MiTek®

RE: 241090-A
Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle

MiTek, Inc.
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571

Site Information:

Customer: Premier Building Supply
Project Name: 241090-A
Lot/Block: 187
Model:
Address: 3219 SW Arboridge Circle
Subdivision:
City: Lee's Summit
State: MO

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

Design Code: IRC2018/TPI2014
Design Program: MiTek 20/20 8.8
Wind Code: ASCE 7-16
Wind Speed: 115 mph
Roof Load: 45.0 psf
Floor Load: N/A psf

This package includes 64 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	R85980055	A11	12/27/2024	21	R85980075	J4	12/27/2024
2	R85980056	A17	12/27/2024	22	R85980076	J5	12/27/2024
3	R85980057	A16	12/27/2024	23	R85980077	LG1	12/27/2024
4	R85980058	A15	12/27/2024	24	R85980078	A1	12/27/2024
5	R85980059	A14	12/27/2024	25	R85980079	A2	12/27/2024
6	R85980060	A13	12/27/2024	26	R85980080	A3	12/27/2024
7	R85980061	A12	12/27/2024	27	R85980081	A4	12/27/2024
8	R85980062	CG6	12/27/2024	28	R85980082	A5	12/27/2024
9	R85980063	J1	12/27/2024	29	R85980083	A6	12/27/2024
10	R85980064	J9	12/27/2024	30	R85980084	A7	12/27/2024
11	R85980065	J2	12/27/2024	31	R85980085	E1	12/27/2024
12	R85980066	C2	12/27/2024	32	R85980086	CG3	12/27/2024
13	R85980067	C1	12/27/2024	33	R85980087	J8	12/27/2024
14	R85980068	CG5	12/27/2024	34	R85980088	LG3	12/27/2024
15	R85980069	J3	12/27/2024	35	R85980089	C3	12/27/2024
16	R85980070	LG6	12/27/2024	36	R85980090	J6	12/27/2024
17	R85980071	B1	12/27/2024	37	R85980091	B4	12/27/2024
18	R85980072	B2	12/27/2024	38	R85980092	B5	12/27/2024
19	R85980073	B3	12/27/2024	39	R85980093	B6	12/27/2024
20	R85980074	CG1	12/27/2024	40	R85980094	B7	12/27/2024

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Direct Lumber of Colorado.

Truss Design Engineer's Name: Sevier, Scott

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

Missouri COA: 001193

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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.

December 27, 2024

Sevier, Scott

MiTek®

RE: 241090-A - Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle

MiTek, Inc.
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571

Site Information:

Project Customer: Premier Building Supply Project Name: 241090-A
Lot/Block: 187 Subdivision:
Address: 3219 SW Arboridge Circle
City, County: Lee's Summit State: MO

No.	Seal#	Truss Name	Date
41	R85980095	B8	12/27/2024
42	R85980096	V1	12/27/2024
43	R85980097	V2	12/27/2024
44	R85980098	A8	12/27/2024
45	R85980099	A9	12/27/2024
46	R85980100	A10	12/27/2024
47	R85980101	V3	12/27/2024
48	R85980102	V4	12/27/2024
49	R85980103	E2	12/27/2024
50	R85980104	V5	12/27/2024
51	R85980105	V6	12/27/2024
52	R85980106	V7	12/27/2024
53	R85980107	V8	12/27/2024
54	R85980108	V9	12/27/2024
55	R85980109	V10	12/27/2024
56	R85980110	LG2	12/27/2024
57	R85980111	LG7	12/27/2024
58	R85980112	LG4	12/27/2024
59	R85980113	LG5	12/27/2024
60	R85980114	LG9	12/27/2024
61	R85980115	LG8	12/27/2024
62	R85980116	D1	12/27/2024
63	R85980117	D2	12/27/2024
64	R85980118	J7	12/27/2024

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980055
241090-A	A11	Hip	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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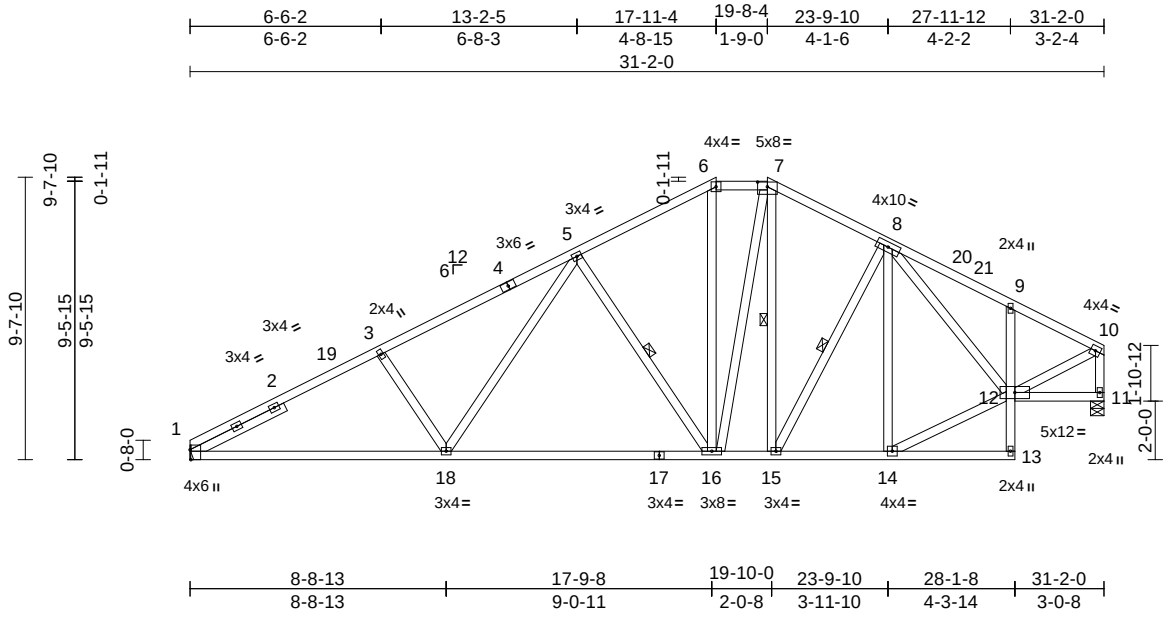

Scale = 1:72

Plate Offsets (X, Y): [1:0-4-1,Edge], [7:0-4-0,0-1-15]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.14	1-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.31	16-18	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.06	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 173 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2
SLIDER	Left 2x4 WW Stud -- 3-7-1

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-1-9 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-4 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-3-13 oc bracing: 1-18.
WEBS	1 Row at midpt 7-15, 8-15, 5-16

REACTIONS (size) 1= Mechanical, 11=0-5-8
Max Horiz 1=230 (LC 12)
Max Uplift 1=-224 (LC 12), 11=-172 (LC 13)
Max Grav 1=1396 (LC 1), 11=1396 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-3=-2398/401, 3-5=-2195/409, 5-6=-1431/347, 6-7=-1222/332, 7-8=-1327/343, 8-9=-1447/330, 9-10=-1415/249, 10-11=-1356/250
BOT CHORD	1-18=-488/2089, 16-18=-290/1579, 15-16=-152/1103, 14-15=-172/1107, 13-14=-5/33, 12-13=0/71, 9-12=-260/160, 11-12=-30/53
WEBS	6-16=-83/413, 7-15=-127/96, 10-12=-227/1363, 8-15=-117/148, 8-12=-108/223, 8-14=-419/139, 12-14=-185/1190, 7-16=-105/471, 3-18=-358/256, 5-18=-119/585, 5-16=-719/299

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 17-11-4, Exterior(2E) 17-11-4 to 19-8-4, Exterior(2R) 19-8-4 to 26-9-2, Interior (1) 26-9-2 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: , Joint 11 SPF No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 1 and 172 lb uplift at joint 11.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980056
241090-A	A17	Half Hip Girder	1	2	Job Reference (optional)

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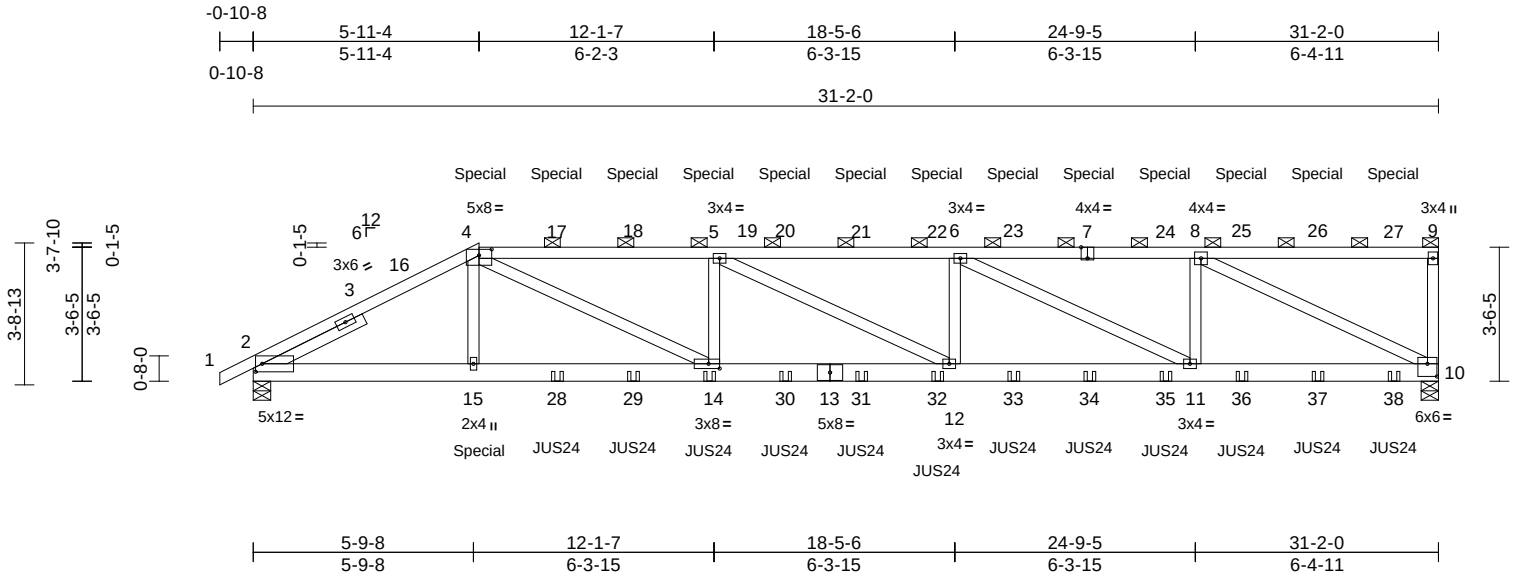

Scale = 1:60.1

Plate Offsets (X, Y): [2:0-2-1,0-2-8], [4:0-4-0,0-1-15], [7:0-2-0,Edge], [10:0-3-0,0-4-0], [14:0-3-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	0.22	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.38	12-14	>978	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 286 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 7-9:2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 2-11-4

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-1 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=143 (LC 34)
Max Uplift 2=-782 (LC 12), 10=-906 (LC 9)
Max Grav 2=2709 (LC 1), 10=2727 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/11, 2-4=-4878/1525, 4-5=-6636/2189, 5-6=-6632/2184, 6-8=-4498/1501, 8-9=-127/104, 9-10=-371/221
BOT CHORD 2-15=-1442/4205, 14-15=-1442/4184, 12-14=-2243/6632, 11-12=-2237/6632, 10-11=-1521/4498
WEBS 4-15=-15/535, 4-14=-972/2827, 8-10=-4934/1626, 5-14=-1014/591, 5-12=-23/67, 6-12=0/472, 6-11=-2384/799, 8-11=-175/1303

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-11-4, Exterior(2R) 5-11-4 to 13-0-2, Interior (1) 13-0-2 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SPF 1650F 1.5E .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 906 lb uplift at joint 10 and 782 lb uplift at joint 2.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Use MiTek JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 8-0-0 from the left end to 30-0-0 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 155 lb down and 136 lb up at 5-11-4, 131 lb down and 136 lb up at 8-0-0, 131 lb down and 136 lb up at 10-0-0, 131 lb down and 136 lb up at 12-0-0, 131 lb down and 136 lb up at 14-0-0, 131 lb down and 136 lb up at 16-0-0, 131 lb down and 136 lb up at 18-0-0, 131 lb down and 136 lb up at 20-0-0, 131 lb down and 136 lb up at 22-0-0, 131 lb down and 136 lb up at 24-0-0, 131 lb down and 136 lb up at 26-0-0, and 131 lb down and 136 lb up at 28-0-0, and 131 lb down and 136 lb up at 30-0-0 on top chord, and 419 lb down and 135 lb up at 5-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-9=-70, 2-10=-20
Concentrated Loads (lb)

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

December 27,2024

Continued on page 2

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980056
241090-A	A17	Half Hip Girder	1	**2**	Job Reference (optional)

Vert: 4=-131 (B), 7=-131 (B), 15=-419 (B), 14=-39 (B), 5=-131 (B), 17=-131 (B), 18=-131 (B), 20=-131 (B), 21=-131 (B), 22=-131 (B), 23=-131 (B), 24=-131 (B), 25=-131 (B), 26=-131 (B), 27=-131 (B), 28=-39 (B), 29=-39 (B), 30=-39 (B), 31=-39 (B), 32=-39 (B), 33=-39 (B), 34=-39 (B), 35=-39 (B), 36=-39 (B), 37=-39 (B), 38=-39 (B)

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980057
241090-A	A16	Half Hip	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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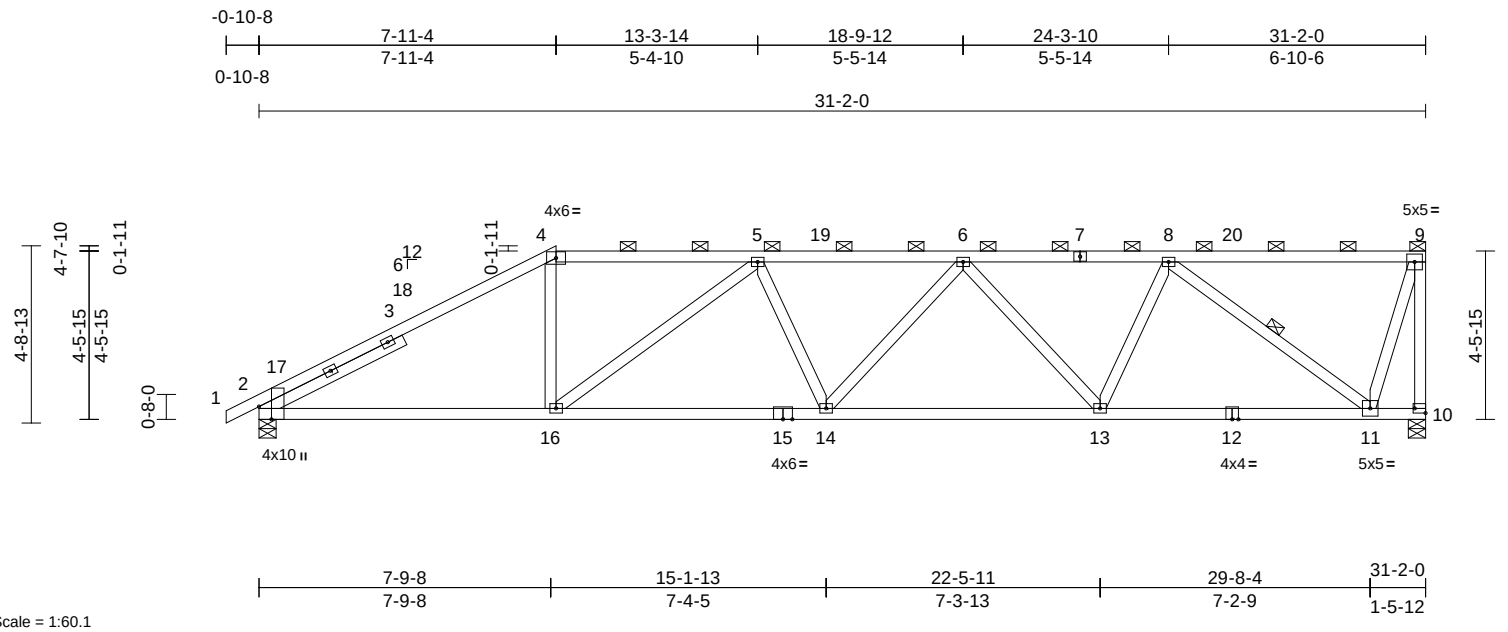

Scale = 1:60.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.15	14-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.29	13-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.11	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 129 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 4-3-9

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

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=188 (LC 9)
Max Uplift 2=-182 (LC 9), 10=-300 (LC 9)
Max Grav 2=1458 (LC 1), 10=1395 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2356/366, 4-5=-2002/369, 5-6=-2618/487, 6-8=-2128/412, 8-9=-474/132, 9-10=-1411/250
BOT CHORD 2-16=-438/2095, 14-16=-590/2655, 13-14=-581/2559, 11-13=-442/1874, 10-11=-76/89
WEBS 4-16=-62/681, 5-16=-873/268, 5-14=0/154, 6-14=0/190, 6-13=-627/180, 8-13=-51/683, 8-11=-1794/430, 9-11=-164/1256

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 7-11-4, Exterior(2R) 7-11-4 to 15-0-2, Interior (1) 15-0-2 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 3x4 (=) MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SPF No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 300 lb uplift at joint 10 and 182 lb uplift at joint 2.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27,2024

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Roseville, CA 95661
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980058
241090-A	A15	Half Hip	1	1	Job Reference (optional)

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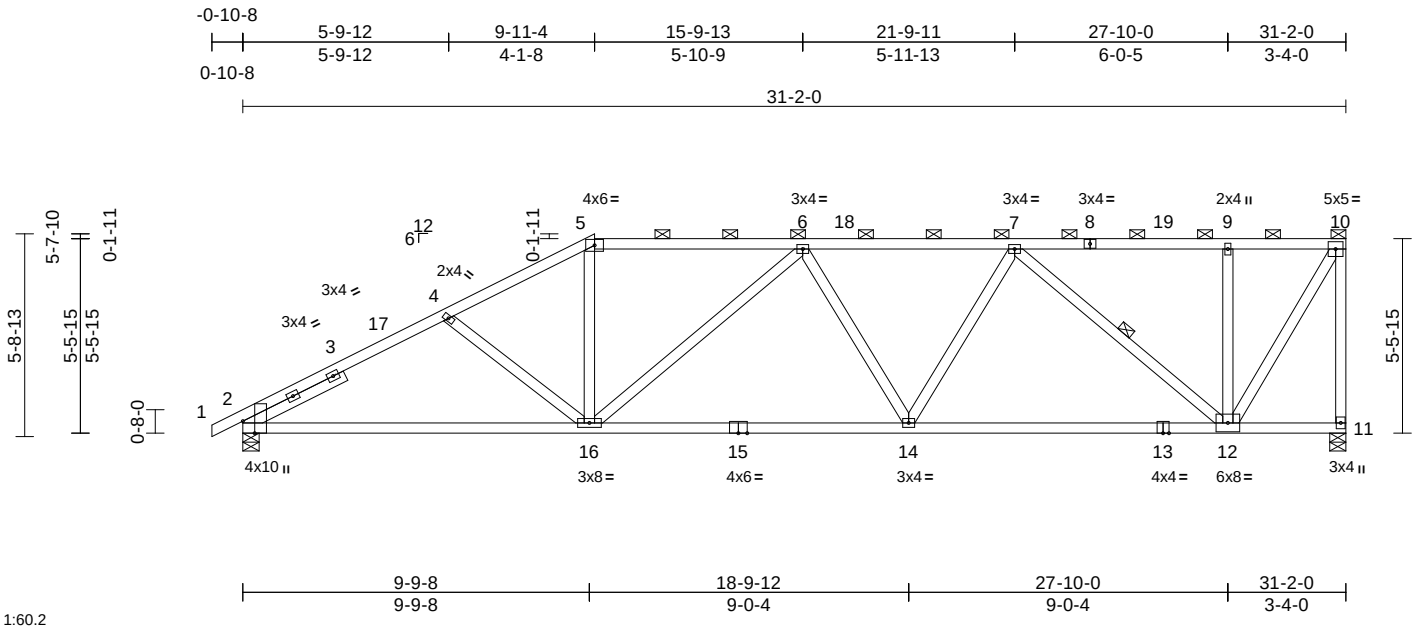


Scale = 1:60.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.23	2-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.48	2-16	>780	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 136 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 3-2-4

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-2 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-14 max.): 5-10.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-12

REACTIONS (size) 2=0-5-8, 11=0-5-8
Max Horiz 2=232 (LC 9)
Max Uplift 2=-182 (LC 12), 11=-297 (LC 9)
Max Grav 2=1458 (LC 1), 11=1395 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2375/404, 4-5=-2138/364, 5-6=-1877/349, 6-7=-2053/364, 7-9=-892/212, 9-10=-892/212, 10-11=-1401/287
BOT CHORD 2-16=-575/2148, 14-16=-501/2223, 12-14=-436/1857, 11-12=-106/114
WEBS 5-16=-38/589, 4-16=-224/216, 6-16=-499/214, 6-14=-262/143, 7-14=-19/471, 7-12=-1277/298, 9-12=-373/172, 10-12=-311/1579

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 9-11-4, Exterior(2R) 9-11-4 to 17-0-2, Interior (1) 17-0-2 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SPF No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 297 lb uplift at joint 11 and 182 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

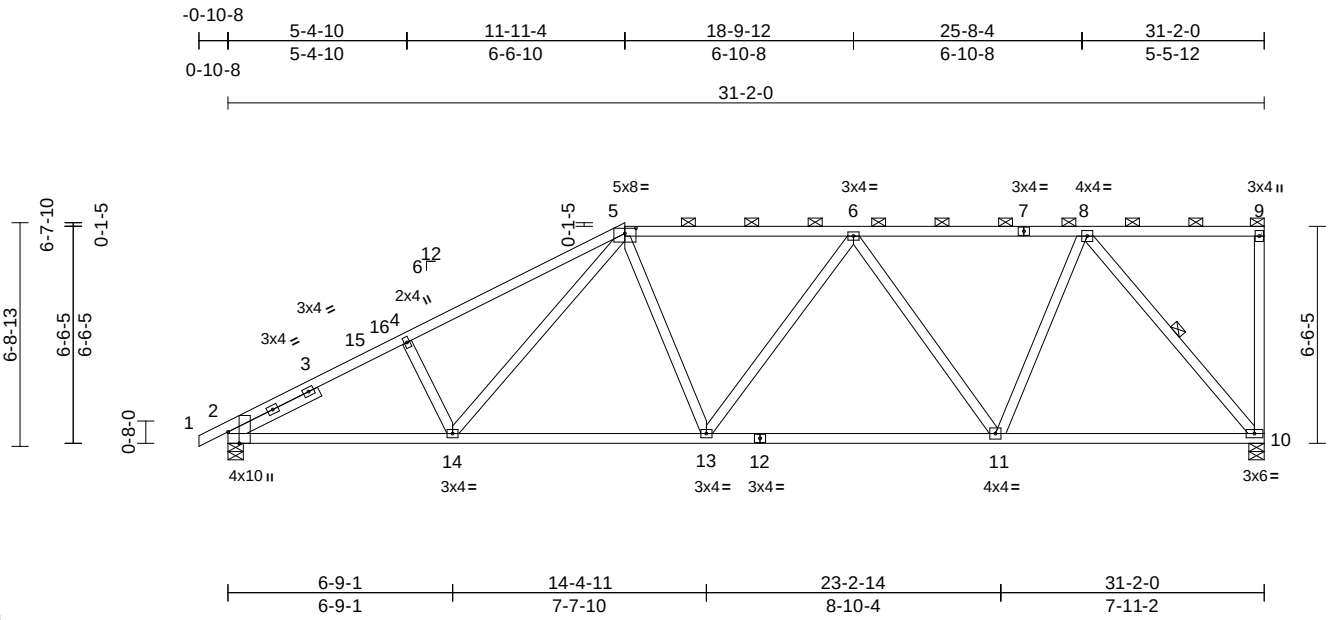
LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980059
241090-A	A14	Half Hip	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:27 Page: 1
ID:n3N9p?HPSdlsWMEmG5eTTbzZ4P9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDuI7J4zJC?I



