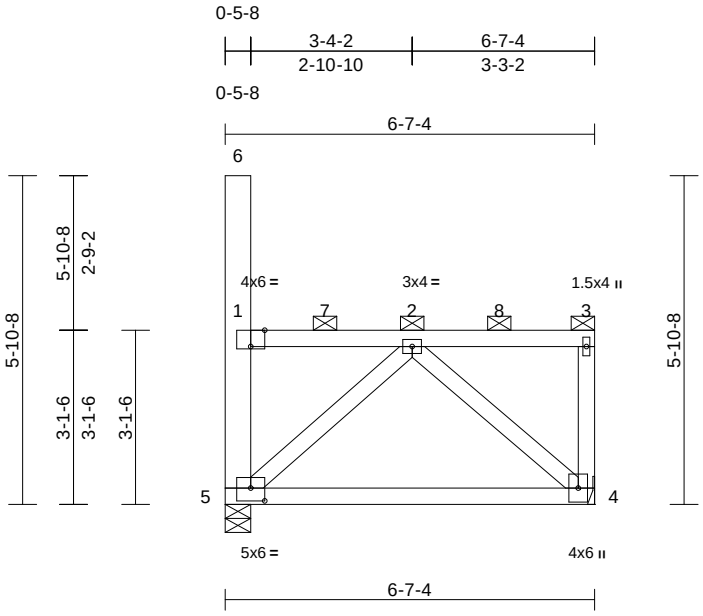

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-248 (LC 11)
Max Uplift 4=-179 (LC 10), 5=-179 (LC 9)
Max Grav 4=609 (LC 36), 5=658 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-515/368, 2-3=-54/59, 3-4=-353/120, 1-5=-428/165, 1-6=0/0
BOT CHORD	4-5=-435/430
WEBS	2-4=-523/536, 2-5=-431/572

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 4 and 179 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-156, 7=-156-to-2=-144, 2=-144-to-8=-132, 8=-132-to-3=-120

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M88	Flat	1	1	Job Reference (optional)	I73988011

Lumber Specialties, Dyersville, IA - 52040,

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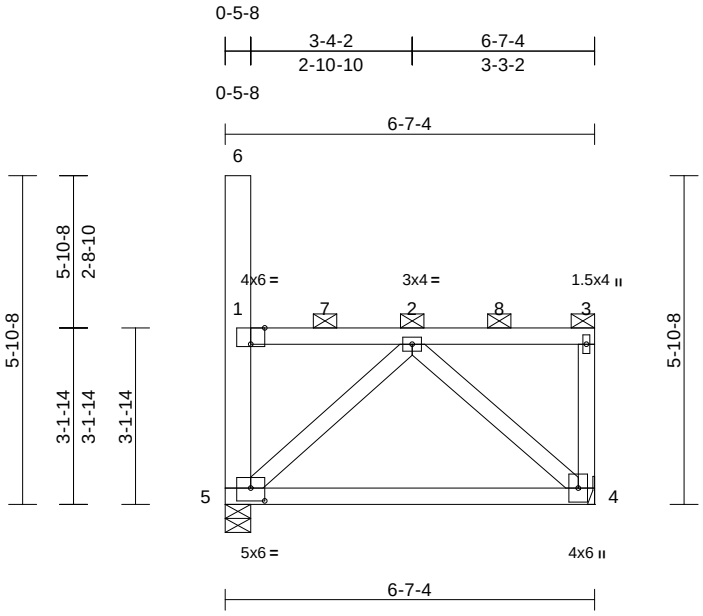

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-247 (LC 11)
Max Uplift 4=-179 (LC 10), 5=-179 (LC 9)
Max Grav 4=609 (LC 36), 5=658 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-505/362, 2-3=-55/60, 3-4=-353/120, 1-5=-428/165, 1-6=0/0
BOT CHORD	4-5=-430/424
WEBS	2-4=-518/532, 2-5=-428/568