Scale = 1:62.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.11	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.26	11-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 137 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 1-5:2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 3-0-6

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

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=278 (LC 9)
Max Uplift 2=-202 (LC 12), 10=-293 (LC 9)
Max Grav 2=1458 (LC 1), 10=1395 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2470/391, 4-5=-2334/429, 5-6=-1777/351, 6-8=-1394/292, 8-9=-137/138, 9-10=-156/73
BOT CHORD 2-14=-623/2250, 13-14=-461/1797, 11-13=-424/1813, 10-11=-282/1108
WEBS 4-14=-291/244, 5-14=-169/517, 5-13=-41/290, 6-13=-126/184, 6-11=-695/208, 8-11=-60/804, 8-10=-1584/352

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 11-11-4, Exterior(2R) 11-11-4 to 18-9-12, Interior (1) 18-9-12 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SPF No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 293 lb uplift at joint 10 and 202 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

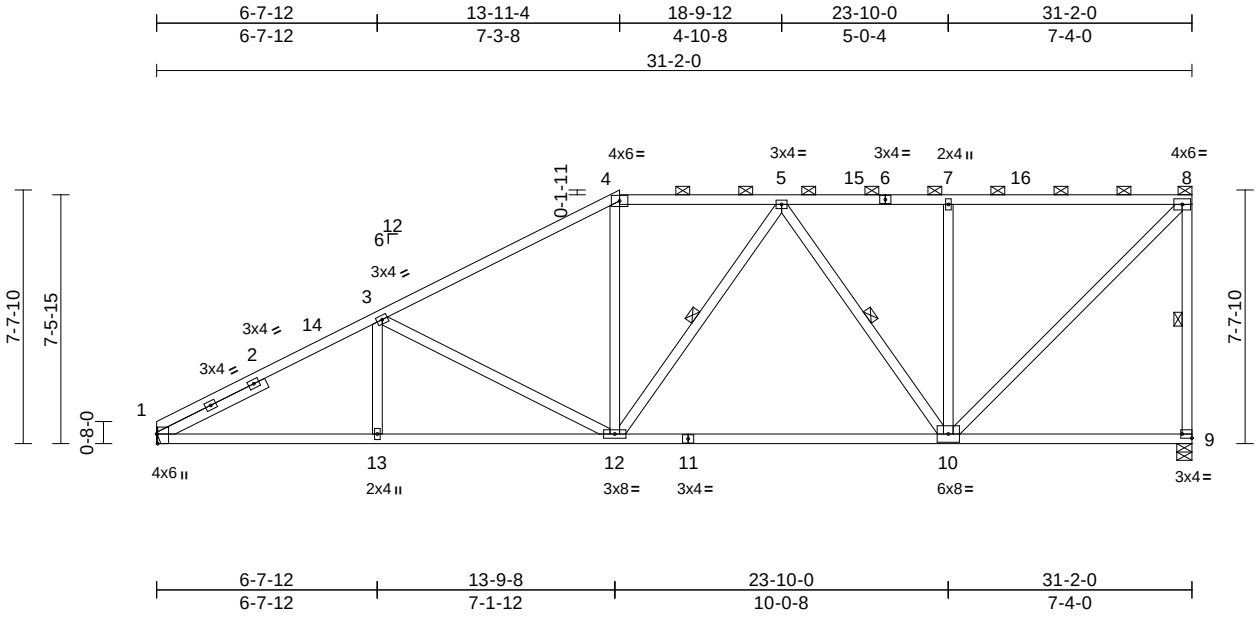
LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980060
241090-A	A13	Half Hip	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:27 Page: 1
ID:n3N9p?HPSdlsWMEmG5eTTbzZ4P9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDuI7J4zJC?I



Scale = 1:64

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.22	10-12	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.47	10-12	>799	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 144 lb	FT = 20%

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

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

REACTIONS (size) 1= Mechanical, 9=0-5-8
Max Horiz 1=320 (LC 9)
Max Uplift 1=-197 (LC 12), 9=-289 (LC 9)
Max Grav 1=1396 (LC 1), 9=1396 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2447/388, 3-4=-1854/350, 4-5=-1592/352, 5-7=-1225/300, 7-8=-1225/300, 8-9=-1364/313
BOT CHORD 1-13=-628/2245, 12-13=-628/2245, 10-12=-401/1566, 9-10=-132/152
WEBS 4-12=-7/392, 3-13=0/260, 3-12=-637/277, 5-12=-74/216, 5-10=-560/170, 7-10=-508/232, 8-10=-309/1621

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 13-11-4, Exterior(2R) 13-11-4 to 21-0-2, Interior (1) 21-0-2 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: , Joint 9 SPF No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 1 and 289 lb uplift at joint 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980061
241090-A	A12	Half Hip	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:26 Page: 1
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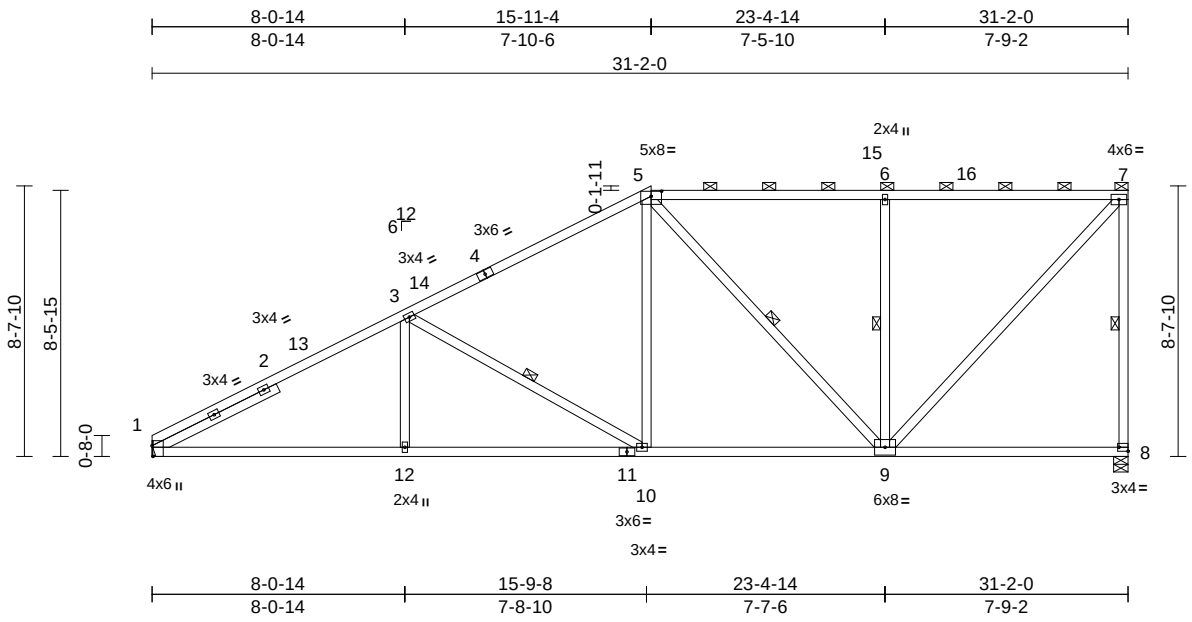

Scale = 1:68

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.11	1-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.26	1-12	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 144 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 4-5-7

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

REACTIONS (size) 1= Mechanical, 8=0-5-8
Max Horiz 1=364 (LC 9)
Max Uplift 1=-211 (LC 12), 8=-283 (LC 9)
Max Grav 1=1396 (LC 1), 8=1396 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2393/373, 3-5=-1686/347, 5-6=-1148/321, 6-7=-1146/319, 7-8=-1359/314
BOT CHORD 1-12=-625/2196, 10-12=-625/2196, 9-10=-433/1504, 8-9=-150/173
WEBS 3-12=0/338, 3-10=-786/304, 5-10=-59/540, 5-9=-498/168, 6-9=-626/288, 7-9=-307/1561

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 15-11-4, Exterior(2R) 15-11-4 to 23-0-2, Interior (1) 23-0-2 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: , Joint 8 SPF No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 283 lb uplift at joint 8 and 211 lb uplift at joint 1.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980062
241090-A	CG6	Diagonal Hip Girder	2	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:33 2024 Page: 1
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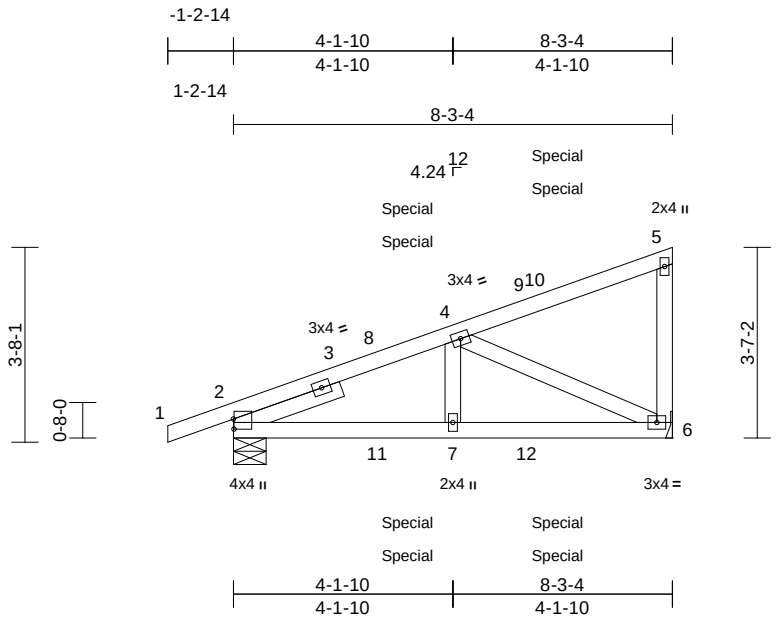

Scale = 1:27.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.01	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.03	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 33 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 2-1-10

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-2-13 oc bracing.

REACTIONS (size) 2=0-7-6, 6= Mechanical
Max Horiz 2=157 (LC 9)
Max Uplift 2=-151 (LC 8), 6=-141 (LC 12)
Max Grav 2=482 (LC 1), 6=408 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-628/285, 4-5=-127/91, 5-6=-145/139
BOT CHORD 2-7=-407/523, 6-7=-407/523
WEBS 4-7=0/230, 4-6=-570/403

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-14 to 5-10-0, Exterior(2R) 5-10-0 to 8-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: Joint 2 SPF No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 6 and 151 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 17 lb down and 66 lb up at 2-8-7, 17 lb down and 66 lb up at 2-8-7, and 44 lb down and 110 lb up at 5-6-6, and 44 lb down and 110 lb up at 5-6-6 on top chord, and 1 lb down at 2-8-7, 1 lb down at 2-8-7, and 21 lb down at 5-6-6, and 21 lb down at 5-6-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 9=-53 (F=-26, B=-26), 12=-19 (F=-10, B=-10)

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle
241090-A	J1	Jack-Open	36	1	Job Reference (optional) R85980063

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:34 Page: 1
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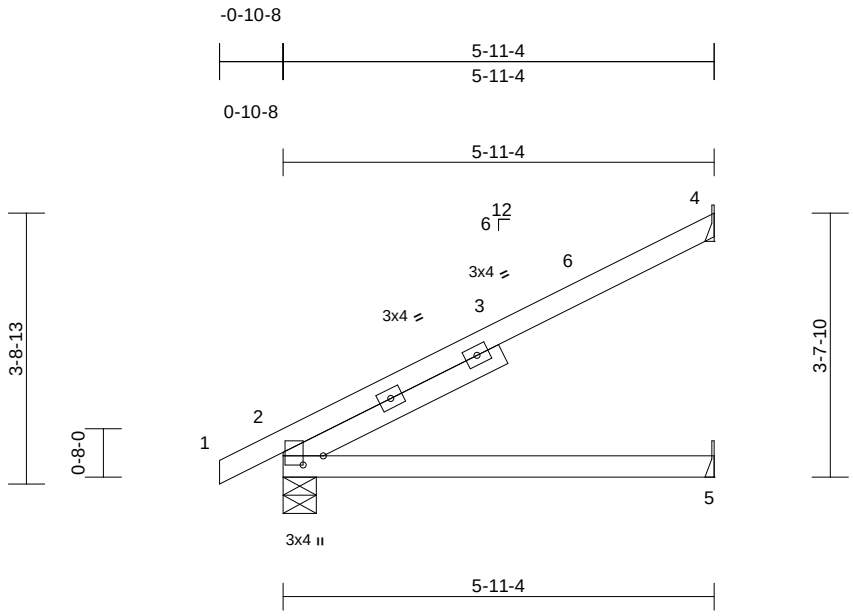

Scale = 1:25.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.07	2-5	>987	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.14	2-5	>493	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 3-4-1

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

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=147 (LC 12)
Max Uplift 2=-41 (LC 12), 4=-132 (LC 12)
Max Grav 2=330 (LC 1), 4=201 (LC 1), 5=117 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-141/97
BOT CHORD 2-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: , Joint 2 SPF No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 132 lb uplift at joint 4 and 41 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980064
241090-A	J9	Jack-Open	9	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:35 Page: 1
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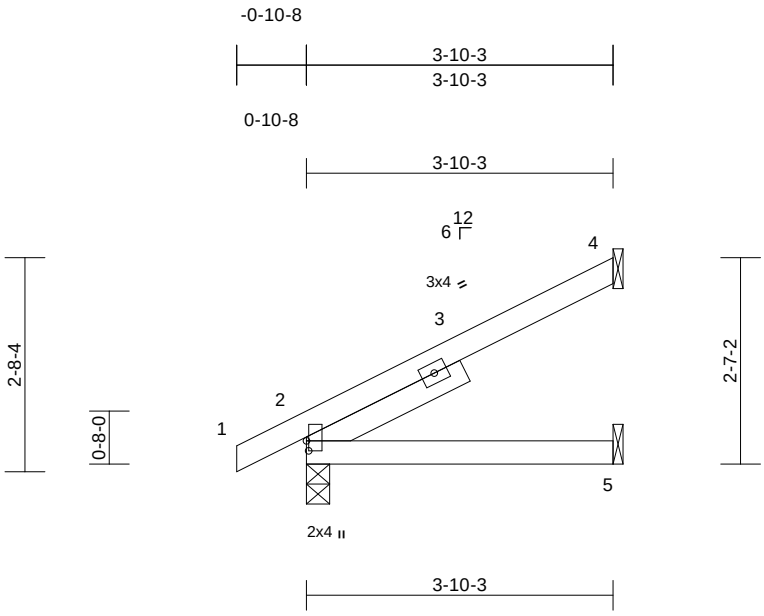

Scale = 1:21.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01	2-5	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 2-2-1

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

REACTIONS (size) 2=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=101 (LC 12)
Max Uplift 2=-33 (LC 12), 4=-87 (LC 12)
Max Grav 2=239 (LC 1), 4=125 (LC 1), 5=76 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-95/63
BOT CHORD 2-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: , Joint 2 SPF No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 4 and 33 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980065
241090-A	J2	Jack-Open	13	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:34 Page: 1
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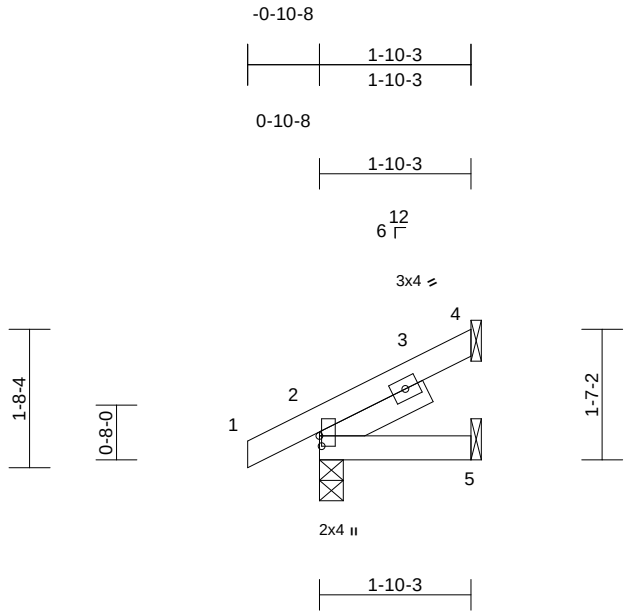

Scale = 1:17.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	2-5	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 7 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 1-5-2

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

REACTIONS (size) 2=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=59 (LC 12)
Max Uplift 2=-26 (LC 12), 4=-43 (LC 12)
Max Grav 2=158 (LC 1), 4=50 (LC 1), 5=37 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-53/29
BOT CHORD 2-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: , Joint 2 SPF No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 2 and 43 lb uplift at joint 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980066
241090-A	C2	Common	2	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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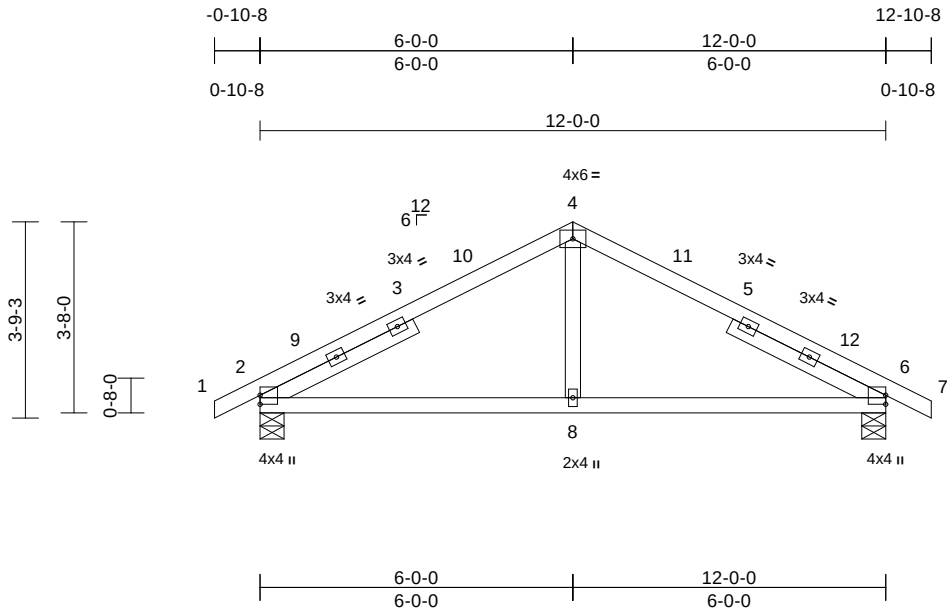

Scale = 1:38.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.03	2-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.06	2-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 41 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 3-3-9, Right 2x4 WW Stud -- 3-3-9

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

REACTIONS (size) 2=0-5-8, 6=0-5-8
Max Horiz 2=65 (LC 12)
Max Uplift 2=-104 (LC 12), 6=-104 (LC 13)
Max Grav 2=601 (LC 1), 6=601 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-731/287, 4-6=-731/287, 6-7=0/6
BOT CHORD 2-8=-128/536, 6-8=-128/536
WEBS 4-8=0/277

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 11-0-0, Interior (1) 11-0-0 to 12-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SPF No.2 .
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 2 and 104 lb uplift at joint 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle
241090-A	C1	Hip Girder	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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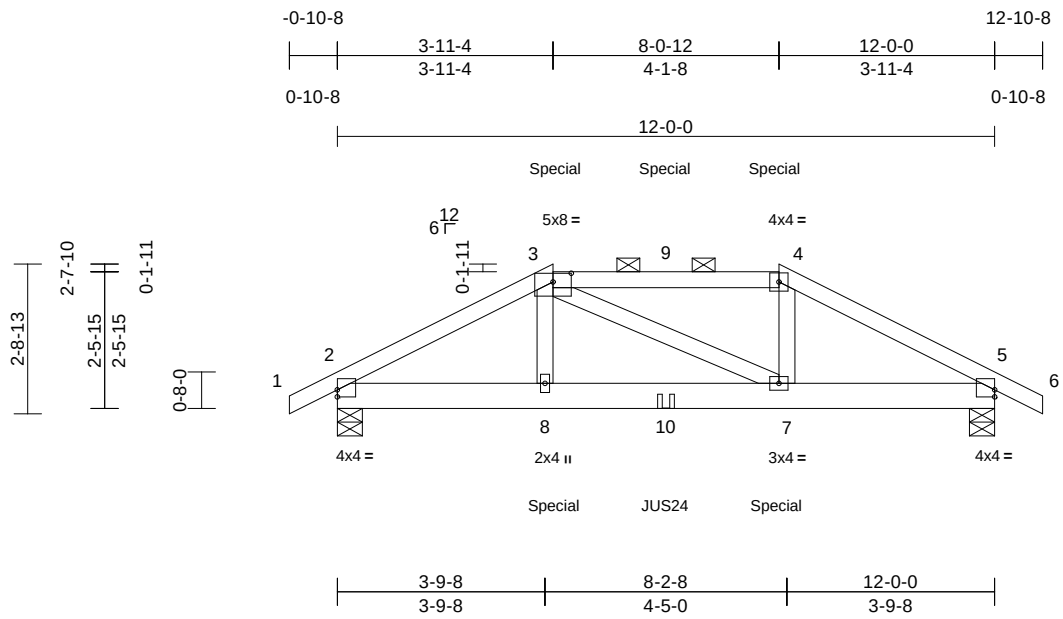

Scale = 1:34.3

Plate Offsets (X, Y): [2:Edge,0-1-9], [3:0-4-0,0-1-15], [5:Edge,0-1-9]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.02	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 48 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS (size) 2=0-5-8, 5=0-5-8
Max Horiz 2=44 (LC 12)
Max Uplift 2=-255 (LC 12), 5=-255 (LC 13)
Max Grav 2=913 (LC 1), 5=913 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/11, 2-3=-1396/511, 3-4=-1121/487, 4-5=-1391/506, 5-6=0/11
BOT CHORD 2-8=-352/1146, 7-8=-351/1125, 5-7=-353/1142
WEBS 3-8=-18/330, 3-7=-58/50, 4-7=-18/328

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SPF 1650F 1.5E .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 255 lb uplift at joint 2 and 255 lb uplift at joint 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Use MiTek JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 6-0-0 from the left end to connect truss(es) to back face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 82 lb down and 100 lb up at 3-11-4, and 59 lb down and 100 lb up at 6-0-0, and 82 lb down and 100 lb up at 8-0-12 on top chord, and 219 lb down and 65 lb up at 3-11-4, and 219 lb down and 65 lb up at 8-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-4=-70, 4-6=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 3=-59 (B), 4=-59 (B), 8=-219 (B), 7=-219 (B), 9=-59 (B), 10=-19 (B)

December 27,2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980068
241090-A	CG5	Diagonal Hip Girder	3	1	Job Reference (optional)

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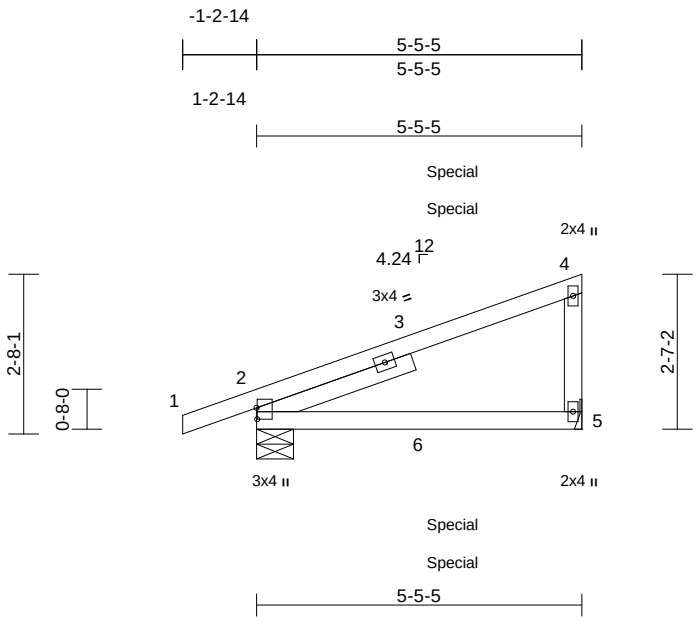

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Plate Offsets (X, Y): [2:0-2-5,0-0-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.05	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.09	2-5	>673	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 2-9-1

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

REACTIONS (size) 2=0-7-6, 5= Mechanical
Max Horiz 2=109 (LC 9)
Max Uplift 2=-106 (LC 8), 5=-59 (LC 12)
Max Grav 2=335 (LC 1), 5=228 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-134/83, 4-5=-199/249
BOT CHORD 2-5=-46/50

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: Joint 2 SPF No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 5 and 106 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb up at 2-8-7, and 66 lb up at 2-8-7 on top chord, and at 2-8-7, and at 2-8-7 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

December 27,2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980069
241090-A	J3	Jack-Open	4	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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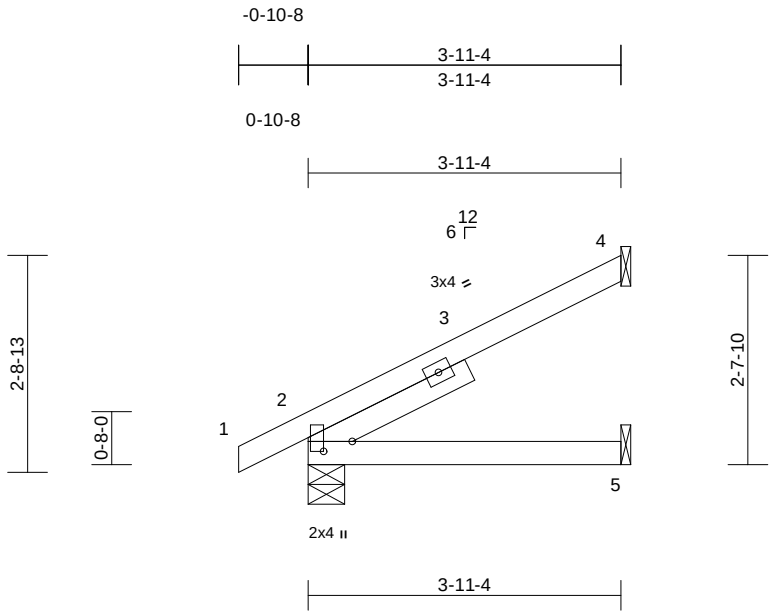

Scale = 1:21.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.01	2-5	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 2-2-11

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

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=103 (LC 12)
Max Uplift 2=-33 (LC 12), 4=-88 (LC 12)
Max Grav 2=243 (LC 1), 4=129 (LC 1), 5=78 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-97/64
BOT CHORD 2-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: , Joint 2 SPF No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 4 and 33 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980070
241090-A	LG6	Lay-In Gable	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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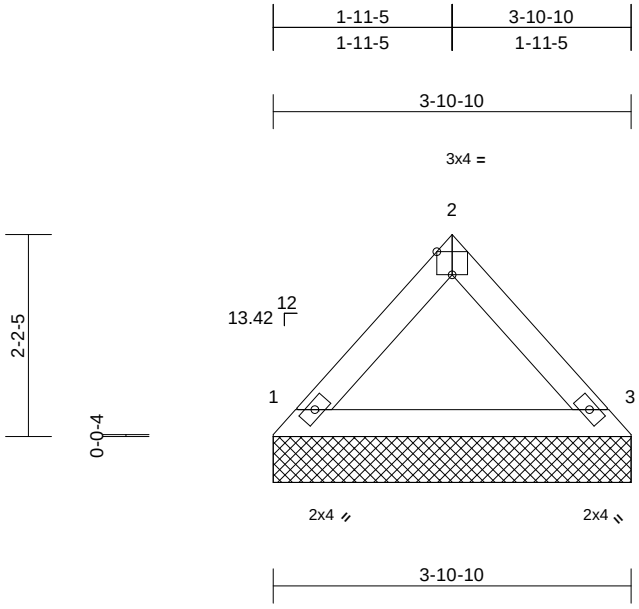

Scale = 1:18

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%

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

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

REACTIONS (size) 1=3-10-10, 3=3-10-10
Max Horiz 1=-53 (LC 10)
Max Uplift 1=-19 (LC 13), 3=-19 (LC 12)
Max Grav 1=147 (LC 1), 3=147 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-125/43, 2-3=-125/43
BOT CHORD 1-3=-16/62

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 1 and 19 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980071
241090-A	B1	Hip Girder	1	2	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:29 Page: 1
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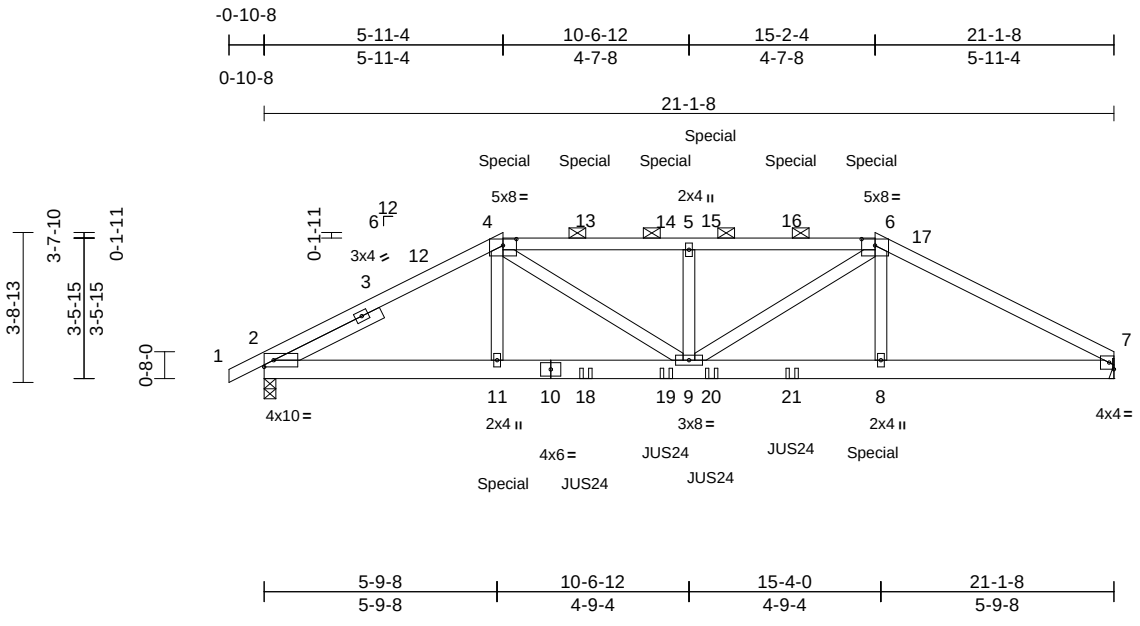

Scale = 1:50.3

Plate Offsets (X, Y): [4:0-4-0,0-1-15], [6:0-4-0,0-1-15]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	0.07	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.12	9-11	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 180 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 2-11-4

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

REACTIONS (size) 2=0-3-8, 7= Mechanical
Max Horiz 2=66 (LC 16)
Max Uplift 2=-566 (LC 12), 7=-537 (LC 13)
Max Grav 2=1914 (LC 1), 7=1831 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/11, 2-4=-3340/1117, 4-5=-3652/1308, 5-6=-3652/1308, 6-7=-3439/1147
BOT CHORD 2-11=-895/2853, 9-11=-893/2830, 8-9=-920/2913, 7-8=-923/2939
WEBS 4-11=-55/512, 6-8=-71/582, 4-9=-390/1081, 6-9=-361/985, 5-9=-877/514

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-11-4, Exterior(2R) 5-11-4 to 13-0-2, Interior (1) 13-0-2 to 15-2-4, Exterior(2E) 15-2-4 to 21-0-12 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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Bearings are assumed to be: Joint 2 SPF 1650F 1.5E .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 537 lb uplift at joint 7 and 566 lb uplift at joint 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use MiTek JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 8-0-0 from the left end to 13-1-8 to connect truss(es) to front face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 155 lb down and 136 lb up at 5-11-4, 131 lb down and 136 lb up at 8-0-0, 131 lb down and 136 lb up at 10-0-0, 131 lb down and 136 lb up at 11-1-8, and 131 lb down and 136 lb up at 13-1-8, and 155 lb down and 136 lb up at 15-2-4 on top chord, and 425 lb down and 136 lb up at 5-11-4, and 425 lb down and 136 lb up at 15-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-6=-70, 6-7=-70, 2-7=-20
Concentrated Loads (lb)
Vert: 4=-131 (F), 6=-131 (F), 11=-425 (F), 8=-425 (F), 13=-131 (F), 14=-131 (F), 15=-131 (F), 16=-131 (F), 18=-39 (F), 19=-39 (F), 20=-39 (F), 21=-39 (F)

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
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916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980072
241090-A	B2	Roof Special Girder	1	2	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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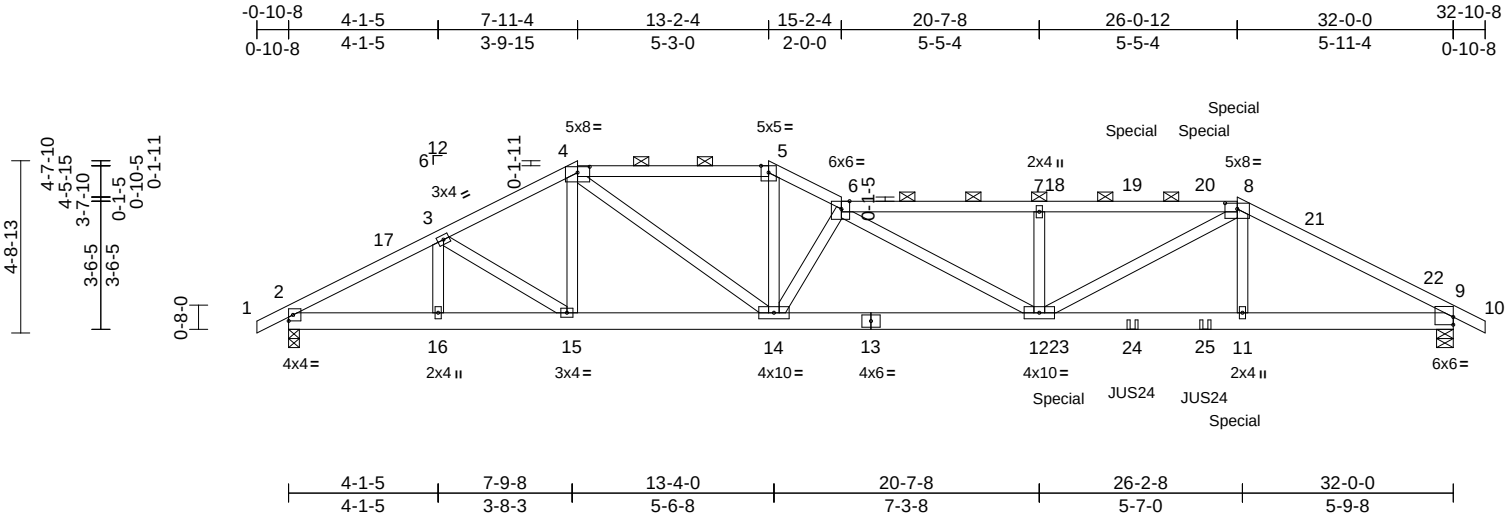

Scale = 1:60.7

Plate Offsets (X, Y): [4:0-4-0,0-1-15], [6:0-2-11,Edge], [8:0-4-0,0-1-15], [9:Edge,0-2-9]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.22	11-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.38	11-12	>988	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.38	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 291 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 6-8:2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS (lb/size) 2=2190/0-3-8, 9=3242/0-5-8
Max Horiz 2=-82 (LC 17)
Max Uplift 2=-412 (LC 12), 9=-910 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/11, 2-17=-3839/974, 3-17=-3740/986, 3-4=-3752/1026, 4-5=-4807/1337, 5-6=-5459/1486, 6-7=-7909/2255, 7-18=-7910/2255, 18-19=-7910/2256, 19-20=-7907/2255, 8-20=-7905/2254, 8-21=-6015/1773, 21-22=-6050/1756, 9-22=-6149/1743, 9-10=0/11
BOT CHORD 2-16=-810/3249, 15-16=-810/3249, 14-15=-790/3323, 13-14=-1715/6743, 12-13=-1715/6743, 12-23=-1451/5243, 23-24=-1451/5243, 24-25=-1451/5243, 11-25=-1451/5243, 9-11=-1455/5279
WEBS 4-15=-34/207, 4-14=-547/1961, 5-14=-520/2121, 6-14=-3710/1076, 6-12=-583/1441, 7-12=-666/323, 8-12=-785/3090, 8-11=-109/787, 3-15=-121/270, 3-16=-16/92

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-5, Interior (1) 4-1-5 to 7-11-4, Exterior(2E) 7-11-4 to 15-2-4, Interior (1) 15-2-4 to 26-0-12, Exterior(2R) 26-0-12 to 31-0-12, Interior (1) 31-0-12 to 32-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SPF 1650F 1.5E crushing capacity of 425 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 412 lb uplift at joint 2 and 910 lb uplift at joint 9.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Use MiTek JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 23-2-4 from the left end to 25-2-4 to connect truss(es) to front face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 181 lb down and 136 lb up at 23-2-4, and 181 lb down and 136 lb up at 25-2-4, and 181 lb down and 136 lb up at 26-0-12 on top chord, and 1542 lb down and 474 lb up at 21-2-4, and 425 lb down and 136 lb up at 26-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-5=-70, 5-6=-70, 6-8=-70, 8-10=-70, 2-9=-20
Concentrated Loads (lb)
Vert: 8=-131 (F), 11=-425 (F), 19=-131 (F), 20=-131 (F), 23=-1542 (F), 24=-39 (F), 25=-39 (F)

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle
241090-A	B3	Roof Special	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:29 Page: 1
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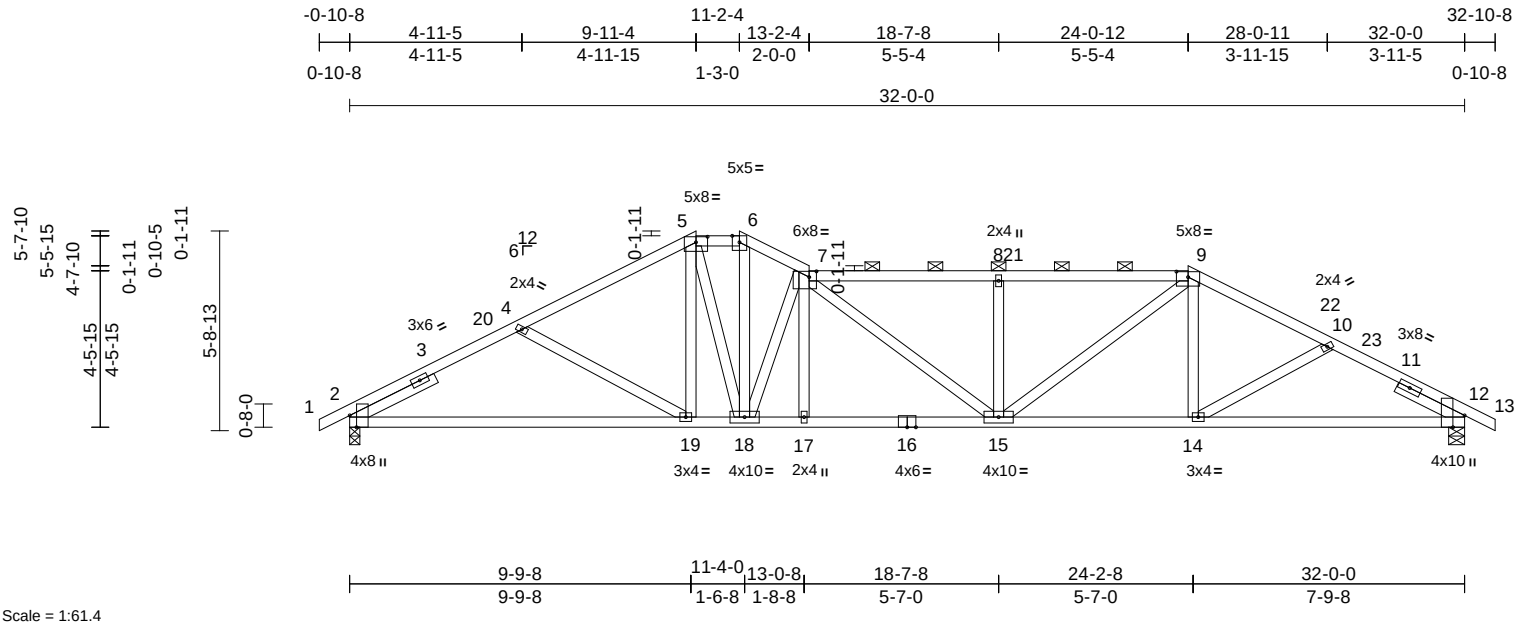

Scale = 1:61.4

Plate Offsets (X, Y): [2:0-4-1,Edge], [5:0-4-0,0-1-15], [7:0-2-8,0-2-0], [9:0-4-0,0-1-15], [12:0-4-1,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.23	2-19	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.49	2-19	>776	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.11	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 146 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 2-8-10, Right 2x4 WW Stud -- 2-1-10

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-10-13 oc purlins, except
2-0-0 oc purlins (3-0-14 max.): 5-6, 7-9.
BOT CHORD Rigid ceiling directly applied or 8-11-9 oc bracing.

REACTIONS (size) 2=0-3-8, 12=0-5-8
Max Horiz 2=-101 (LC 13)
Max Uplift 2=-185 (LC 12), 12=-292 (LC 13)
Max Grav 2=1501 (LC 1), 12=1501 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2494/525, 4-5=-2222/446, 5-6=-2033/479, 6-7=-2327/532, 7-8=-2750/584, 8-9=-2750/584, 9-10=-2331/464, 10-12=-2483/507, 12-13=0/6
BOT CHORD 2-19=-408/2099, 18-19=-249/1910, 17-18=-389/2630, 15-17=-392/2626, 14-15=-278/2045, 12-14=-370/2077
WEBS 5-19=0/503, 5-18=-213/451, 6-18=-238/980, 7-18=-1537/307, 7-17=0/230, 7-15=-105/234, 8-15=-493/208, 9-15=-185/855, 9-14=0/257, 4-19=-276/225, 10-14=-67/144

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 9-11-4, Exterior(2E) 9-11-4 to 13-2-4, Interior (1) 13-2-4 to 24-0-12, Exterior(2R) 24-0-12 to 29-0-12, Interior (1) 29-0-12 to 32-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SPF No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 185 lb uplift at joint 2 and 292 lb uplift at joint 12.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980074
241090-A	CG1	Diagonal Hip Girder	3	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:32 2024 Page: 1
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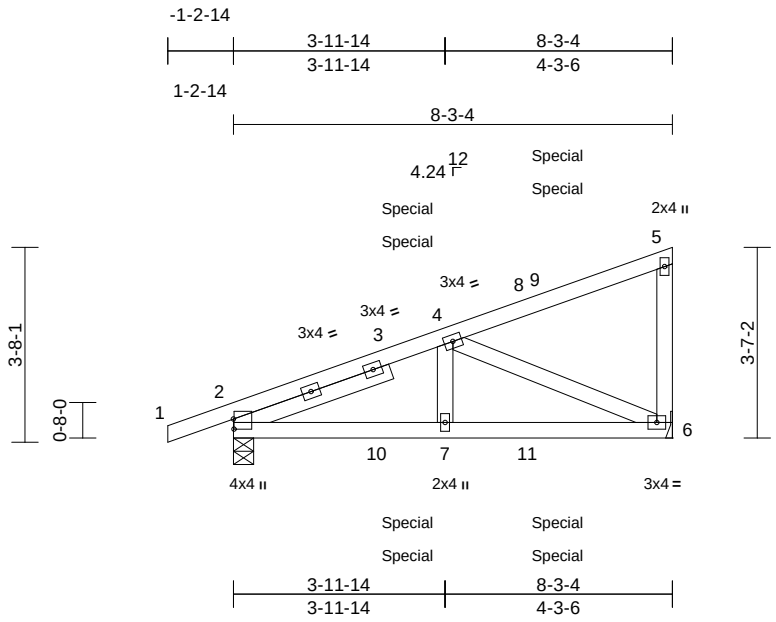

Scale = 1:27.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.01	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.03	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 34 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 3-1-8

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

REACTIONS (size) 2=0-4-9, 6= Mechanical
Max Horiz 2=157 (LC 9)
Max Uplift 2=-152 (LC 8), 6=-143 (LC 12)
Max Grav 2=487 (LC 1), 6=414 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-654/292, 4-5=-131/91, 5-6=-151/147
BOT CHORD 2-7=-412/549, 6-7=-412/549
WEBS 4-7=0/230, 4-6=-598/407

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-14 to 5-10-0, Exterior(2R) 5-10-0 to 8-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: Joint 2 SPF No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 6 and 152 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 15 lb down and 59 lb up at 2-8-7, 17 lb down and 66 lb up at 2-8-7, and 44 lb down and 110 lb up at 5-6-6, and 46 lb down and 113 lb up at 5-6-6 on top chord, and 4 lb down and 1 lb up at 2-8-7, 1 lb down at 2-8-7, and 21 lb down at 5-6-6, and 21 lb down at 5-6-6 on bottom chord. The design/selection of such connection device (s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 8=-60 (F=-34, B=-26), 10=-4 (F), 11=-19 (F=-10, B=-10)

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980075
241090-A	J4	Jack-Open	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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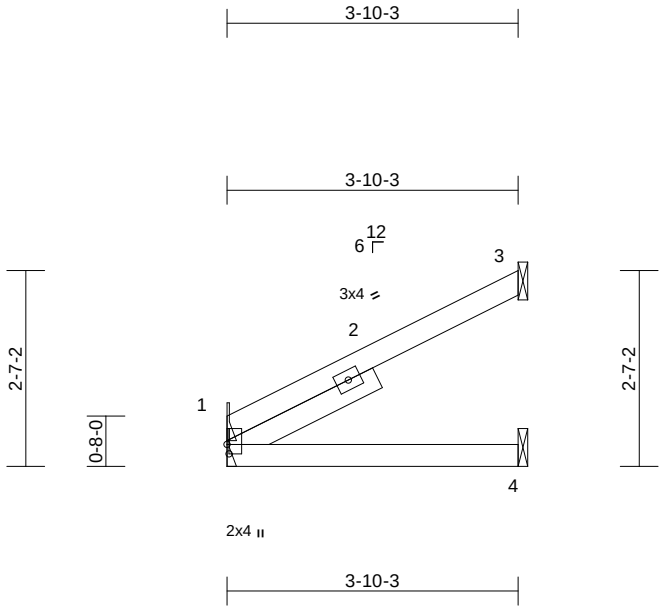

Scale = 1:29.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.01	1-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	1-4	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 12 lb	FT = 20%