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 4 and 179 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-156, 7=-156-to-2=-144, 2=-144-to-8=-132, 8=-132-to-3=-120

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M89	Flat	1	1	Job Reference (optional)	I73988012

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:28
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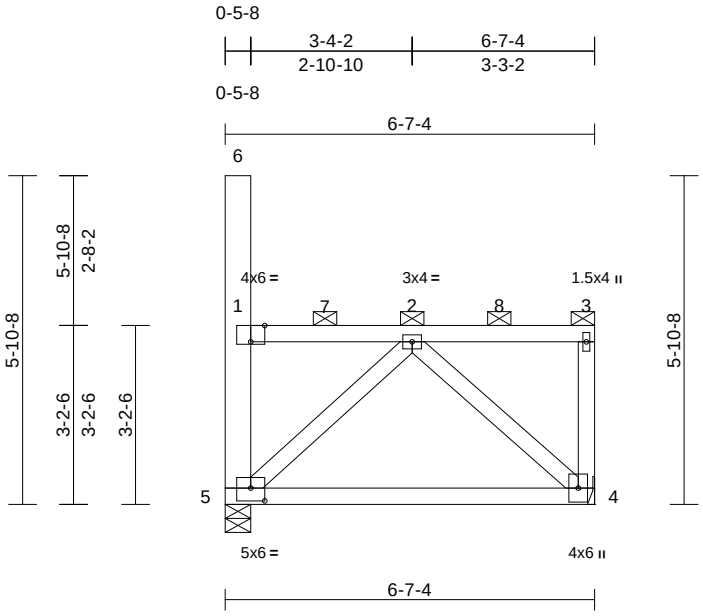
Page: 1



Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 48 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-246 (LC 9)
Max Uplift 4=-178 (LC 10), 5=-178 (LC 9)
Max Grav 4=608 (LC 36), 5=660 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-495/356, 2-3=-56/61, 3-4=-352/120, 1-5=-429/164, 1-6=0/0
BOT CHORD	4-5=-425/418
WEBS	2-4=-512/528, 2-5=-425/563

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 4 and 178 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-169-to-7=-156, 7=-156-to-2=-144, 2=-144-to-8=-132, 8=-132-to-3=-119

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M90	Flat	1	1	Job Reference (optional)	I73988013

Lumber Specialties, Dyersville, IA - 52040,

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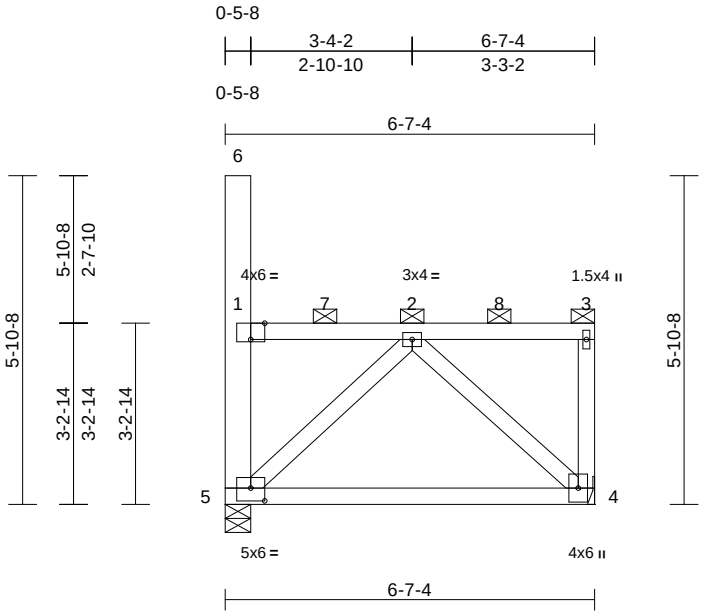