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

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

REACTIONS (size) 1= Mechanical, 3= Mechanical, 4= Mechanical
Max Horiz 1=98 (LC 12)
Max Uplift 1=-8 (LC 12), 3=-89 (LC 12)
Max Grav 1=170 (LC 1), 3=133 (LC 1), 4=76 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-98/65
BOT CHORD 1-4=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 1 and 89 lb uplift at joint 3.
6) Non Standard bearing condition. Review required.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980076
241090-A	J5	Jack-Open	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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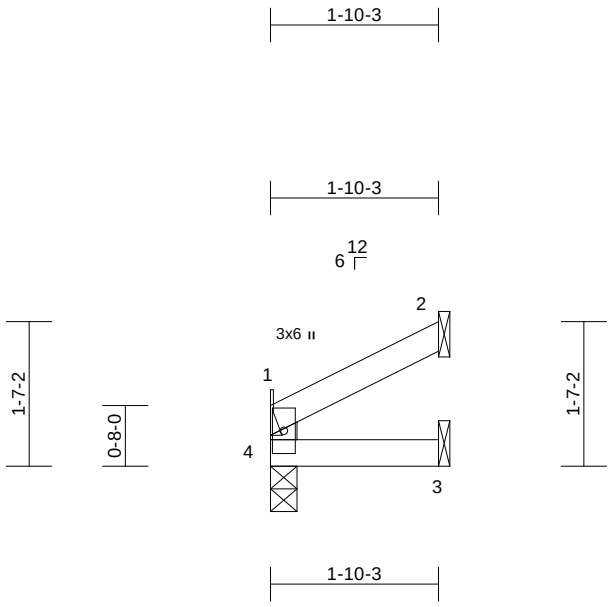

Scale = 1:25.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	3-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	3-4	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 5 lb	FT = 20%

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

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

REACTIONS (size) 1= Mechanical, 2= Mechanical, 3= Mechanical, 4=0-3-8
Max Horiz 1=33 (LC 9)
Max Uplift 1=-21 (LC 12), 2=-32 (LC 12)
Max Grav 1=63 (LC 1), 2=55 (LC 1), 3=33 (LC 3), 4=35 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=0/0, 1-2=-37/26
BOT CHORD 3-4=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: , Joint 4 SPF No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1 and 32 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980077
241090-A	LG1	Lay-In Gable	1	1	Job Reference (optional)

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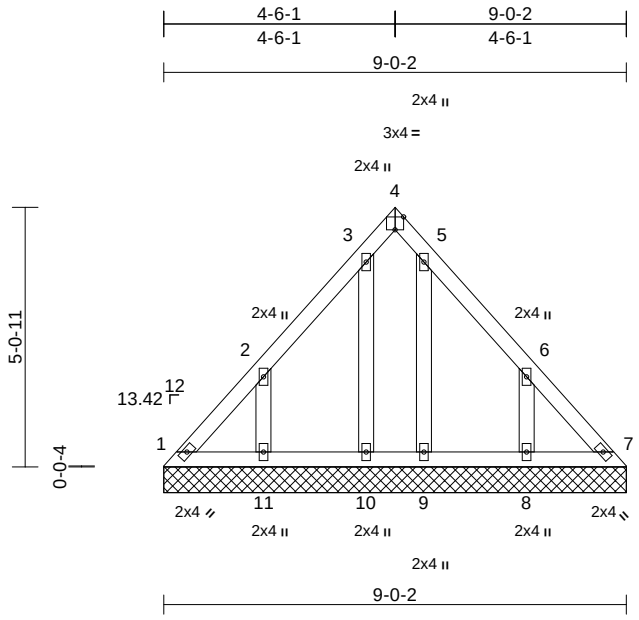

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Plate Offsets (X, Y): [4:Edge,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 37 lb	FT = 20%

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

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

REACTIONS (size) 1=9-0-2, 7=9-0-2, 8=9-0-2, 9=9-0-2, 10=9-0-2, 11=9-0-2
Max Horiz 1=135 (LC 9)
Max Uplift 1=-44 (LC 10), 7=-28 (LC 11), 8=-165 (LC 13), 9=-43 (LC 13), 10=-55 (LC 12), 11=-163 (LC 12)
Max Grav 1=135 (LC 12), 7=124 (LC 13), 8=226 (LC 22), 9=143 (LC 22), 10=156 (LC 21), 11=224 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-198/157, 2-3=-87/69, 3-4=-56/41, 4-5=-56/41, 5-6=-70/52, 6-7=-184/157
BOT CHORD 1-11=-122/150, 10-11=-122/150, 9-10=-122/150, 8-9=-122/150, 7-8=-122/150
WEBS 2-11=-259/183, 3-10=-128/74, 5-9=-125/62, 6-8=-259/184

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 0-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 1, 28 lb uplift at joint 7, 163 lb uplift at joint 11, 55 lb uplift at joint 10, 43 lb uplift at joint 9 and 165 lb uplift at joint 8.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle
241090-A	A1	Roof Special Girder	1	2	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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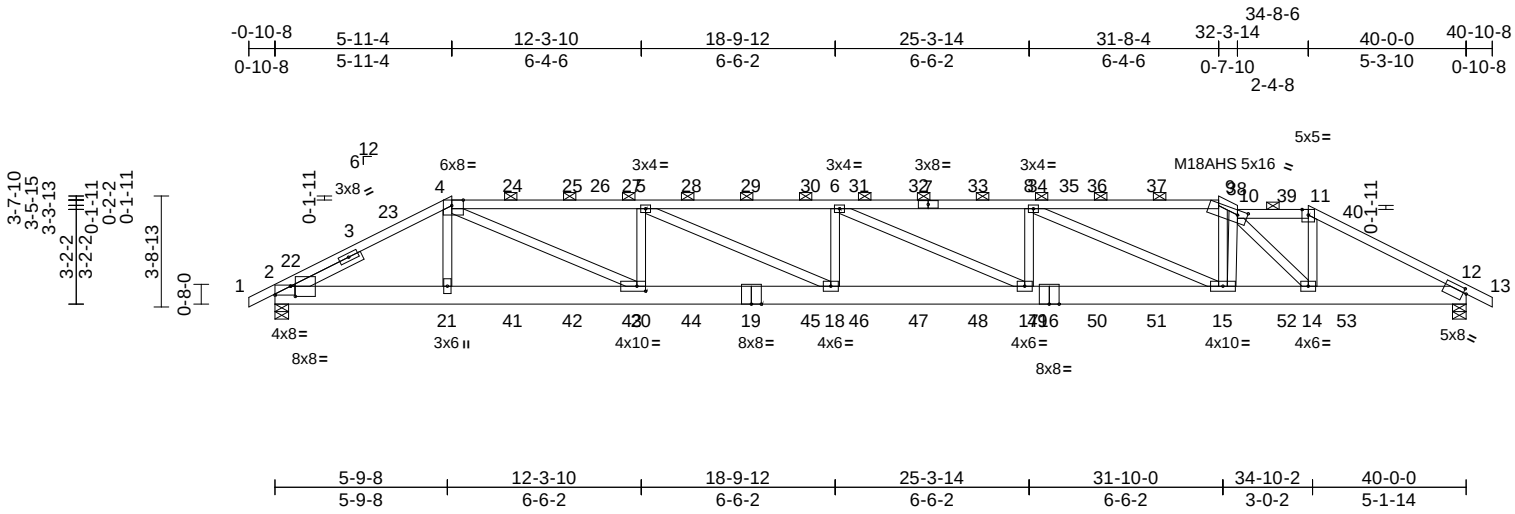

Scale = 1:73.2

Plate Offsets (X, Y): [2:0-1-15,0-4-2], [2:Edge,0-3-9], [4:0-4-10,Edge], [10:0-3-14,0-2-0], [12:0-1-4,0-1-12], [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)	25.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	0.47	17-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.80	17-18	>593	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.11	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 405 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 1-4,7-9:2x4 SPF 1650F 1.5E, 4-7:2x4 SPF 2100F 1.8E
BOT CHORD 2x8 SPF 1950F 1.7E
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 2-7-6

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-7 oc purlins, except 2-0-0 oc purlins (3-8-4 max.): 4-9, 10-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=3540/0-5-8, 12=3682/0-5-8
Max Horiz 2=63 (LC 16)
Max Uplift 2=-1042 (LC 9), 12=-1056 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-22=-6633/2074, 3-22=-6538/2087, 3-23=-6552/2090, 4-23=-6511/2106, 4-24=-10094/3302, 24-25=-10095/3303, 25-26=-10098/3303, 26-27=-10099/3303, 5-27=-10101/3304, 5-28=-11754/3826, 28-29=-11754/3826, 29-30=-11754/3826, 6-30=-11754/3826, 6-31=-10978/3541, 31-32=-10978/3541, 7-32=-10978/3541, 7-33=-10978/3541, 8-33=-10978/3541, 8-34=-7674/2466, 34-35=-7672/2465, 35-36=-7671/2465, 36-37=-7669/2465, 9-37=-7667/2464, 9-38=-8146/2569, 10-38=-8209/2597, 10-39=-5708/1840, 11-39=-5714/1841, 11-40=-6629/2093, 12-40=-6760/2079, 12-13=0/16
BOT CHORD 2-21=-1828/5803, 21-41=-1829/5784, 41-42=-1829/5784, 42-43=-1829/5784, 20-43=-1829/5784, 20-44=-3255/10095, 19-44=-3255/10095, 19-45=-3255/10095, 18-45=-3255/10095, 18-46=-3780/11754, 46-47=-3780/11754, 47-48=-3780/11754, 17-48=-3780/11754, 17-49=-3495/10978, 16-49=-3495/10978, 16-50=-3495/10978, 50-51=-3495/10978, 15-51=-3495/10978, 15-52=-2386/7804, 14-52=-2386/7804, 14-53=-1743/5844, 12-53=-1743/5844
WEBS 4-21=0/496, 9-15=-453/2127, 11-14=-805/2666, 4-20=-1620/4863, 8-15=-3700/1248, 5-20=-1853/863, 5-18=-598/1862, 6-18=-533/410, 6-17=-908/314, 8-17=0/732, 10-15=-215/102, 10-14=-3208/1058

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-6-0 oc.
Bottom chords connected as follows: 2x8 - 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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-11-4, Exterior(2R) 5-11-4 to 10-11-4, Interior (1) 10-11-4 to 31-8-4, Exterior(2E) 31-8-4 to 32-3-14, Interior (1) 32-3-14 to 34-8-6, Exterior (2R) 34-8-6 to 39-9-4, Interior (1) 39-9-4 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) All bearings are assumed to be SPF 1950F 1.7E crushing capacity of 425 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1042 lb uplift at joint 2 and 1056 lb uplift at joint 12.

December 27,2024

Continued on page 2

MiTek®
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980078
241090-A	A1	Roof Special Girder	1	**2**	Job Reference (optional)

10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 155 lb down and 136 lb up at 5-11-4, 131 lb down and 136 lb up at 8-0-0, 131 lb down and 136 lb up at 10-0-0, 131 lb down and 136 lb up at 12-0-0, 131 lb down and 136 lb up at 14-0-0, 131 lb down and 136 lb up at 16-0-0, 131 lb down and 136 lb up at 18-0-0, 131 lb down and 136 lb up at 19-7-8, 131 lb down and 136 lb up at 21-7-8, 131 lb down and 136 lb up at 23-7-8, 131 lb down and 136 lb up at 25-7-8, 131 lb down and 136 lb up at 27-7-8, 131 lb down and 136 lb up at 29-7-8, 155 lb down and 136 lb up at 31-8-4, and 161 lb down and 120 lb up at 32-0-0, and 178 lb down and 120 lb up at 34-0-0 on top chord, and 419 lb down and 135 lb up at 5-11-4, 77 lb down at 8-0-0, 77 lb down at 10-0-0, 77 lb down at 12-0-0, 77 lb down at 14-0-0, 77 lb down at 16-0-0, 77 lb down at 18-0-0, 77 lb down at 19-7-8, 77 lb down at 21-7-8, 77 lb down at 23-7-8, 77 lb down at 25-7-8, 77 lb down at 27-7-8, 77 lb down at 29-7-8, 77 lb down at 31-7-8, 76 lb down at 32-0-0, and 76 lb down at 34-0-0, and 419 lb down and 150 lb up at 36-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 1-4=-70, 4-9=-70, 9-10=-70, 10-11=-70, 11-13=-70, 2-12=-20
   Concentrated Loads (lb)
   Vert: 4=-131 (F), 19=-39 (F), 21=-419 (F), 15=-77 (F), 9=-131 (F), 24=-131 (F), 25=-131 (F), 27=-131 (F), 28=-131 (F), 29=-131 (F), 30=-131 (F), 31=-131 (F), 32=-131 (F), 33=-131 (F), 34=-131 (F), 36=-131 (F), 37=-131 (F), 38=-128 (F), 39=-128 (F), 41=-39 (F), 42=-39 (F), 43=-39 (F), 44=-39 (F), 45=-39 (F), 46=-39 (F), 47=-39 (F), 48=-39 (F), 49=-39 (F), 50=-39 (F), 51=-39 (F), 52=-38 (F), 53=-419 (F)

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle
241090-A	A2	Roof Special	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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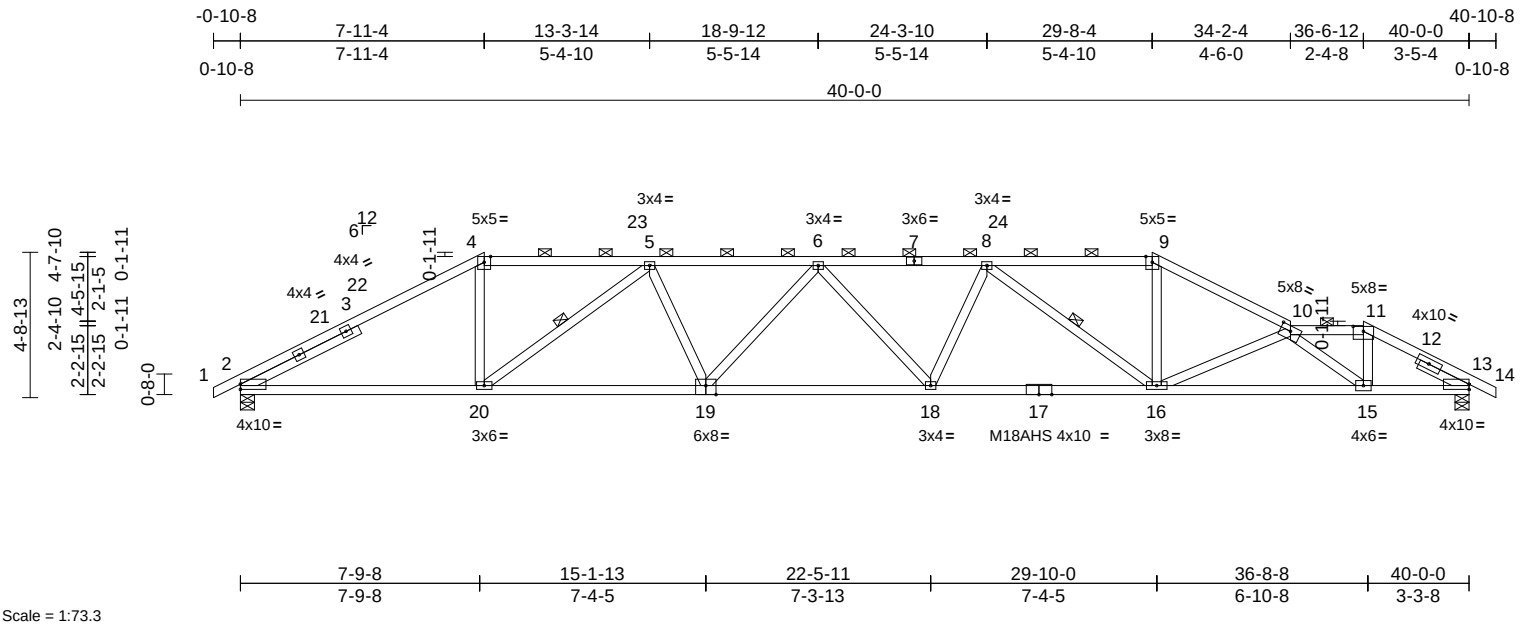

Scale = 1:73.3

Plate Offsets (X, Y): [2:Edge,0-2-1], [10:0-4-0,0-2-0], [11:0-4-0,0-1-15], [13:Edge,0-2-1], [19:0-4-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.40	18-19	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.76	18-19	>628	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.23	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 159 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SPF No.2 *Except* 1-4:2x4 SPF 2100F 1.8E, 11-14:2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 WW Stud -- 4-3-9, Right 2x4 WW Stud -- 1-9-6

BRACING

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-5-0 max.): 4-9, 10-11.
BOT CHORD	Rigid ceiling directly applied or 8-5-3 oc bracing.
WEBS	1 Row at midpt 5-20, 8-16

REACTIONS (size) 2=0-5-8, 13=0-5-8
Max Horiz 2=-82 (LC 13)
Max Uplift 2=-244 (LC 9), 13=-217 (LC 8)
Max Grav 2=1861 (LC 1), 13=1861 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/6, 2-4=-3195/513, 4-5=-2720/522, 5-6=-4055/708, 6-8=-4241/730, 8-9=-3274/610, 9-10=-3734/656, 10-11=-2647/479, 11-13=-3220/536, 13-14=0/6
BOT CHORD	2-20=-412/2721, 18-20=-727/4281, 16-18=-657/4112, 15-16=-718/4390, 13-15=-404/2732
WEBS	4-20=-121/1080, 9-16=-155/1343, 10-16=-1235/294, 11-15=-184/1453, 5-19=-27/518, 5-20=-1541/365, 6-19=-434/145, 6-18=-193/110, 8-18=0/317, 8-16=-1206/308, 10-15=-2259/419

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 7-11-4, Exterior(2R) 7-11-4 to 12-11-4, Interior (1) 12-11-4 to 29-8-4, Exterior(2E) 29-8-4 to 34-2-4, Interior (1) 34-2-4 to 36-6-12, Exterior (2E) 36-6-12 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SPF 1650F 1.5E .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 244 lb uplift at joint 2 and 217 lb uplift at joint 13.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/07/2025

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980080
241090-A	A3	Roof Special	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.82 E Sep 25 2024 Print: 8.820 E Sep 25 2024 MiTek Industries, Inc. Fri Dec 27 12:41:28 Page: 1
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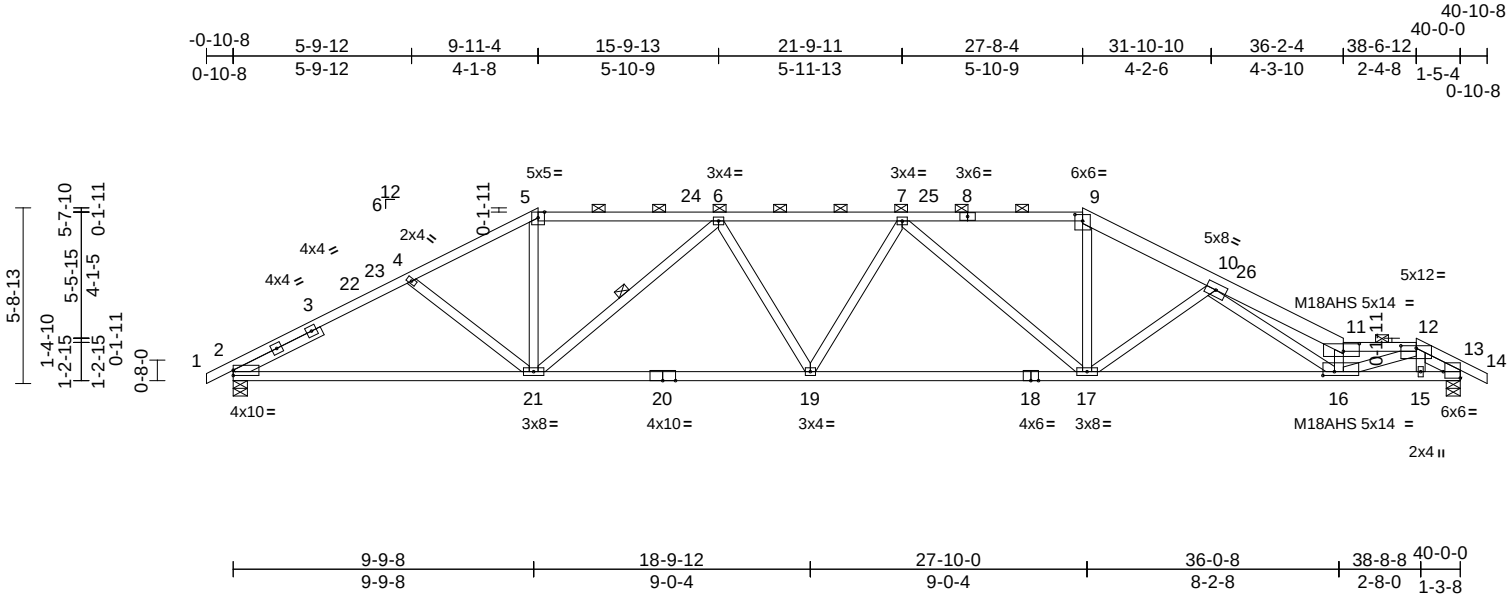

Scale = 1:73.5

Plate Offsets (X, Y): [2:Edge,0-2-1], [9:0-3-0,0-2-8], [11:0-6-4,0-3-0], [12:0-6-0,0-0-15], [13:Edge,0-2-8], [16:0-4-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.37	16-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.73	16-17	>658	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.20	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 170 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 9-11:2x6 SPF 1650F 1.5E, 11-12:2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E *Except* 18-20:2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 3-2-4, Right 2x4 WW Stud -- 1-3-10

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-3-11 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 5-9, 11-12.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 6-21

REACTIONS (lb/size) 2=1861/0-5-8, 13=1861/0-5-8
Max Horiz 2=101 (LC 16)
Max Uplift 2=-196 (LC 12), 13=-228 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-3=-3190/551, 3-22=-3101/565, 22-23=-3045/576, 4-23=-3044/580, 4-5=-2952/536, 5-24=-2613/511, 6-24=-2615/510, 6-7=-3479/629, 7-25=-3008/578, 8-25=-3008/578, 8-9=-3009/578, 9-10=-3438/610, 10-26=-6513/1067, 11-26=-6598/1053, 11-12=-6295/988, 12-13=-3283/557, 13-14=0/6
BOT CHORD 2-21=-454/2700, 20-21=-468/3332, 19-20=-468/3332, 18-19=-484/3457, 17-18=-484/3457, 16-17=-588/3757, 15-16=-440/2760, 13-15=-440/2760
WEBS 5-21=-95/942, 9-17=-131/1173, 11-16=-2712/492, 12-15=-18/67, 4-21=-145/213, 10-17=-944/280, 10-16=-382/2670, 6-19=0/292, 6-21=-1092/284, 7-19=-97/118, 7-17=-786/242, 12-16=-526/3679

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 9-11-4, Exterior(2R) 9-11-4 to 14-11-4, Interior (1) 14-11-4 to 27-8-4, Exterior(2R) 27-8-4 to 32-8-4, Interior (1) 32-8-4 to 38-8-8, Exterior (2E) 38-8-8 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SPF 1650F 1.5E crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 228 lb uplift at joint 13 and 196 lb uplift at joint 2.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980081
241090-A	A4	Hip	1	1	Job Reference (optional)

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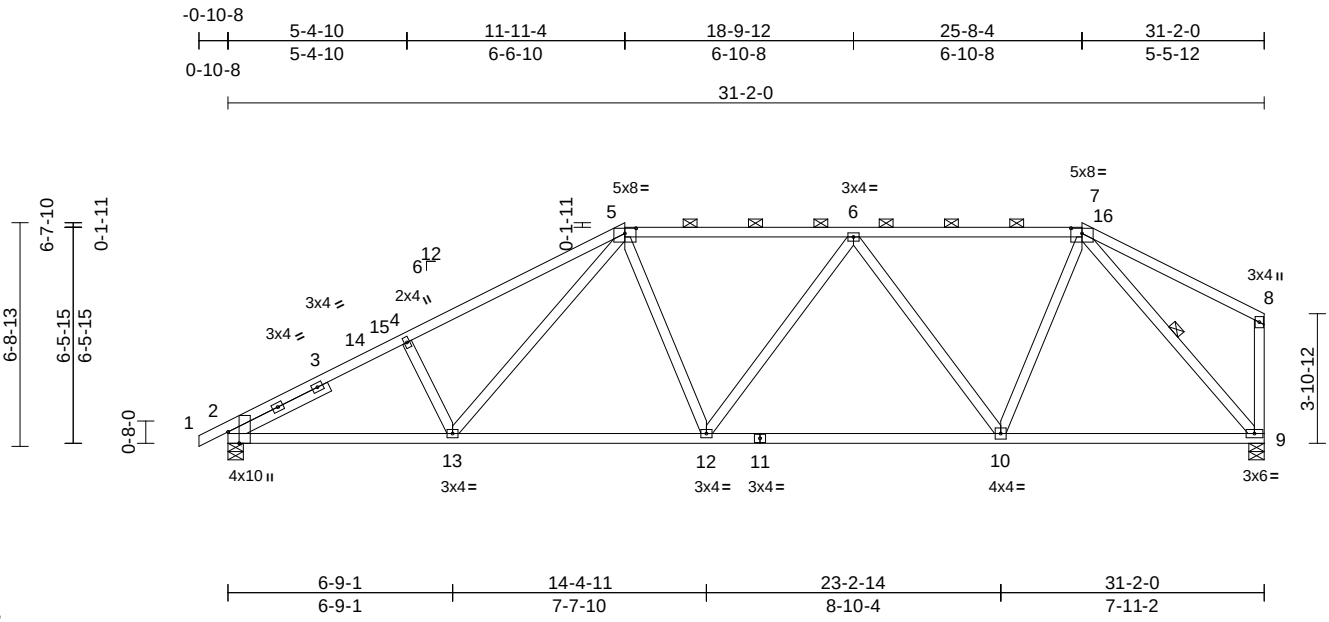

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Plate Offsets (X, Y): [2:0-4-1,Edge], [5:0-4-0,0-1-15], [7:0-4-0,0-1-15]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.12	10-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.27	10-12	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 136 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 1-5:2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 3-4-6

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-4-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-11 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 8-1-10 oc bracing.
WEBS 1 Row at midpt 7-9

REACTIONS (size) 2=0-5-8, 9=0-5-8
Max Horiz 2=200 (LC 9)
Max Uplift 2=-204 (LC 12), 9=-143 (LC 8)
Max Grav 2=1458 (LC 1), 9=1395 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2449/396, 4-5=-2322/434, 5-6=-1768/357, 6-7=-1351/298, 7-8=-184/172, 8-9=-232/148
BOT CHORD 2-13=-521/2188, 12-13=-365/1737, 10-12=-371/1779, 9-10=-241/1063
WEBS 4-13=-287/243, 5-13=-168/514, 5-12=-37/298, 6-12=-133/177, 6-10=-746/228, 7-10=-80/843, 7-9=-1519/283

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 11-11-4, Exterior(2R) 11-11-4 to 18-9-12, Interior (1) 18-9-12 to 25-8-4, Exterior(2E) 25-8-4 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SPF No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 204 lb uplift at joint 2 and 143 lb uplift at joint 9.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980082
241090-A	A5	Hip	1	1	Job Reference (optional)

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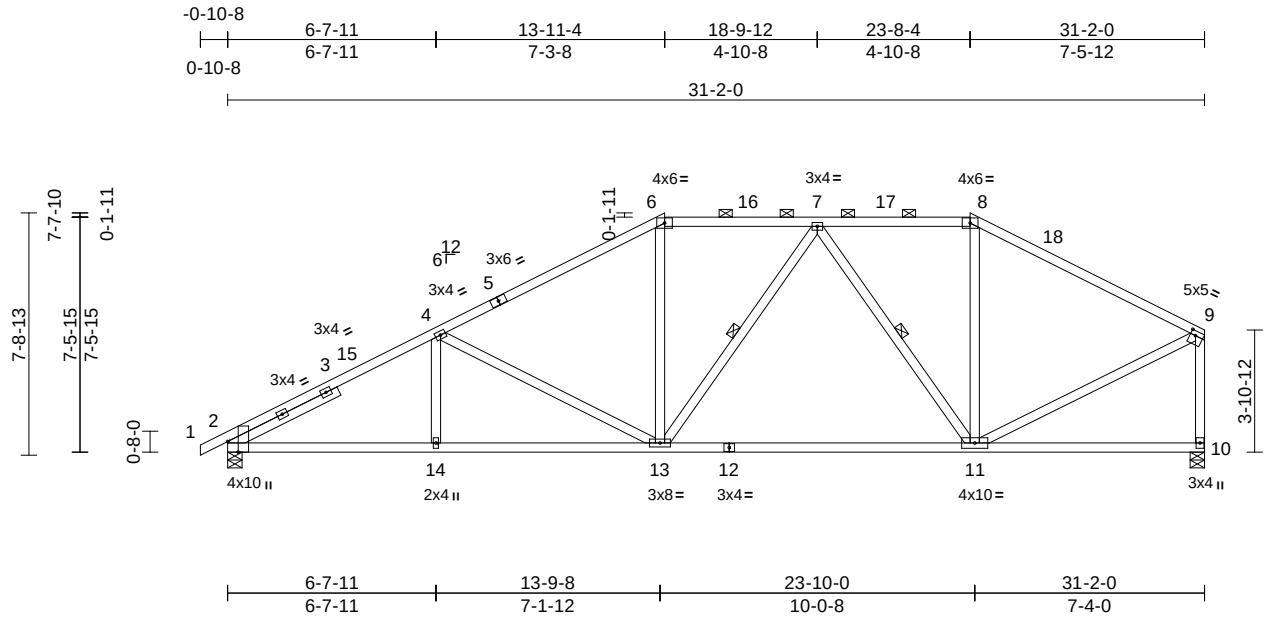

Scale = 1:66.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.21	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.46	11-13	>816	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 141 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 6-8,1-5:2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 3-11-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-1-13 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-2 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 8-2-13 oc bracing.
WEBS 1 Row at midpt 7-11, 7-13

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=214 (LC 9)
Max Uplift 2=-222 (LC 12), 10=-131 (LC 13)
Max Grav 2=1458 (LC 1), 10=1395 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2418/384, 4-6=-1830/356, 6-7=-1570/358, 7-8=-1169/315, 8-9=-1371/288, 9-10=-1346/283
BOT CHORD 2-14=-499/2154, 13-14=-499/2154, 11-13=-324/1504, 10-11=-74/100
WEBS 4-14=0/258, 4-13=-627/272, 6-13=-7/393, 8-11=0/259, 9-11=-180/1205, 7-11=-655/180, 7-13=-73/200

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 13-11-4, Exterior(2R) 13-11-4 to 21-0-2, Interior (1) 21-0-2 to 23-8-4, Exterior(2E) 23-8-4 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SPF No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 222 lb uplift at joint 2 and 131 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980083
241090-A	A6	Hip	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:24 Page: 1
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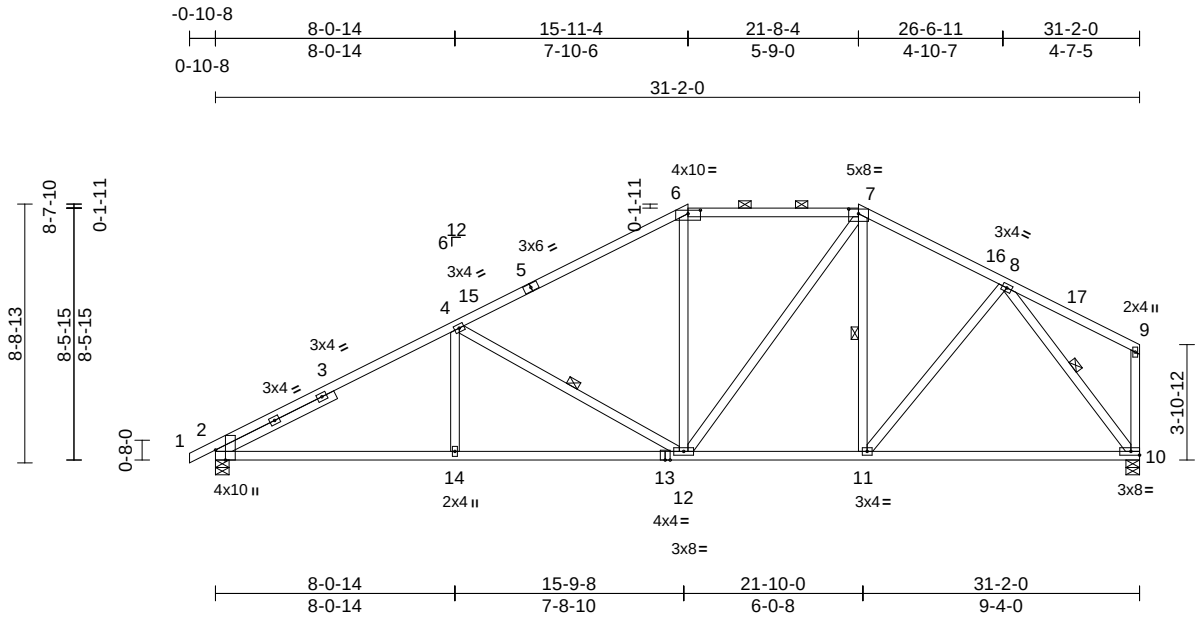

Scale = 1:70.2

Plate Offsets (X, Y): [2:0-4-1,Edge], [6:0-5-0,0-1-7], [7:0-4-0,0-1-15]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.21	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.42	10-11	>882	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 145 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 4-5-11

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-5-4 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 8-6-13 oc bracing.
WEBS 1 Row at midpt 4-12, 7-11, 8-10

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=228 (LC 9)
Max Uplift 2=-236 (LC 12), 10=-154 (LC 13)
Max Grav 2=1458 (LC 1), 10=1395 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2363/370, 4-6=-1650/355, 6-7=-1401/360, 7-8=-1374/334, 8-9=-160/135, 9-10=-182/97
BOT CHORD 2-14=-466/2095, 12-14=-466/2095, 11-12=-226/1189, 10-11=-241/966
WEBS 4-14=0/347, 4-12=-785/297, 6-12=0/303, 7-11=-158/128, 8-10=-1489/324, 7-12=-145/459, 8-11=-31/427

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 15-11-4, Exterior(2E) 15-11-4 to 21-8-4, Exterior(2R) 21-8-4 to 28-9-2, Interior (1) 28-9-2 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SPF No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 236 lb uplift at joint 2 and 154 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980084
241090-A	A7	Hip	1	1	Job Reference (optional)

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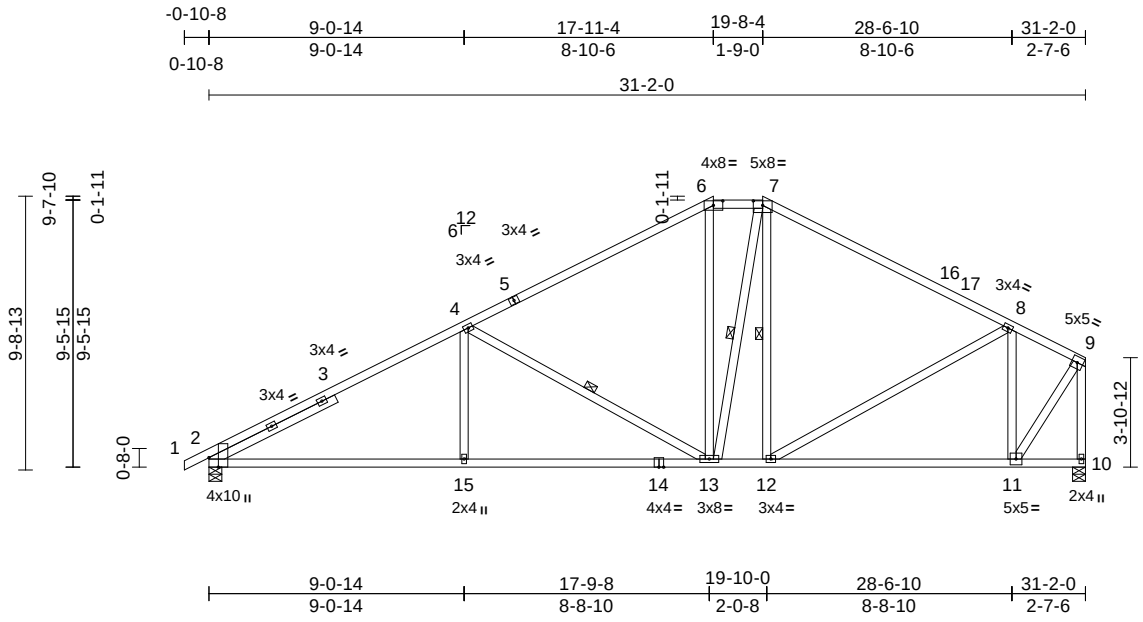

Scale = 1:74.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.16	2-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.34	2-15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 153 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 6-7,1-5:2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 5-0-2

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

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=240 (LC 11)
Max Uplift 2=-248 (LC 12), 10=-174 (LC 13)
Max Grav 2=1458 (LC 1), 10=1395 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2322/364, 4-6=-1486/332, 6-7=-1243/343, 7-8=-1418/312, 8-9=-851/193, 9-10=-1418/215
BOT CHORD 2-15=-428/2052, 13-15=-428/2052, 12-13=-210/1185, 11-12=-198/825, 10-11=-83/87
WEBS 4-15=0/392, 4-13=-931/338, 6-13=-81/361, 7-12=-96/91, 8-12=-38/448, 8-11=-1024/326, 9-11=-266/1416, 7-13=-156/447

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 17-11-4, Exterior(2E) 17-11-4 to 19-8-4, Exterior(2R) 19-8-4 to 26-9-2, Interior (1) 26-9-2 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SPF No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 248 lb uplift at joint 2 and 174 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980085
241090-A	E1	Hip Girder	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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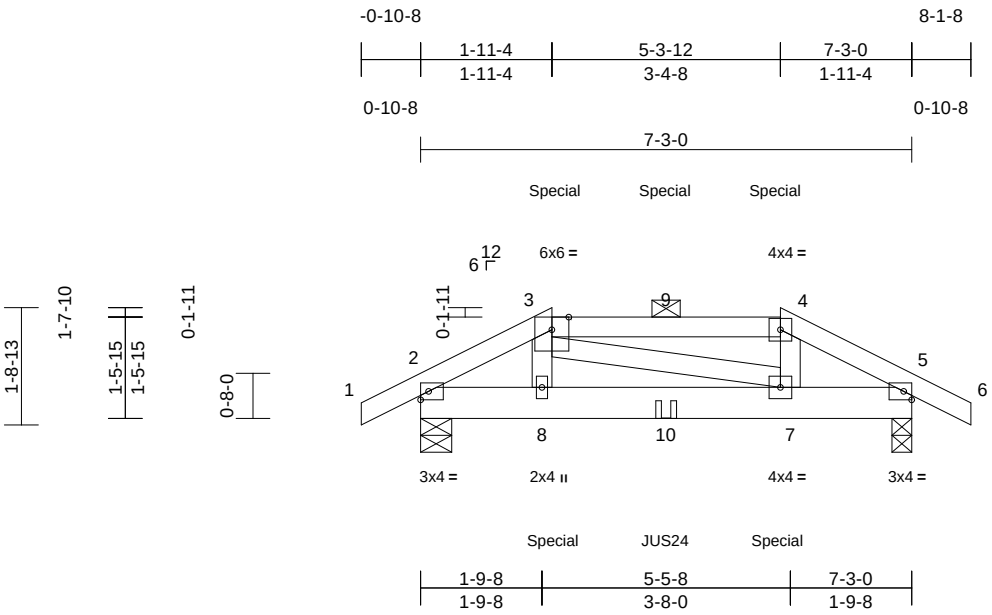

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	0.01	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 30 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

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

REACTIONS (size) 2=0-5-8, 5=0-3-8
Max Horiz 2=-25 (LC 36)
Max Uplift 2=-138 (LC 12), 5=-134 (LC 13)
Max Grav 2=449 (LC 1), 5=440 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/11, 2-3=-530/247, 3-4=-383/227, 4-5=-518/236, 5-6=0/11
BOT CHORD 2-8=-142/404, 7-8=-142/390, 5-7=-135/394
WEBS 3-8=0/132, 3-7=-20/15, 4-7=0/133

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SPF 1650F 1.5E .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 138 lb uplift at joint 2 and 134 lb uplift at joint 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Use MiTek JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 3-7-8 from the left end to connect truss(es) to front face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 18 lb down and 62 lb up at 1-11-4, and 18 lb down and 62 lb up at 3-7-8, and 18 lb down and 62 lb up at 5-3-12 on top chord, and 61 lb down and 40 lb up at 1-11-4, and 61 lb down and 40 lb up at 5-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-4=-70, 4-6=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 8=-61 (F), 7=-61 (F)

December 27,2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980086
241090-A	CG3	Diagonal Hip Girder	2	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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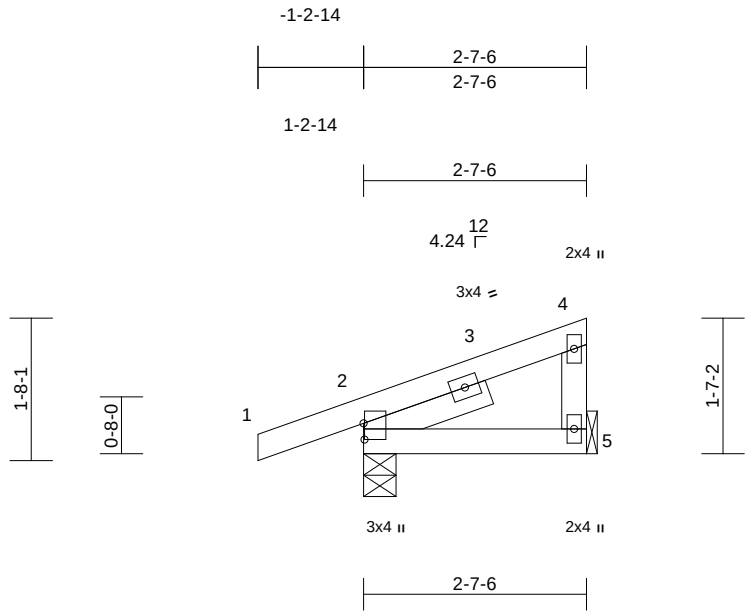

Scale = 1:17.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	0.00	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 1-6-7

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

REACTIONS (size) 2=0-4-9, 5= Mechanical
Max Horiz 2=61 (LC 9)
Max Uplift 2=-89 (LC 8), 5=-23 (LC 12)
Max Grav 2=219 (LC 1), 5=89 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-67/45, 4-5=-102/111
BOT CHORD 2-5=-26/28

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: Joint 2 SPF No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 5 and 89 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980087
241090-A	J8	Jack-Open	3	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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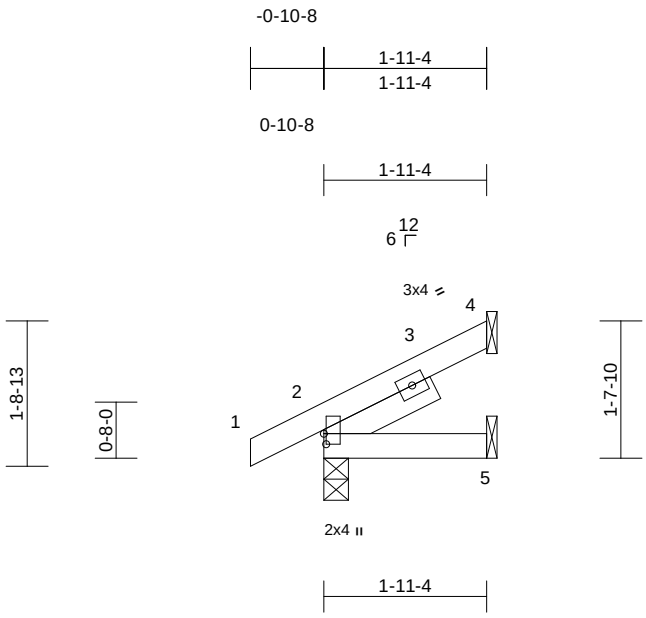

Scale = 1:17.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	2-5	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 7 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 1-5-3

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

REACTIONS (size) 2=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=61 (LC 12)
Max Uplift 2=-26 (LC 12), 4=-45 (LC 12)
Max Grav 2=162 (LC 1), 4=53 (LC 1), 5=39 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-55/30
BOT CHORD 2-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: , Joint 2 SPF No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 2 and 45 lb uplift at joint 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980088
241090-A	LG3	Lay-In Gable	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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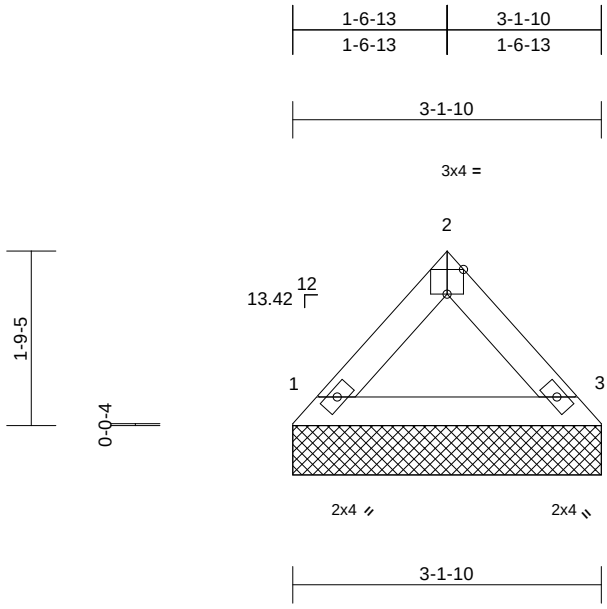

Scale = 1:16.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

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

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

REACTIONS (size) 1=3-1-10, 3=3-1-10
Max Horiz 1=-41 (LC 8)
Max Uplift 1=-14 (LC 13), 3=-14 (LC 12)
Max Grav 1=114 (LC 1), 3=114 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-96/33, 2-3=-96/33
BOT CHORD 1-3=-12/47

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 14 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

December 27,2024

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Roseville, CA 95661
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980089
241090-A	C3	Common Girder	1	2	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:32 2024 Page: 1
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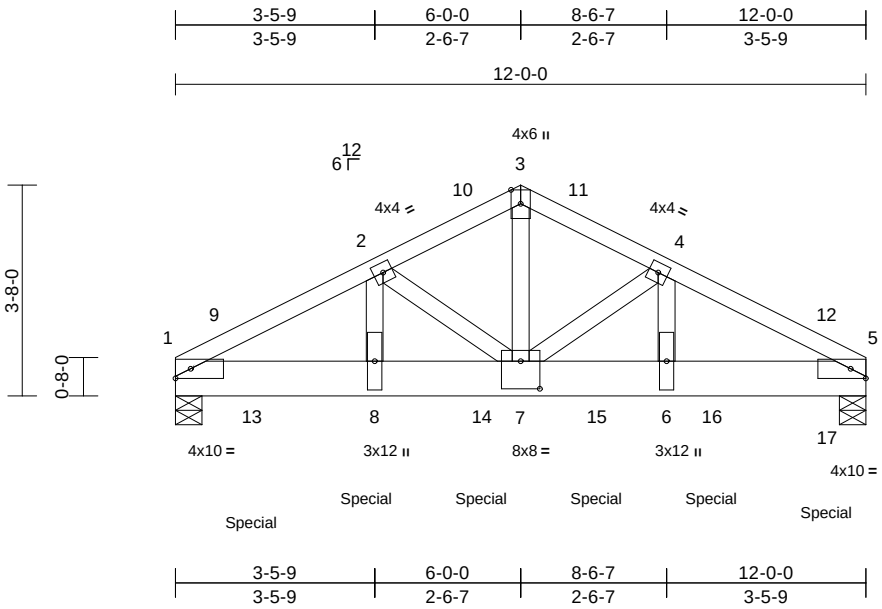

Scale = 1:36.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.05	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.09	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 114 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SPF 1950F 1.7E
WEBS 2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-9-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-5-8, 5=0-5-8
Max Horiz 1=-60 (LC 13)
Max Uplift 1=-751 (LC 12), 5=-795 (LC 13)
Max Grav 1=4394 (LC 1), 5=4906 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6229/1269, 2-3=-4754/1025, 3-4=-4754/1025, 4-5=-6193/1242
BOT CHORD 1-8=-1051/5305, 7-8=-1051/5305, 6-7=-1002/5274, 5-6=-1002/5274
WEBS 2-8=-267/1717, 2-7=-1372/366, 3-7=-802/4005, 4-7=-1333/337, 4-6=-234/1674

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-3-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-2-12 to 5-2-12, Interior (1) 5-2-12 to 6-0-0, Exterior(2R) 6-0-0 to 11-0-0, Interior (1) 11-0-0 to 11-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SPF 1950F 1.7E .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 751 lb uplift at joint 1 and 795 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1376 lb down and 242 lb up at 1-4-0, 1376 lb down and 242 lb up at 3-4-0, 1376 lb down and 242 lb up at 5-4-0, 1376 lb down and 236 lb up at 7-4-0, and 1376 lb down and 223 lb up at 9-4-0, and 1382 lb down and 206 lb up at 11-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-5=-70, 1-5=-20
Concentrated Loads (lb)
Vert: 8=-1376 (F), 13=-1376 (F), 14=-1376 (F), 15=-1376 (F), 16=-1376 (F), 17=-1382 (F)

December 27,2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980090
241090-A	J6	Jack-Closed Girder	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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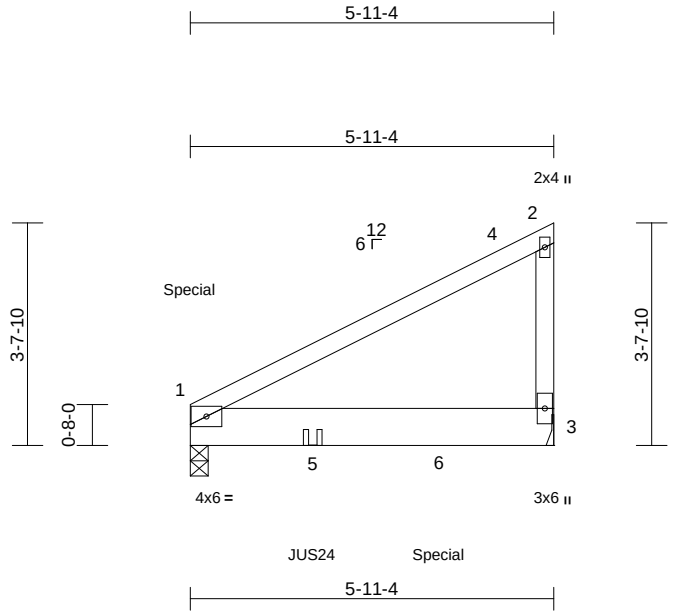

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.06	1-3	>999	240	MT20	137/130
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.11	1-3	>599	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 29 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 1-1/2x 7-1/4 2.0E 2900Fb PWT LVL
WEBS 2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-3-11 oc bracing.