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 48 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=246 (LC 10)
Max Uplift 4=-178 (LC 10), 5=-178 (LC 9)
Max Grav 4=610 (LC 36), 5=658 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-486/350, 2-3=-57/62, 3-4=-354/120, 1-5=-428/163, 1-6=0/0
BOT CHORD	4-5=-420/413
WEBS	2-4=-507/524, 2-5=-422/559

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 4 and 178 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 3=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-156, 7=-156-to-2=-144, 2=-144-to-8=-132, 8=-132-to-3=-120

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M91	Flat	1	1	Job Reference (optional)	I73988014

Lumber Specialties, Dyersville, IA - 52040,

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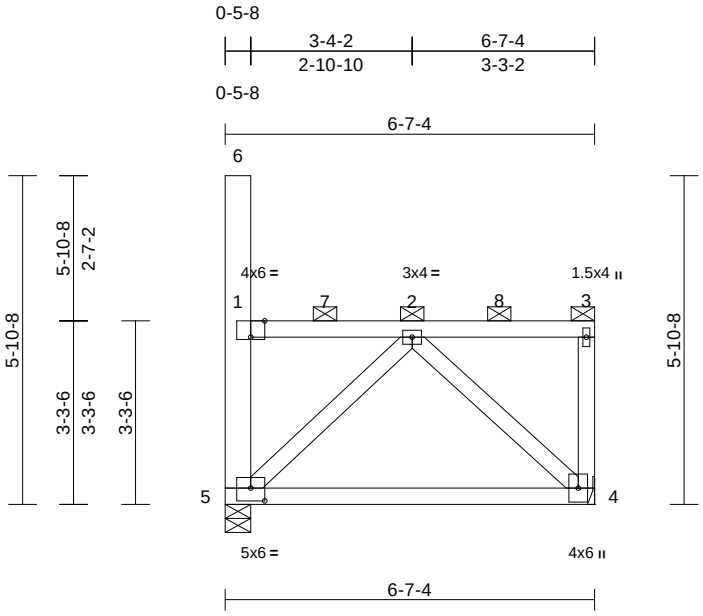

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 48 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-245 (LC 11)
Max Uplift 4=-178 (LC 10), 5=-178 (LC 9)
Max Grav 4=611 (LC 36), 5=657 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-477/345, 2-3=-58/62, 3-4=-355/119, 1-5=-426/162, 1-6=0/0
BOT CHORD	4-5=-415/407
WEBS	2-4=-502/520, 2-5=-419/555

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 4 and 178 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 3=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-167-to-7=-155, 7=-155-to-2=-144, 2=-144-to-8=-133, 8=-133-to-3=-121

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M92	Flat	1	1	Job Reference (optional)	I73988015

Lumber Specialties, Dyersville, IA - 52040,

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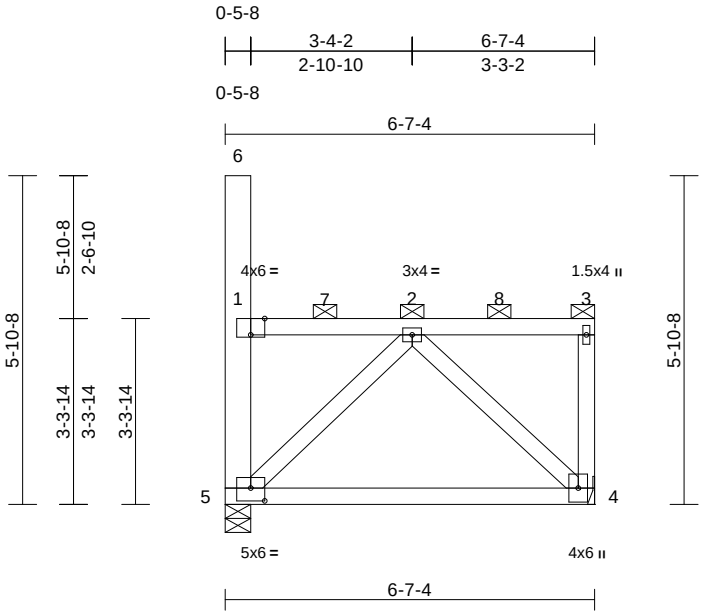