REACTIONS (size) 1=0-3-8, 3= Mechanical
Max Horiz 1=138 (LC 9)
Max Uplift 1=-225 (LC 12), 3=-462 (LC 12)
Max Grav 1=946 (LC 1), 3=1562 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-195/144, 2-3=-265/263
BOT CHORD 1-3=-64/69

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 5-9-8 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: Joint 1 LVL 2.0E 2900Fb 2.0E 2900Fb .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 1 and 462 lb uplift at joint 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Use MiTek JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 2-0-0 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
8) Fill all nail holes where hanger is in contact with lumber.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 38 lb down and 28 lb up at 0-1-12 on top chord, and 1811 lb down and 549 lb up at 4-0-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 1-3=-20
Concentrated Loads (lb)
Vert: 1=-38 (B), 5=-150 (B), 6=-1811 (B)

December 27,2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980091
241090-A	B4	Roof Special	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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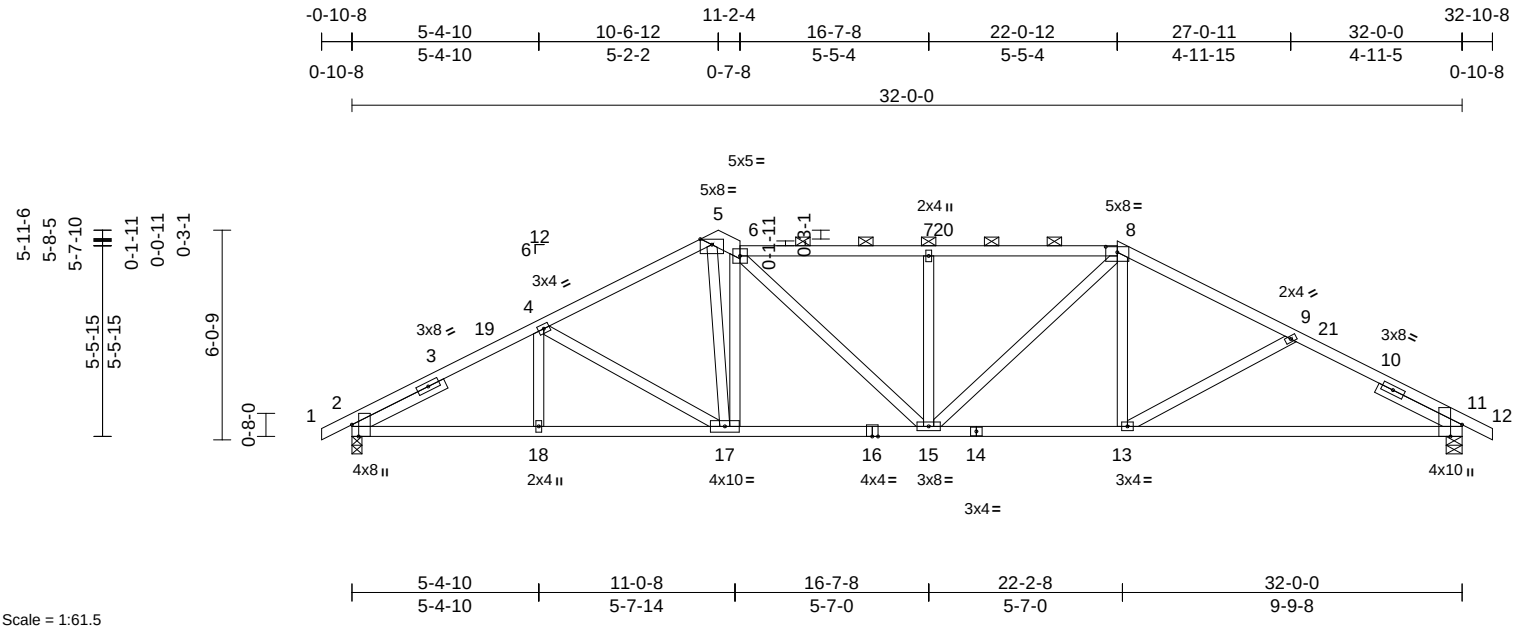


Scale = 1:61.5

Plate Offsets (X, Y): [2:0-4-1,Edge], [8:0-4-0,0-1-15], [11:0-4-1,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.25	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.53	11-13	>720	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 141 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SPF No.2 *Except* 5-6:2x6 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 -- 2-11-11, Right 2x4 WW Stud -- 2-8-5

BRACING

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

REACTIONS (size) 2=0-3-8, 11=0-5-8
Max Horiz 2=-107 (LC 13)
Max Uplift 2=-191 (LC 12), 11=-295 (LC 13)
Max Grav 2=1501 (LC 1), 11=1501 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/6, 2-4=-2520/462, 4-5=-2133/444, 5-6=-2126/473, 6-7=-2286/511, 7-8=-2288/512, 8-9=-2219/441, 9-11=-2489/528, 11-12=0/6
BOT CHORD	2-18=-351/2123, 17-18=-351/2123, 15-17=-266/2016, 13-15=-223/1910, 11-13=-379/2095
WEBS	4-18=0/206, 4-17=-407/184, 5-17=-299/1544, 6-17=-1244/361, 6-15=-138/446, 7-15=-466/203, 8-15=-161/473, 8-13=0/365, 9-13=-225/200

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 10-5-10, Exterior(2E) 10-5-10 to 11-2-4, Interior (1) 11-2-4 to 22-0-12, Exterior(2R) 22-0-12 to 27-2-10, Interior (1) 27-2-10 to 32-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SPF No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 191 lb uplift at joint 2 and 295 lb uplift at joint 11.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

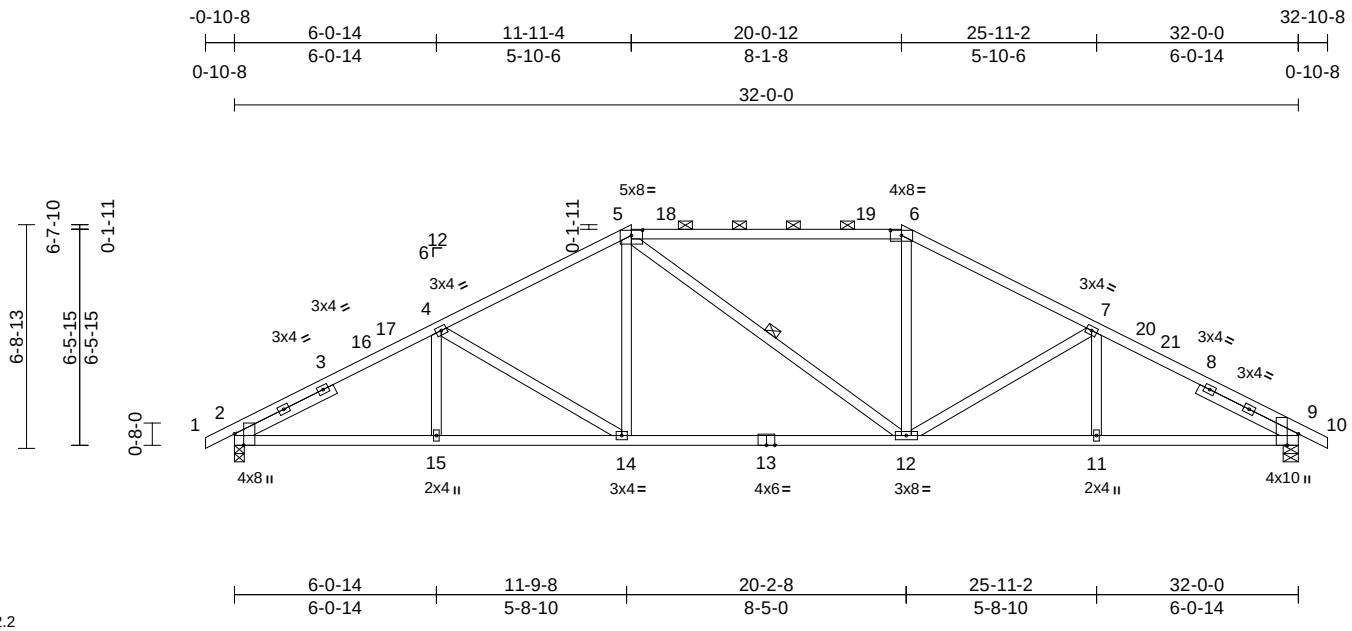
LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980092
241090-A	B5	Hip	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:30 Page: 1
ID:uZf4YRRZOcO0aMkFWKNWVKzZ4Oy-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCB0i7542JC?f



Scale = 1:62.2

Plate Offsets (X, Y): [2:0-4-1,Edge], [5:0-4-0,0-1-15], [6:0-4-0,0-1-15], [9:0-4-1,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.15	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.35	12-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.11	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 132 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 5-6:2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 3-4-0, Right 2x4 WW Stud -- 3-4-0

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

REACTIONS (size) 2=0-3-8, 9=0-5-8
Max Horiz 2=-120 (LC 17)
Max Uplift 2=-207 (LC 12), 9=-207 (LC 13)
Max Grav 2=1501 (LC 1), 9=1501 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2501/427, 4-5=-2065/406, 5-6=-1804/409, 6-7=-2066/406, 7-9=-2500/427, 9-10=0/6
BOT CHORD 2-15=-301/2116, 14-15=-301/2116, 12-14=-172/1762, 11-12=-297/2116, 9-11=-297/2116
WEBS 4-15=0/214, 4-14=-429/218, 5-14=-21/431, 5-12=-192/193, 6-12=0/431, 7-12=-429/219, 7-11=0/214

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 11-11-4, Exterior(2R) 11-11-4 to 19-0-2, Interior (1) 19-0-2 to 20-0-12, Exterior(2R) 20-0-12 to 27-1-10, Interior (1) 27-1-10 to 32-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SPF No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 207 lb uplift at joint 2 and 207 lb uplift at joint 9.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

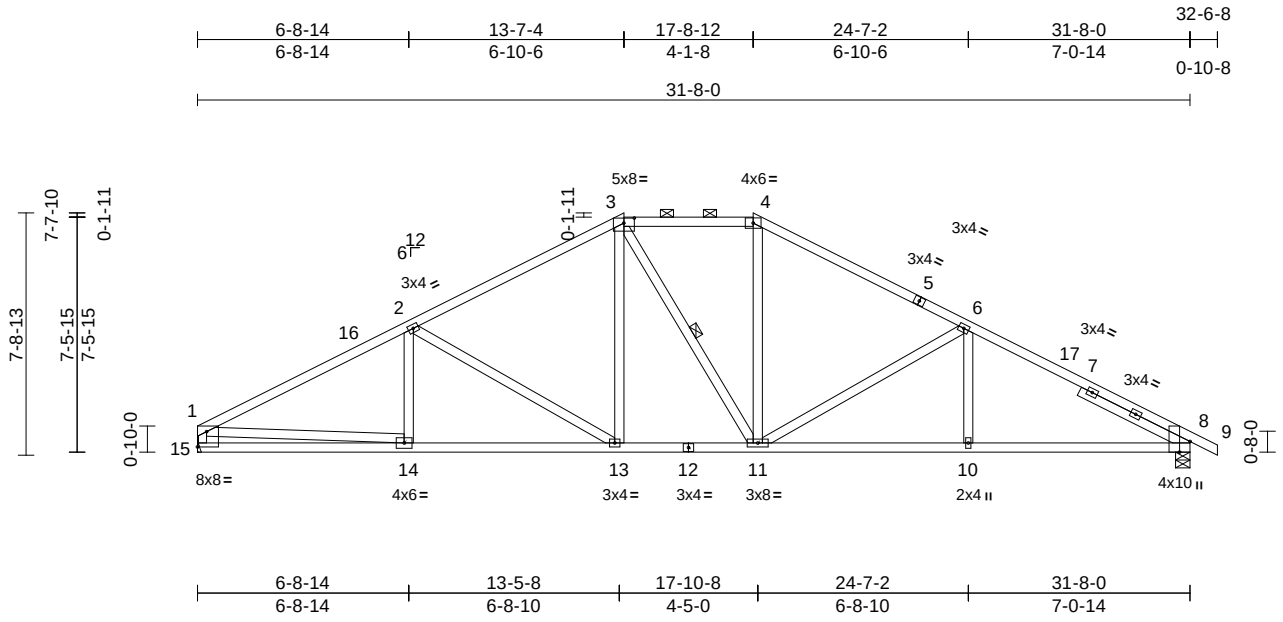
LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980093
241090-A	B6	Hip	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:30 2024 Page: 1
ID:MmDSlnSB9wWtCWJS41ul2YzZ4Ox-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDu7J4z3C?I



Scale = 1:66.2

Plate Offsets (X, Y): [3:0-4-0,0-1-15], [8:0-4-1,Edge], [15:Edge,0-5-13]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.11	13-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.23	13-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 139 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x4 WW Stud -- 3-10-12

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

REACTIONS (size) 8=0-5-8, 15= Mechanical
Max Horiz 15=-142 (LC 13)
Max Uplift 8=-224 (LC 13), 15=-196 (LC 12)
Max Grav 8=1481 (LC 1), 15=1418 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2321/379, 2-3=-1839/374, 3-4=-1587/384, 4-6=-1850/375, 6-8=-2445/397, 8-9=0/6, 1-15=-1352/260
BOT CHORD 14-15=-184/367, 13-14=-309/1995, 11-13=-108/1526, 10-11=-264/2068, 8-10=-264/2068
WEBS 2-14=-16/187, 2-13=-563/242, 3-13=-58/393, 3-11=-171/214, 4-11=-42/401, 6-11=-633/256, 6-10=0/297, 1-14=-210/1653

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 13-11-4, Exterior(2E) 13-11-4 to 18-0-12, Exterior(2R) 18-0-12 to 24-11-2, Interior (1) 24-11-2 to 32-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: , Joint 8 SPF No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 196 lb uplift at joint 15 and 224 lb uplift at joint 8.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980094
241090-A	B7	Hip	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:31 2024 Page: 1
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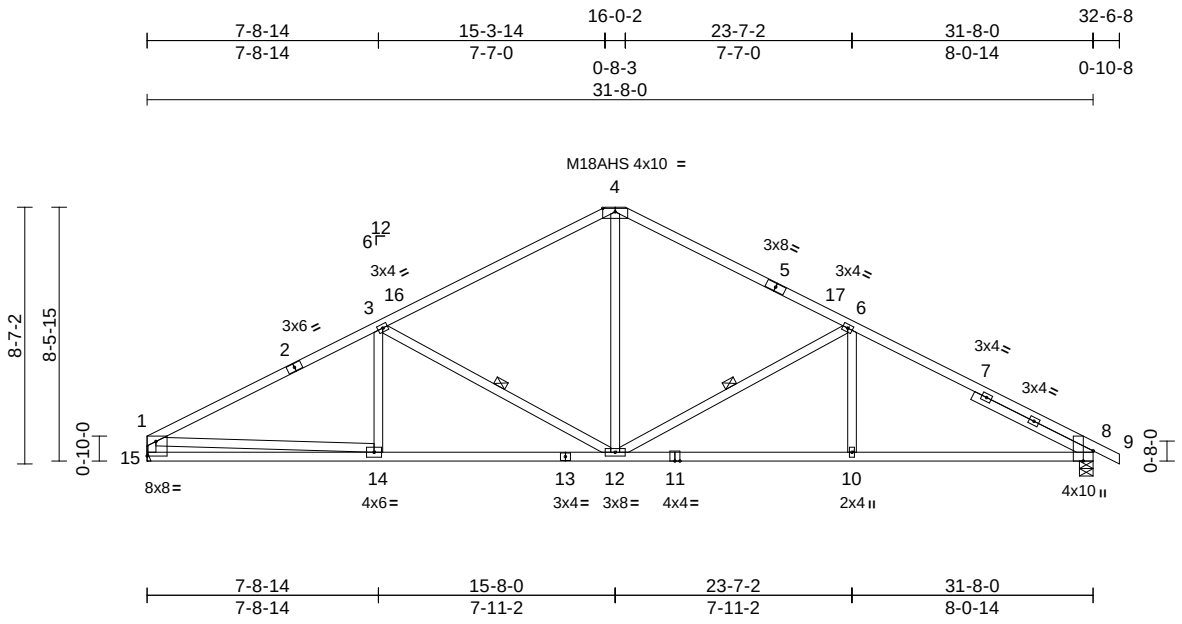


Scale = 1:69.7

Plate Offsets (X, Y): [8:0-4-1,Edge], [15:Edge,0-5-13]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.11	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.25	8-10	>999	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 129 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 4-5:2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x4 WW Stud -- 4-5-7

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-11-12 oc bracing.
WEBS 1 Row at midpt 3-12, 6-12

REACTIONS (size) 8=0-5-8, 15= Mechanical
Max Horiz 15=-163 (LC 13)
Max Uplift 8=-239 (LC 13), 15=-212 (LC 12)
Max Grav 8=1481 (LC 1), 15=1418 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2311/355, 3-4=-1683/344, 4-6=-1678/340, 6-8=-2408/362, 8-9=0/6, 1-15=-1344/255
BOT CHORD 14-15=-227/449, 12-14=-342/1974, 10-12=-225/2034, 8-10=-225/2034
WEBS 3-14=0/244, 3-12=-734/292, 6-12=-795/305, 6-10=0/336, 1-14=-164/1549, 4-12=-100/893

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 16-0-0, Exterior(2R) 16-0-0 to 23-0-14, Interior (1) 23-0-14 to 32-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearings are assumed to be: , Joint 8 SPF No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 212 lb uplift at joint 15 and 239 lb uplift at joint 8.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

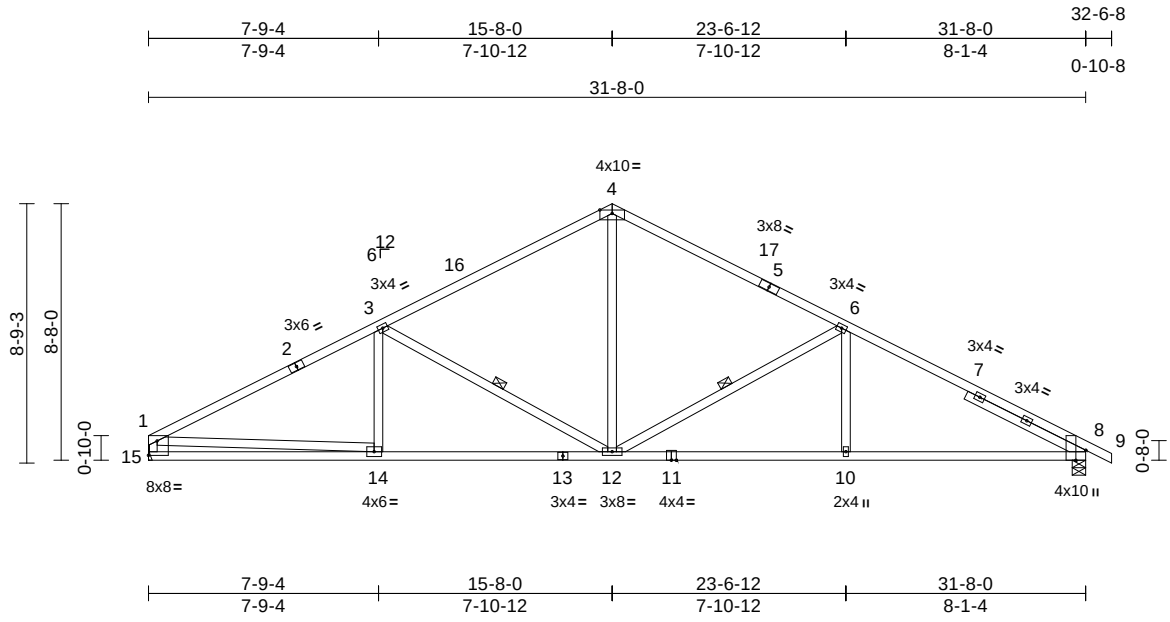
December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980095
241090-A	B8	Common	2	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:31 Page: 1
ID:Be2lS1JHlY8RNqzKxEBA5DzZ4P6-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDorJ4z3e?f



Scale = 1:70.3

Plate Offsets (X, Y): [8:0-4-1,Edge], [15:Edge,0-5-13]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.11	8-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.26	8-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 130 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 4-5:2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x4 WW Stud -- 4-5-10

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-11-14 oc bracing.
WEBS 1 Row at midpt 6-12, 3-12

REACTIONS (size) 8=0-5-8, 15= Mechanical
Max Horiz 15=-163 (LC 13)
Max Uplift 8=-239 (LC 13), 15=-212 (LC 12)
Max Grav 8=1481 (LC 1), 15=1418 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2310/380, 3-4=-1682/372, 4-6=-1678/368, 6-8=-2406/384, 8-9=0/6, 1-15=-1344/269
BOT CHORD 14-15=-229/453, 12-14=-341/1972, 10-12=-239/2032, 8-10=-239/2032
WEBS 4-12=-100/896, 6-12=-795/305, 6-10=0/337, 3-12=-733/291, 3-14=0/245, 1-14=-181/1543

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 16-0-0, Exterior(2R) 16-0-0 to 21-0-0, Interior (1) 21-0-0 to 32-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Bearings are assumed to be: , Joint 8 SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 212 lb uplift at joint 15 and 239 lb uplift at joint 8.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980096
241090-A	V1	Valley	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:37 Page: 1
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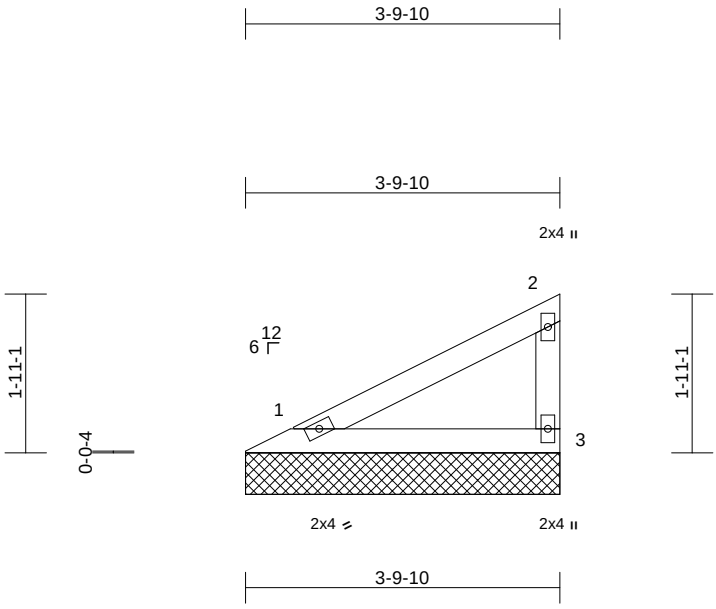

Scale = 1:26.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%

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

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

REACTIONS (size) 1=3-9-10, 3=3-9-10
Max Horiz 1=69 (LC 9)
Max Uplift 1=-21 (LC 12), 3=-39 (LC 12)
Max Grav 1=138 (LC 1), 3=138 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-97/72, 2-3=-142/139
BOT CHORD 1-3=-32/34

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SPF No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1 and 39 lb uplift at joint 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980097
241090-A	V2	Valley	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:38 2024 Page: 1
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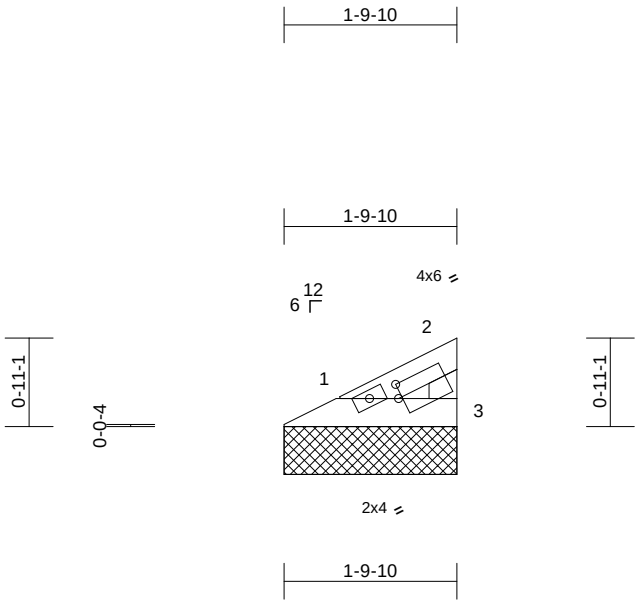

Scale = 1:22.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 4 lb	FT = 20%

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

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

REACTIONS (size) 1=1-9-10, 3=1-9-10
Max Horiz 1=24 (LC 9)
Max Uplift 1=-7 (LC 12), 3=-14 (LC 12)
Max Grav 1=48 (LC 1), 3=48 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-34/25, 2-3=-49/49
BOT CHORD 1-3=-11/12

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SPF No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 1 and 14 lb uplift at joint 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980098
241090-A	A8	Common	2	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:25 Page: 1
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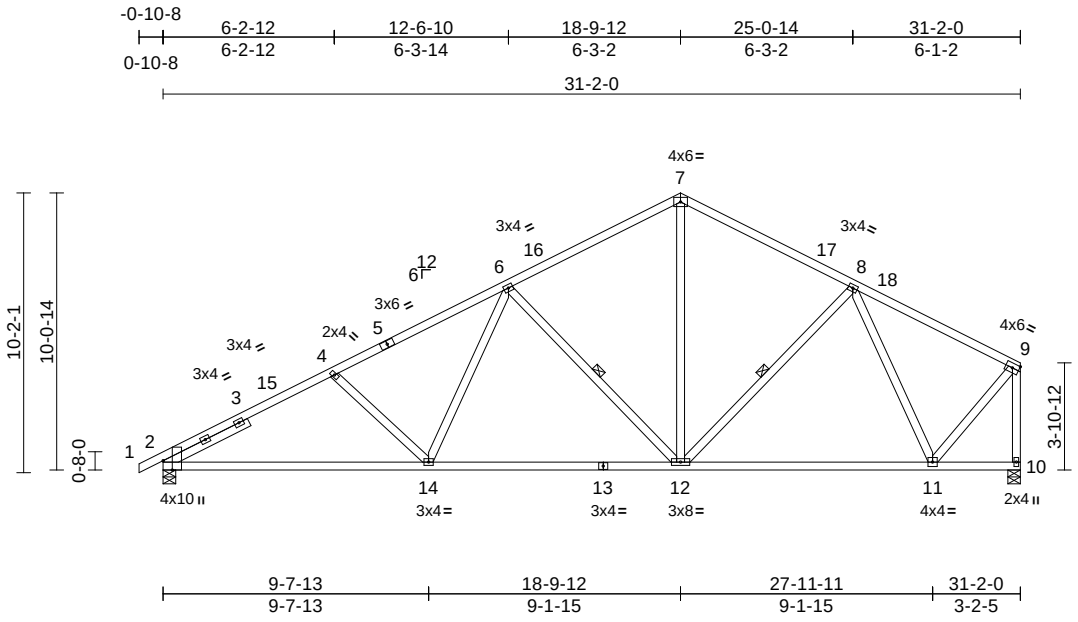

Scale = 1:76

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.21	2-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.44	2-14	>846	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 142 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 3-5-6

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

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=249 (LC 11)
Max Uplift 2=-252 (LC 12), 10=-181 (LC 13)
Max Grav 2=1458 (LC 1), 10=1395 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2377/420, 4-6=-2115/382, 6-7=-1361/355, 7-8=-1361/334, 8-9=-941/216, 9-10=-1399/234
BOT CHORD 2-14=-479/2119, 12-14=-367/1689, 11-12=-250/1107, 10-11=-68/75
WEBS 7-12=-128/749, 4-14=-337/239, 6-14=-51/482, 6-12=-794/311, 8-12=-95/210, 8-11=-792/230, 9-11=-140/1130

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 18-9-12, Exterior(2R) 18-9-12 to 23-9-12, Interior (1) 23-9-12 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SPF No.2 .
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 252 lb uplift at joint 2 and 181 lb uplift at joint 10.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle
241090-A	A9	Common	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:25 Page: 1
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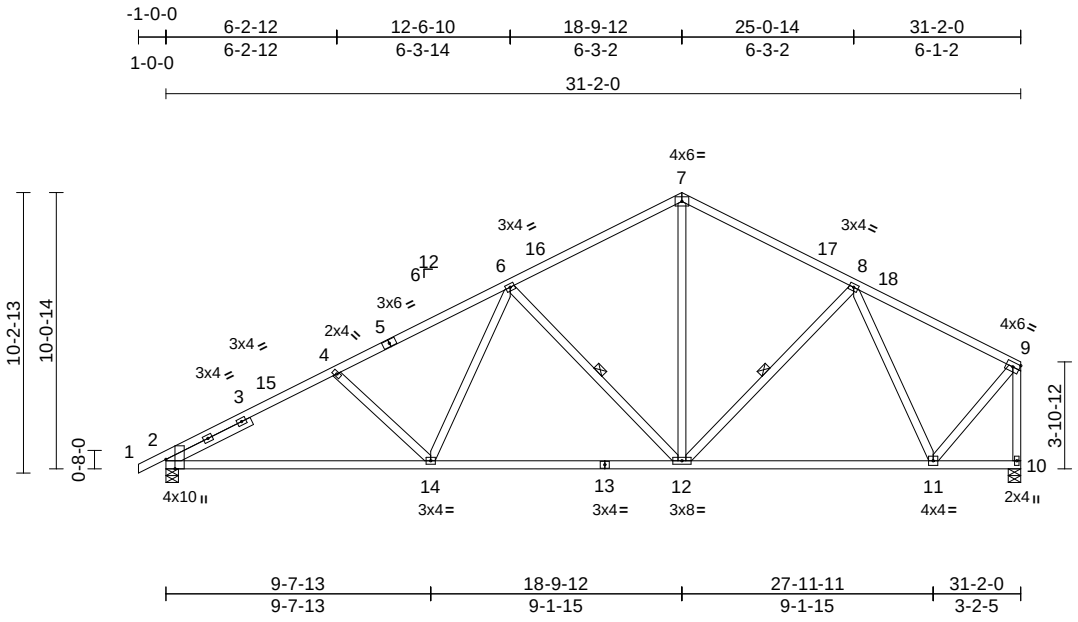

Scale = 1:76.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.21	2-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.44	2-14	>847	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 142 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 3-5-6

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

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=250 (LC 11)
Max Uplift 2=-255 (LC 12), 10=-181 (LC 13)
Max Grav 2=1467 (LC 1), 10=1395 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/10, 2-4=-2376/419, 4-6=-2113/380, 6-7=-1361/354, 7-8=-1360/333, 8-9=-941/216, 9-10=-1399/234
BOT CHORD 2-14=-478/2117, 12-14=-366/1688, 11-12=-250/1107, 10-11=-68/75
WEBS 7-12=-127/748, 4-14=-336/238, 6-14=-51/481, 6-12=-794/311, 8-12=-95/210, 8-11=-791/230, 9-11=-140/1129

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-0-0 to 4-0-0, Interior (1) 4-0-0 to 18-9-12, Exterior(2R) 18-9-12 to 23-9-12, Interior (1) 23-9-12 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SPF No.2 .
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 255 lb uplift at joint 2 and 181 lb uplift at joint 10.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980100
241090-A	A10	Common	3	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:26 Page: 1
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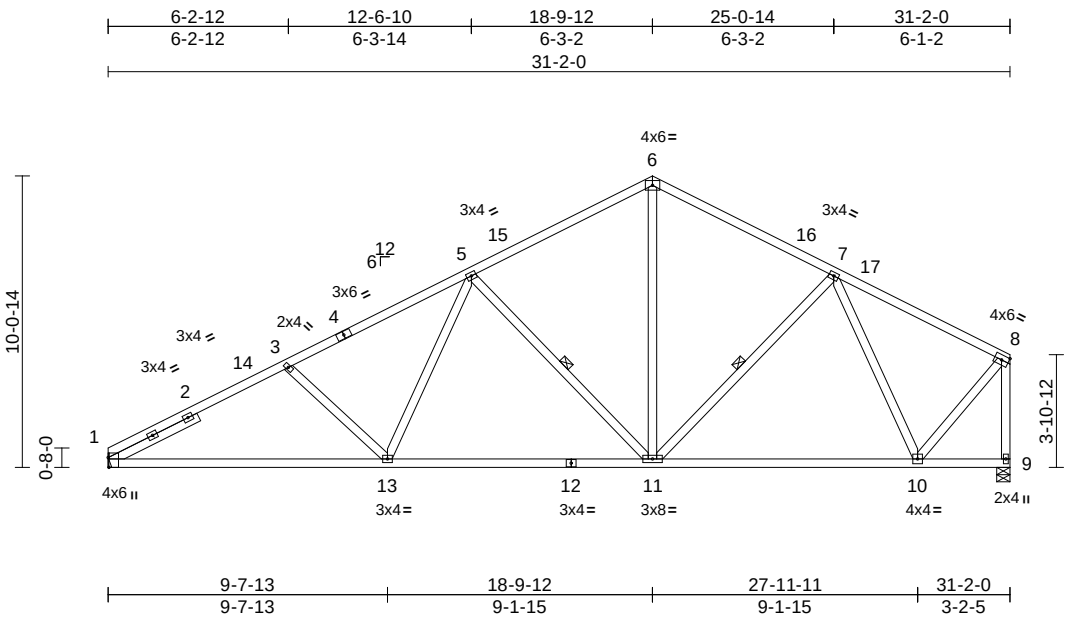

Scale = 1:73.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.21	1-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.45	1-13	>826	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 141 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 3-5-6

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-3-6 oc bracing.
WEBS 1 Row at midpt 5-11, 7-11

REACTIONS (size) 1= Mechanical, 9=0-5-8
Max Horiz 1=247 (LC 9)
Max Uplift 1=-230 (LC 12), 9=-181 (LC 13)
Max Grav 1=1396 (LC 1), 9=1396 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2383/423, 3-5=-2119/391, 5-6=-1362/357, 6-7=-1362/337, 7-8=-941/217, 8-9=-1400/234
BOT CHORD 1-13=-481/2123, 11-13=-367/1690, 10-11=-250/1108, 9-10=-68/75
WEBS 6-11=-130/749, 3-13=-339/241, 5-13=-53/483, 5-11=-796/311, 7-11=-95/210, 7-10=-792/231, 8-10=-140/1130

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 18-9-12, Exterior(2R) 18-9-12 to 23-9-12, Interior (1) 23-9-12 to 31-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Bearings are assumed to be: , Joint 9 SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 230 lb uplift at joint 1 and 181 lb uplift at joint 9.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980101
241090-A	V3	Valley	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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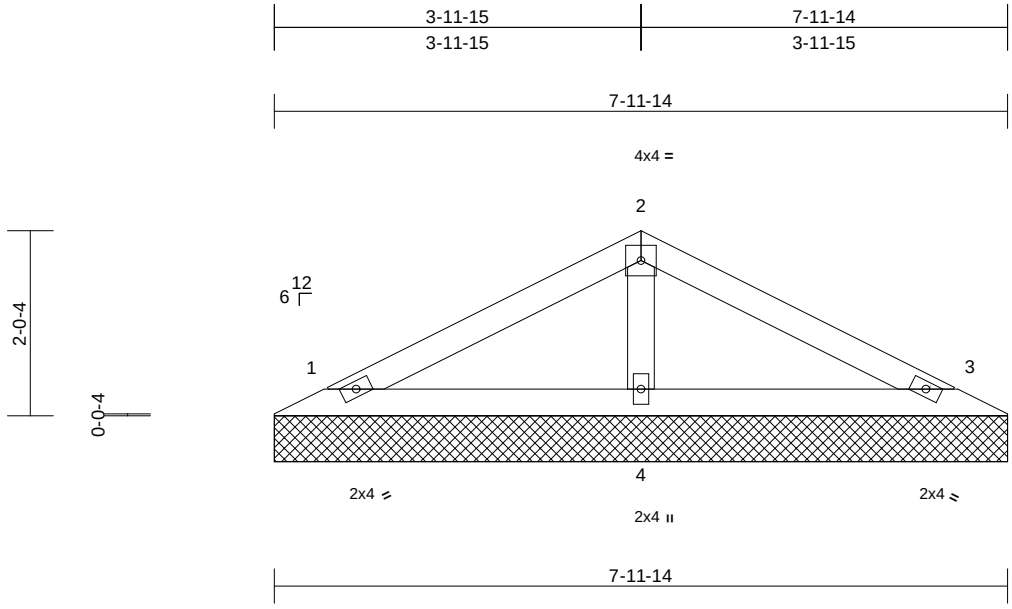

Scale = 1:17.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%

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

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

REACTIONS (size) 1=7-11-14, 3=7-11-14, 4=7-11-14
Max Horiz 1=32 (LC 16)
Max Uplift 1=-41 (LC 12), 3=-47 (LC 13), 4=-12 (LC 12)
Max Grav 1=156 (LC 1), 3=156 (LC 1), 4=301 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-70/52, 2-3=-70/58
BOT CHORD 1-4=0/30, 3-4=0/30
WEBS 2-4=-231/172

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 1, 47 lb uplift at joint 3 and 12 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980102
241090-A	V4	Valley	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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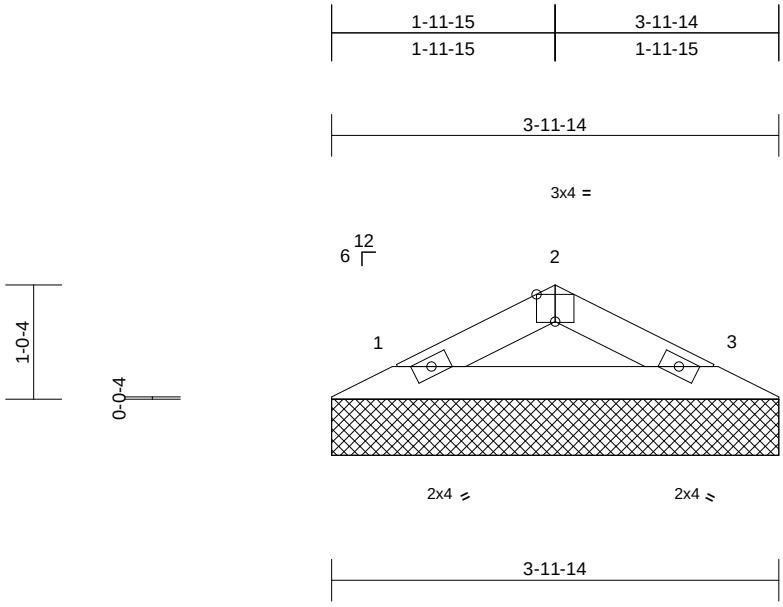

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Plate Offsets (X, Y): [2:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-11-14, 3=3-11-14
Max Horiz 1=13 (LC 16)
Max Uplift 1=-19 (LC 12), 3=-19 (LC 13)
Max Grav 1=127 (LC 1), 3=127 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-140/113, 2-3=-140/120
BOT CHORD 1-3=-78/104

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 1 and 19 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980103
241090-A	E2	Common	2	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:34 Page: 1
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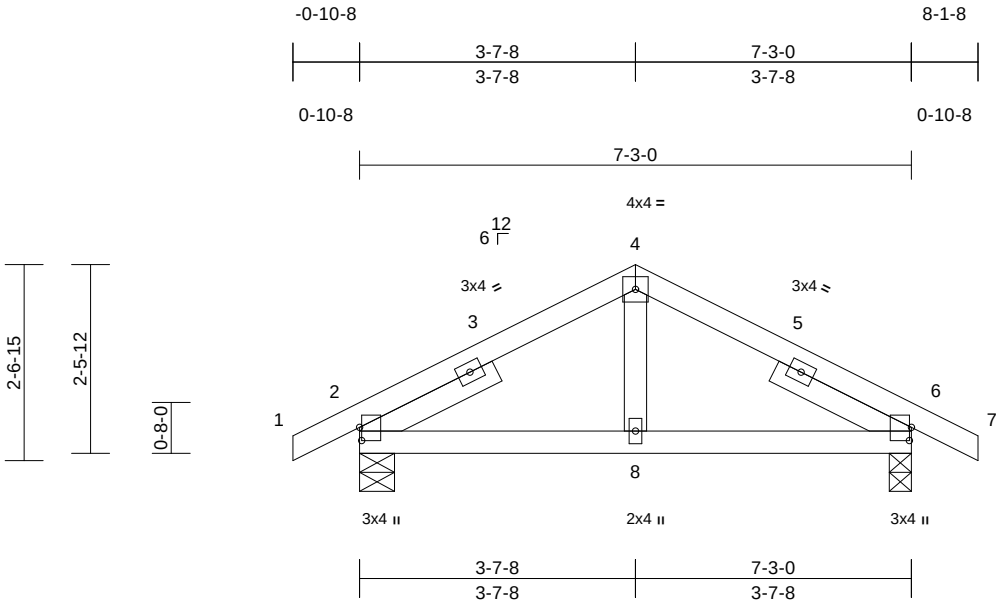

Scale = 1:22.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.01	2-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	2-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 26 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 1-11-10, Right 2x4 WW Stud -- 1-11-10

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

REACTIONS (size) 2=0-5-8, 6=0-3-8
Max Horiz 2=42 (LC 12)
Max Uplift 2=-71 (LC 12), 6=-71 (LC 13)
Max Grav 2=387 (LC 1), 6=387 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-419/180, 4-6=-419/197, 6-7=0/6
BOT CHORD 2-8=-68/281, 6-8=-68/281
WEBS 4-8=0/178

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SPF No.2 .
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 2 and 71 lb uplift at joint 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980104
241090-A	V5	Valley	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:38 Page: 1
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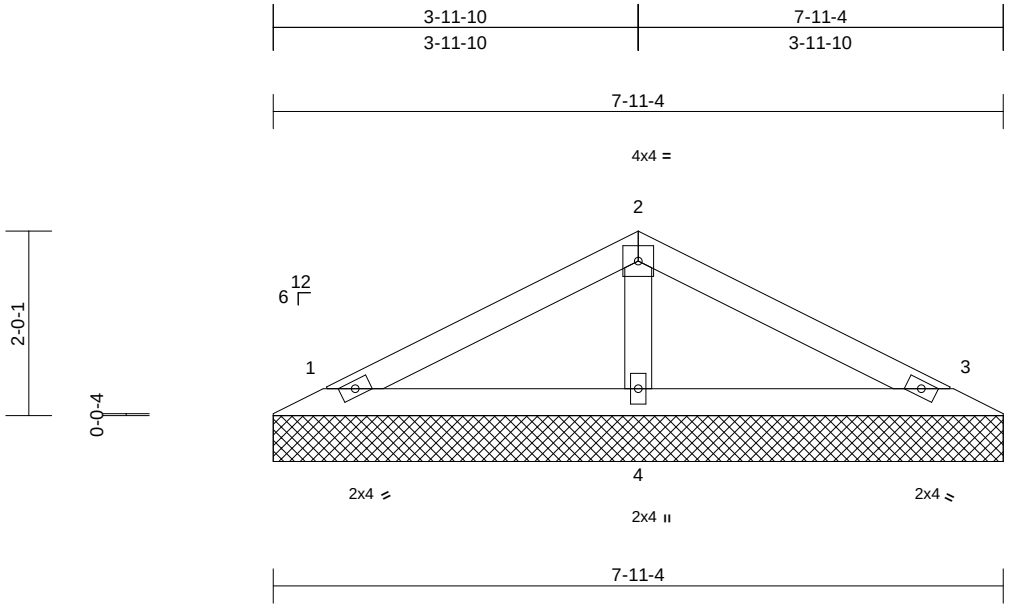

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%

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

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

REACTIONS (size) 1=7-11-4, 3=7-11-4, 4=7-11-4
Max Horiz 1=-32 (LC 13)
Max Uplift 1=-40 (LC 12), 3=-46 (LC 13), 4=-12 (LC 12)
Max Grav 1=155 (LC 1), 3=155 (LC 1), 4=299 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-70/51, 2-3=-70/58
BOT CHORD 1-4=0/29, 3-4=0/29
WEBS 2-4=-230/171