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 48 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=245 (LC 10)
Max Uplift 4=-178 (LC 10), 5=-178 (LC 9)
Max Grav 4=608 (LC 36), 5=660 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-468/339, 2-3=-58/63, 3-4=-352/119, 1-5=-429/161, 1-6=0/0
BOT CHORD	4-5=-410/402
WEBS	2-4=-497/516, 2-5=-416/551

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 4 and 178 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-169-to-7=-156, 7=-156-to-2=-144, 2=-144-to-8=-132, 8=-132-to-3=-119

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M93	Flat	1	1	Job Reference (optional)	I73988016

Lumber Specialties, Dyersville, IA - 52040,

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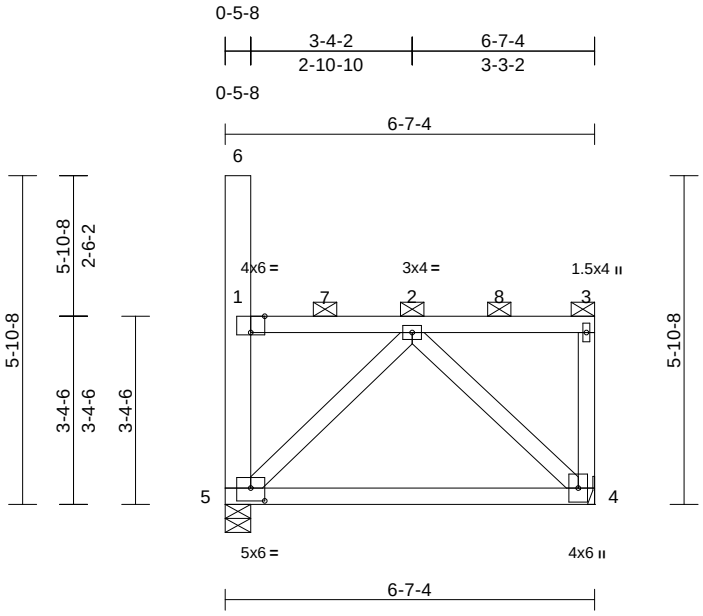

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 48 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=244 (LC 12)
Max Uplift 4=-177 (LC 10), 5=-177 (LC 9)
Max Grav 4=610 (LC 36), 5=658 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-459/334, 2-3=-59/64, 3-4=-354/119, 1-5=-427/161, 1-6=0/0
BOT CHORD	4-5=-406/397
WEBS	2-4=-493/512, 2-5=-414/547

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 4 and 177 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 3=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-156, 7=-156-to-2=-144, 2=-144-to-8=-132, 8=-132-to-3=-120

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M94	Flat	1	1	Job Reference (optional)	I73988017

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:29
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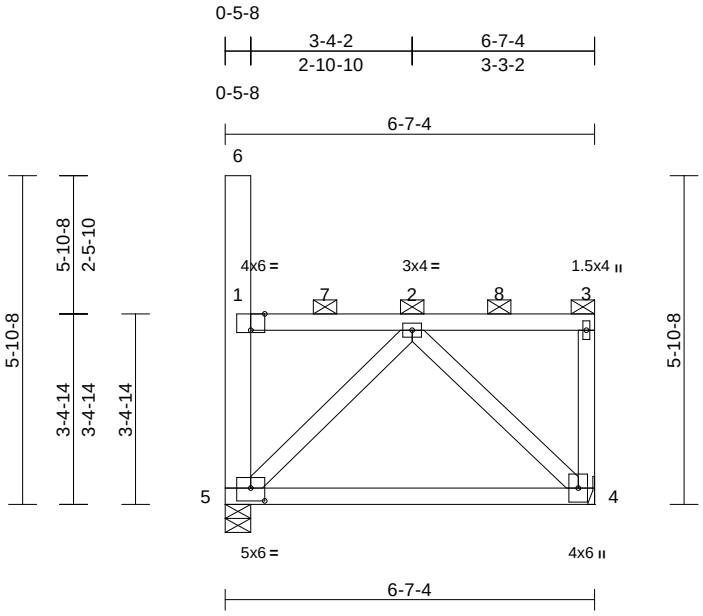

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 48 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-243 (LC 9)
Max Uplift 4=-177 (LC 10), 5=-177 (LC 9)
Max Grav 4=608 (LC 36), 5=653 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-451/329, 2-3=-60/65, 3-4=-354/119, 1-5=-424/160, 1-6=0/0
BOT CHORD	4-5=-401/392
WEBS	2-4=-488/509, 2-5=-409/543

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 4 and 177 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 3=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-165-to-7=-154, 7=-154-to-2=-143, 2=-143-to-8=-132, 8=-132-to-3=-120

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M95	Flat	1	1	Job Reference (optional)	I73988018

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:30
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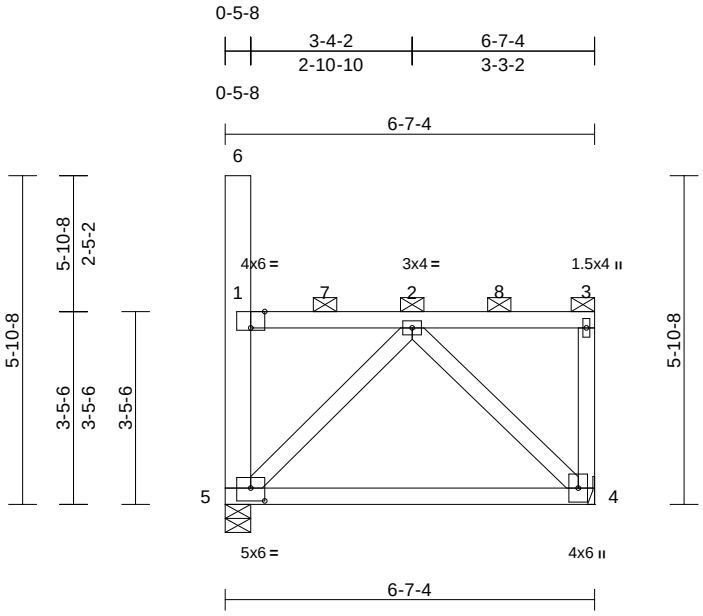

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 48 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=243 (LC 12)
Max Uplift 4=-177 (LC 10), 5=-177 (LC 9)
Max Grav 4=608 (LC 36), 5=660 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-443/324, 2-3=-61/66, 3-4=-352/119, 1-5=-428/159, 1-6=0/0
BOT CHORD	4-5=-397/387
WEBS	2-4=-483/505, 2-5=-408/540

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 5 and 177 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Trapezoidal Loads (lb/ft)
   Vert: 1=-169-to-7=-156, 7=-156-to-2=-144, 2=-144-to-8=-132, 8=-132-to-3=-119

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M96	Flat	1	1	Job Reference (optional)	I73988019

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:30
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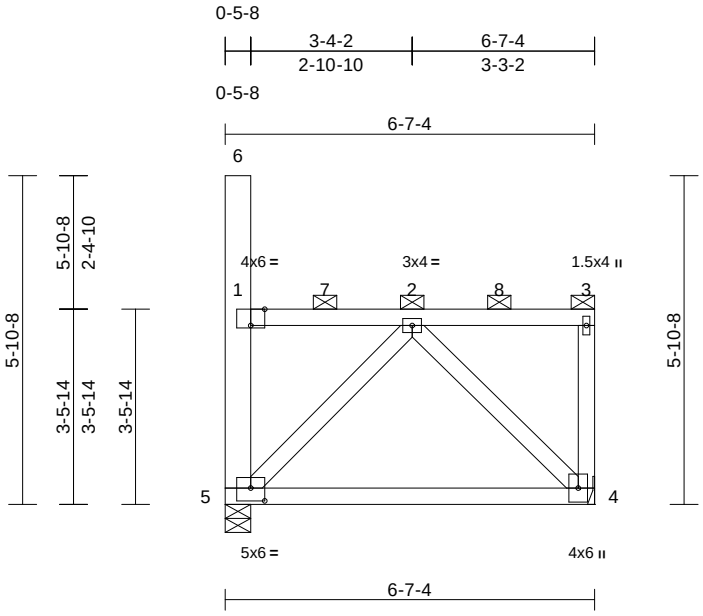

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 49 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-242 (LC 9)
Max Uplift 4=-176 (LC 10), 5=-176 (LC 9)
Max Grav 4=612 (LC 36), 5=664 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-435/319, 2-3=-62/67, 3-4=-354/119, 1-5=-431/158, 1-6=0/0
BOT CHORD	4-5=-393/382
WEBS	2-4=-479/502, 2-5=-408/536

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 176 lb uplift at joint 5 and 176 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-1, 3=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-170-to-7=-158, 7=-158-to-2=-145, 2=-145-to-8=-132, 8=-132-to-3=-120

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M97	Flat	1	1	Job Reference (optional)	I73988020

Lumber Specialties, Dyersville, IA - 52040,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu Jun 05 07:14:30
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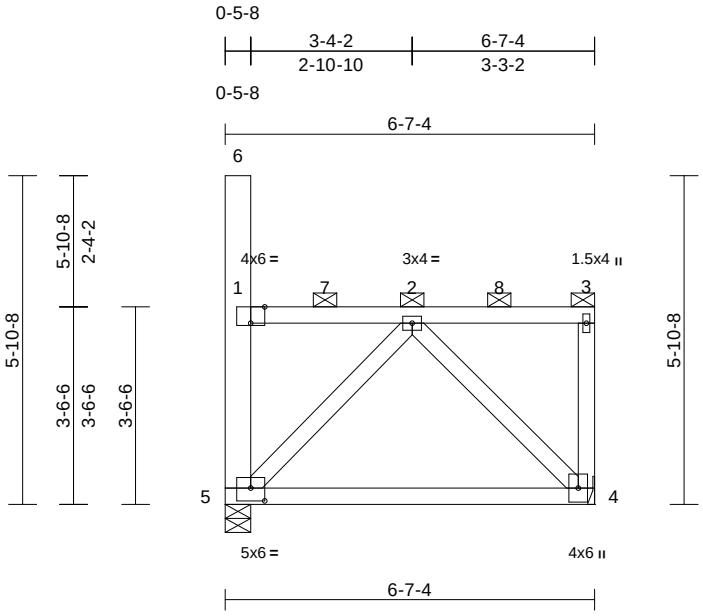

Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 49 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=242 (LC 10)
Max Uplift 4=-176 (LC 10), 5=-176 (LC 9)
Max Grav 4=610 (LC 36), 5=658 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-427/314, 2-3=-62/68, 3-4=-354/118, 1-5=-426/157, 1-6=0/0
BOT CHORD	4-5=-389/378
WEBS	2-4=-475/499, 2-5=-404/533

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 176 lb uplift at joint 4 and 176 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 1=-1
   Trapezoidal Loads (lb/ft)
   Vert: 1=-167-to-7=-155, 7=-155-to-2=-144, 2=-144-to-8=-133, 8=-133-to-3=-121

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

June 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Discover Pet Spa	
2503401-A	M98	Flat	1	1	Job Reference (optional)	I73988021

Lumber Specialties, Dyersville, IA - 52040,

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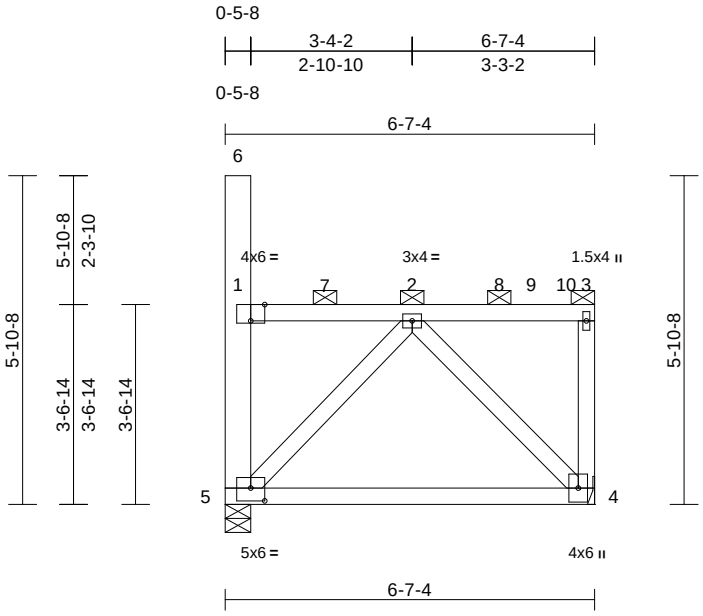


Scale = 1:41.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.08	4-5	>946	180		
TCDL	15.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 49 lb	FT = 12%

LUMBER

TOP CHORD	2x4 SP 1650F 1.6E
BOT CHORD	2x4 SP 1650F 1.6E
WEBS	2x4 SP No.2 *Except* 6-5:2x6 SP 2400F 2.0E

BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, 1-6, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-8
Max Horiz 5=-241 (LC 9)
Max Uplift 4=-176 (LC 10), 5=-176 (LC 9)
Max Grav 4=598 (LC 36), 5=659 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-419/309, 2-3=-63/69, 3-4=-342/118, 1-5=-428/157, 1-6=0/0
BOT CHORD	4-5=-385/373
WEBS	2-4=-470/496, 2-5=-400/530

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Provide adequate drainage to prevent water ponding.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 176 lb uplift at joint 4 and 176 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Top Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 4-5=-20
   Concentrated Loads (lb)
   Vert: 3=-4
   Trapezoidal Loads (lb/ft)
   Vert: 1=-168-to-7=-156, 7=-156-to-2=-145, 2=-145-to-8=-133, 8=-133-to-9=-129, 9=-114-to-10=-107, 10=-98-to-3=-96

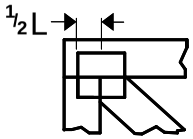
STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

June 6,2025

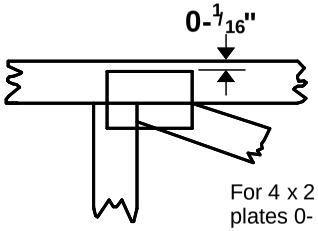
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

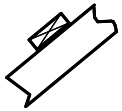
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

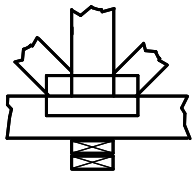
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

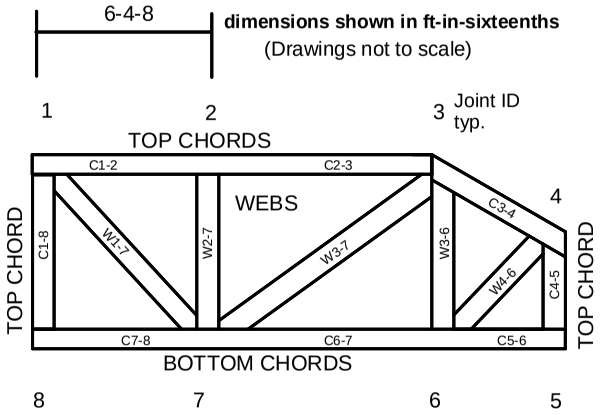


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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