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 1, 46 lb uplift at joint 3 and 12 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980105
241090-A	V6	Valley	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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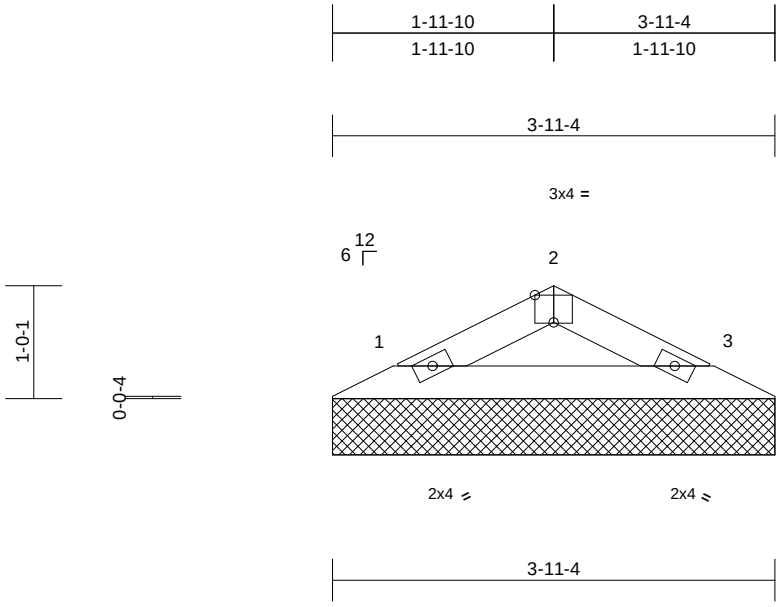

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Plate Offsets (X, Y): [2:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

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

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

REACTIONS (size) 1=3-11-4, 3=3-11-4
Max Horiz 1=-13 (LC 17)
Max Uplift 1=-19 (LC 12), 3=-19 (LC 13)
Max Grav 1=124 (LC 1), 3=124 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-138/111, 2-3=-138/118
BOT CHORD 1-3=-76/102

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 1 and 19 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980106
241090-A	V7	Valley	1	1	Job Reference (optional)

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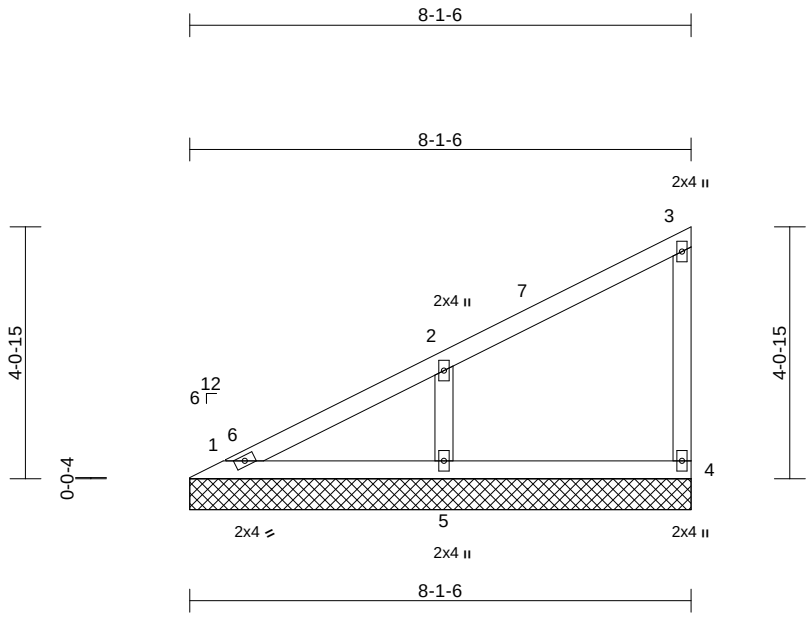

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

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

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

REACTIONS (size) 1=8-1-6, 4=8-1-6, 5=8-1-6
Max Horiz 1=165 (LC 9)
Max Uplift 4=-30 (LC 9), 5=-141 (LC 12)
Max Grav 1=123 (LC 22), 4=134 (LC 1), 5=416 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-293/175, 2-3=-127/98, 3-4=-144/133
BOT CHORD 1-5=-76/83, 4-5=-76/83
WEBS 2-5=-378/331

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 8-0-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SPF No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 4 and 141 lb uplift at joint 5.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle
241090-A	V8	Valley	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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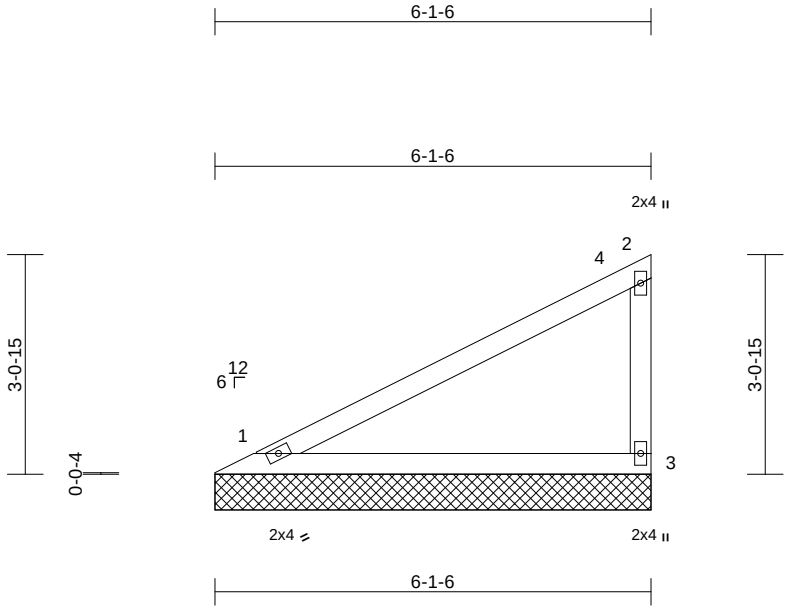

Scale = 1:31

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb	FT = 20%

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

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

REACTIONS (size) 1=6-1-6, 3=6-1-6
Max Horiz 1=120 (LC 9)
Max Uplift 1=-38 (LC 12), 3=-68 (LC 12)
Max Grav 1=242 (LC 1), 3=242 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-166/129, 2-3=-245/235
BOT CHORD 1-3=-56/60

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 6-0-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SPF No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 1 and 68 lb uplift at joint 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980108
241090-A	V9	Valley	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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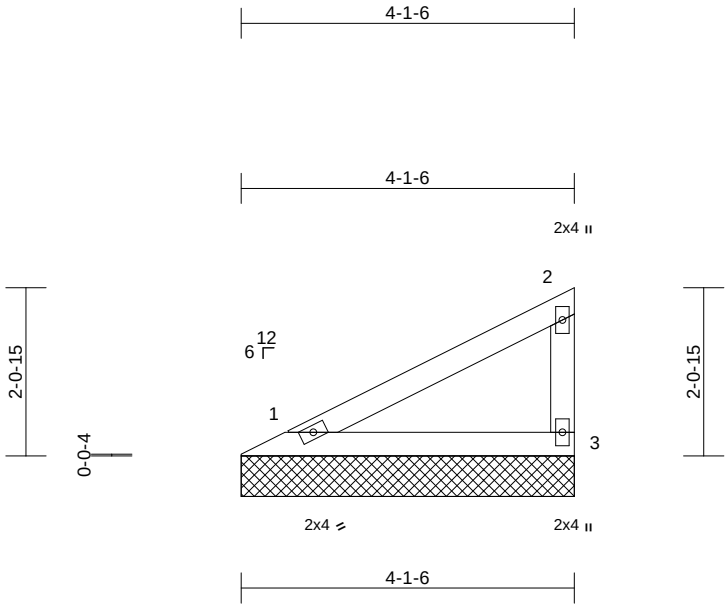

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-1-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-1-6, 3=4-1-6
Max Horiz 1=76 (LC 9)
Max Uplift 1=-24 (LC 12), 3=-43 (LC 12)
Max Grav 1=152 (LC 1), 3=152 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-107/80, 2-3=-156/153
BOT CHORD 1-3=-35/38

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SPF No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 1 and 43 lb uplift at joint 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle
241090-A	V10	Valley	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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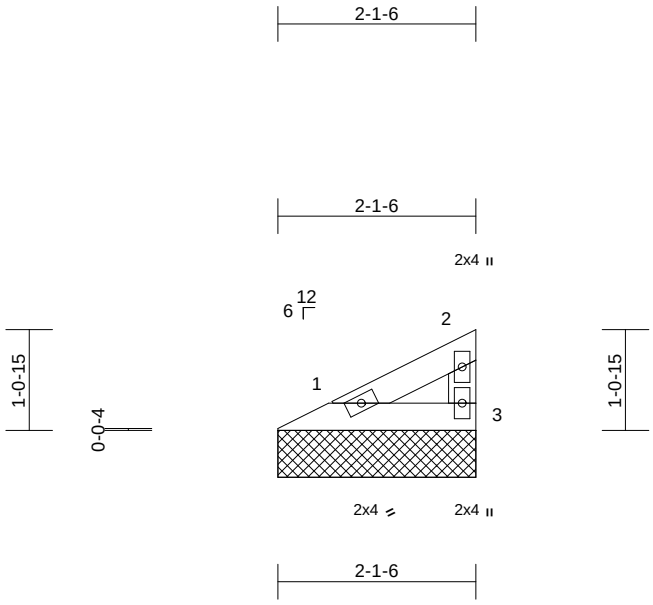

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 5 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-1-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-1-6, 3=2-1-6
Max Horiz 1=31 (LC 9)
Max Uplift 1=-10 (LC 12), 3=-17 (LC 12)
Max Grav 1=62 (LC 1), 3=62 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-44/33, 2-3=-64/63
BOT CHORD 1-3=-14/16

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SPF No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 1 and 17 lb uplift at joint 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980110
241090-A	LG2	Lay-In Gable	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:36 Page: 1
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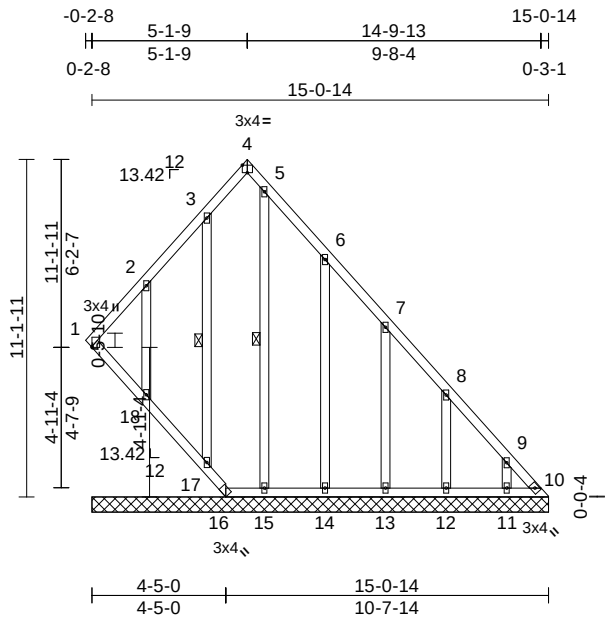

Scale = 1:67.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horiz(TL)	0.01	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 91 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-2-3 oc bracing.
WEBS 1 Row at midpt 3-17, 5-15

REACTIONS (size) 1=15-0-14, 10=15-0-14, 11=15-0-14, 12=15-0-14, 13=15-0-14, 14=15-0-14, 15=15-0-14, 16=15-0-14, 17=15-0-14, 18=15-0-14
Max Horiz 1=-322 (LC 13)
Max Uplift 1=-10 (LC 11), 10=-138 (LC 11), 11=-128 (LC 13), 12=-153 (LC 13), 13=-142 (LC 13), 14=-183 (LC 13), 16=-416 (LC 13), 17=-62 (LC 9), 18=-215 (LC 12)
Max Grav 1=401 (LC 13), 10=369 (LC 13), 11=184 (LC 22), 12=218 (LC 22), 13=207 (LC 22), 14=228 (LC 22), 15=144 (LC 24), 16=179 (LC 11), 17=203 (LC 21), 18=236 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-229/176, 2-3=-143/110, 3-4=-131/114, 4-5=-87/56, 5-6=-143/107, 6-7=-114/62, 7-8=-234/168, 8-9=-385/293, 9-10=-502/390
BOT CHORD 1-18=-418/531, 17-18=-413/534, 16-17=-417/556, 15-16=-266/350, 14-15=-266/350, 13-14=-266/350, 12-13=-266/350, 11-12=-266/350, 10-11=-266/350
WEBS 2-18=-268/232, 3-17=-163/98, 5-15=-110/27, 6-14=-263/208, 7-13=-230/166, 8-12=-243/179, 9-11=-201/144

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-11 to 5-4-1, Exterior(2R) 5-4-1 to 10-4-1, Interior (1) 10-4-1 to 14-11-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 (||) MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 0-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) All bearings are assumed to be SPF No.2 .
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 138 lb uplift at joint 10, 10 lb uplift at joint 1, 416 lb uplift at joint 16, 215 lb uplift at joint 18, 62 lb uplift at joint 17, 183 lb uplift at joint 14, 142 lb uplift at joint 13, 153 lb uplift at joint 12 and 128 lb uplift at joint 11.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 16, 18, 17.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980111
241090-A	LG7	Lay-In Gable	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:37 2024 Page: 1
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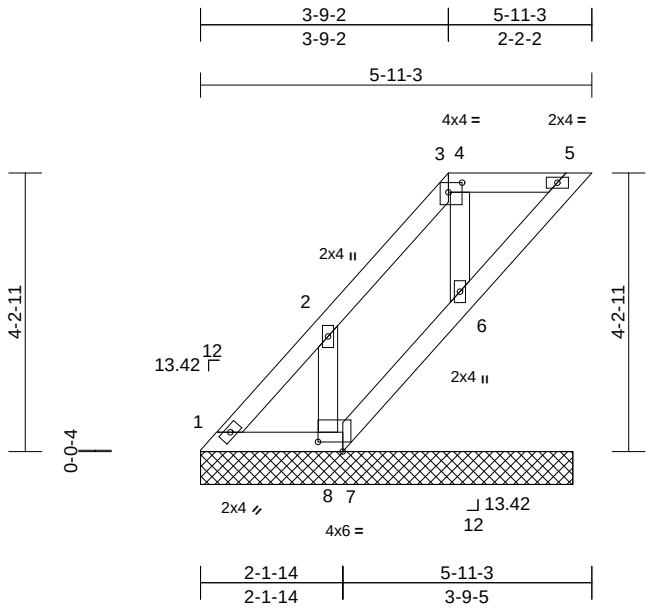

Scale = 1:26.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-7 oc purlins, except 2-0-0 oc purlins: 3-5.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=5-7-12, 5=5-7-12, 6=5-7-12, 7=5-7-12, 8=5-7-12
Max Horiz 1=172 (LC 12)
Max Uplift 1=-6 (LC 10), 5=-45 (LC 12), 6=-19 (LC 9), 7=-33 (LC 10), 8=-158 (LC 12)
Max Grav 1=105 (LC 12), 5=68 (LC 1), 6=167 (LC 1), 7=39 (LC 12), 8=233 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-164/161, 2-3=-62/25, 3-4=-36/39, 4-5=-36/39
BOT CHORD 1-8=-39/36, 7-8=-39/36, 6-7=-64/72, 5-6=-68/61
WEBS 4-6=-156/57, 2-8=-272/189

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 1, 45 lb uplift at joint 5, 33 lb uplift at joint 7, 19 lb uplift at joint 6 and 158 lb uplift at joint 8.
9) Non Standard bearing condition. Review required.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980112
241090-A	LG4	Lay-In Gable	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:36 Page: 1
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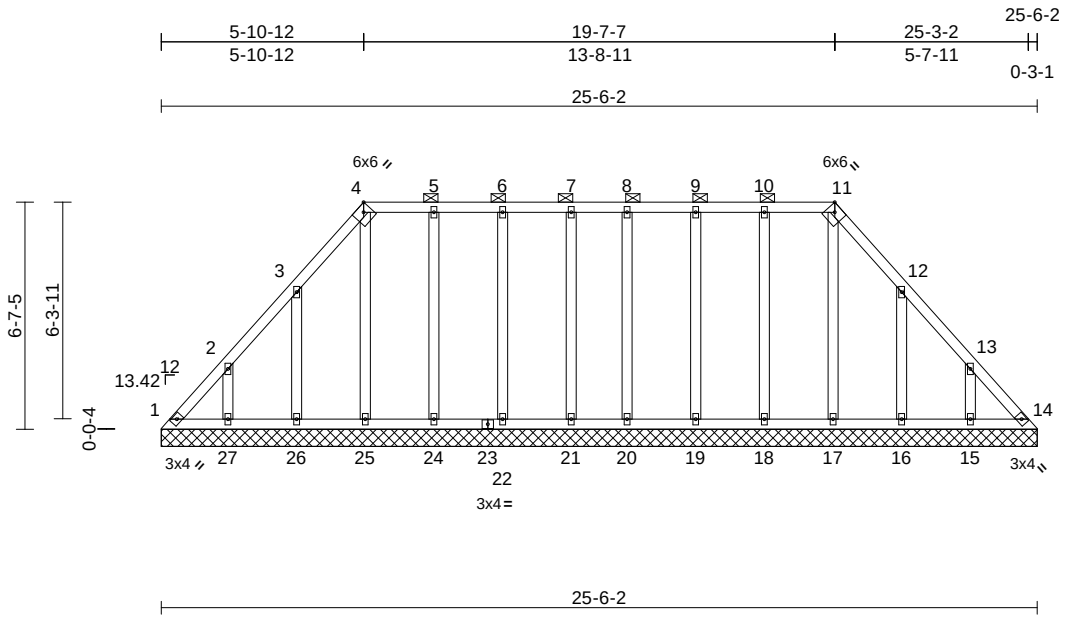

Scale = 1:60

Plate Offsets (X, Y): [4:0-2-10,Edge], [11:0-2-10,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.01	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 132 lb	FT = 20%

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

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

REACTIONS (size) 1=25-6-2, 14=25-6-2, 15=25-6-2, 16=25-6-2, 17=25-6-2, 18=25-6-2, 19=25-6-2, 20=25-6-2, 21=25-6-2, 22=25-6-2, 24=25-6-2, 25=25-6-2, 26=25-6-2, 27=25-6-2
Max Horiz 1=-181 (LC 8)
Max Uplift 1=-87 (LC 10), 14=-32 (LC 11), 15=-149 (LC 13), 16=-157 (LC 13), 18=-46 (LC 9), 19=-40 (LC 8), 20=-35 (LC 9), 21=-35 (LC 9), 22=-40 (LC 8), 24=-44 (LC 8), 25=-32 (LC 9), 26=-158 (LC 12), 27=-149 (LC 12)
Max Grav 1=152 (LC 12), 14=122 (LC 24), 15=212 (LC 22), 16=221 (LC 22), 17=149 (LC 28), 18=192 (LC 27), 19=182 (LC 1), 20=160 (LC 27), 21=160 (LC 28), 22=182 (LC 1), 24=192 (LC 28), 25=171 (LC 24), 26=221 (LC 21), 27=212 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-221/177, 2-3=-144/123, 3-4=-162/165, 4-5=-121/131, 5-6=-121/131, 6-7=-121/131, 7-8=-121/131, 8-9=-121/131, 9-10=-121/131, 10-11=-121/131, 11-12=-162/138, 12-13=-88/51, 13-14=-173/109
BOT CHORD 1-27=-87/145, 26-27=-87/145, 25-26=-87/145, 24-25=-87/144, 22-24=-87/144, 21-22=-87/144, 20-21=-87/144, 19-20=-87/144, 18-19=-87/144, 17-18=-87/144, 16-17=-87/145, 15-16=-87/145, 14-15=-87/145
WEBS 2-27=-221/167, 3-26=-237/183, 4-25=-131/55, 5-24=-169/67, 6-22=-167/64, 7-21=-146/56, 8-20=-146/56, 9-19=-167/65, 10-18=-169/70, 11-17=-109/3, 12-16=-237/183, 13-15=-221/167

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-3-15 to 5-3-15, Interior (1) 5-3-15 to 5-10-15, Exterior(2R) 5-10-15 to 12-11-13, Interior (1) 12-11-13 to 19-7-10, Exterior(2E) 19-7-10 to 25-2-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 (||) MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 0-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) All bearings are assumed to be SPF No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 1, 32 lb uplift at joint 14, 149 lb uplift at joint 27, 158 lb uplift at joint 26, 32 lb uplift at joint 25, 44 lb uplift at joint 24, 40 lb uplift at joint 22, 35 lb uplift at joint 21, 35 lb uplift at joint 20, 40 lb uplift at joint 19, 46 lb uplift at joint 18, 157 lb uplift at joint 16 and 149 lb uplift at joint 15.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980113
241090-A	LG5	Lay-In Gable	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:36 Page: 1
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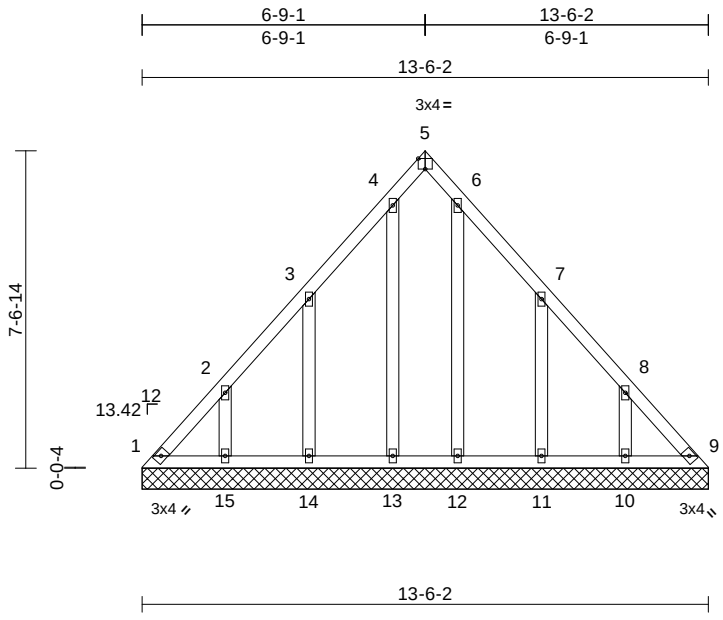

Scale = 1:50.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 64 lb	FT = 20%

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

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

REACTIONS (size) 1=13-6-2, 9=13-6-2, 10=13-6-2, 11=13-6-2, 12=13-6-2, 13=13-6-2, 14=13-6-2, 15=13-6-2
Max Horiz 1=-208 (LC 8)
Max Uplift 1=-86 (LC 10), 9=-66 (LC 11), 10=-147 (LC 13), 11=-169 (LC 13), 12=-28 (LC 13), 13=-43 (LC 12), 14=-167 (LC 12), 15=-148 (LC 12)
Max Grav 1=234 (LC 12), 9=221 (LC 13), 10=214 (LC 22), 11=223 (LC 22), 12=152 (LC 22), 13=169 (LC 21), 14=220 (LC 21), 15=214 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-333/248, 2-3=-195/131, 3-4=-103/65, 4-5=-77/61, 5-6=-77/61, 6-7=-82/45, 7-8=-178/131, 8-9=-315/248
BOT CHORD 1-15=-184/241, 14-15=-184/241, 13-14=-184/241, 12-13=-184/241, 11-12=-184/241, 10-11=-184/241, 9-10=-184/241
WEBS 2-15=-231/172, 3-14=-259/207, 4-13=-134/64, 8-10=-231/172, 7-11=-259/207, 6-12=-120/49

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-3-15 to 5-3-15, Exterior(2N) 5-3-15 to 6-9-5, Corner(3R) 6-9-5 to 11-6-10, Exterior(2N) 11-6-10 to 13-2-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 (||) MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) All bearings are assumed to be SPF No.2 .
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 1, 66 lb uplift at joint 9, 148 lb uplift at joint 15, 167 lb uplift at joint 14, 43 lb uplift at joint 13, 147 lb uplift at joint 11 and 28 lb uplift at joint 12.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle
241090-A	LG9	Lay-In Gable	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:37 2024 Page: 1
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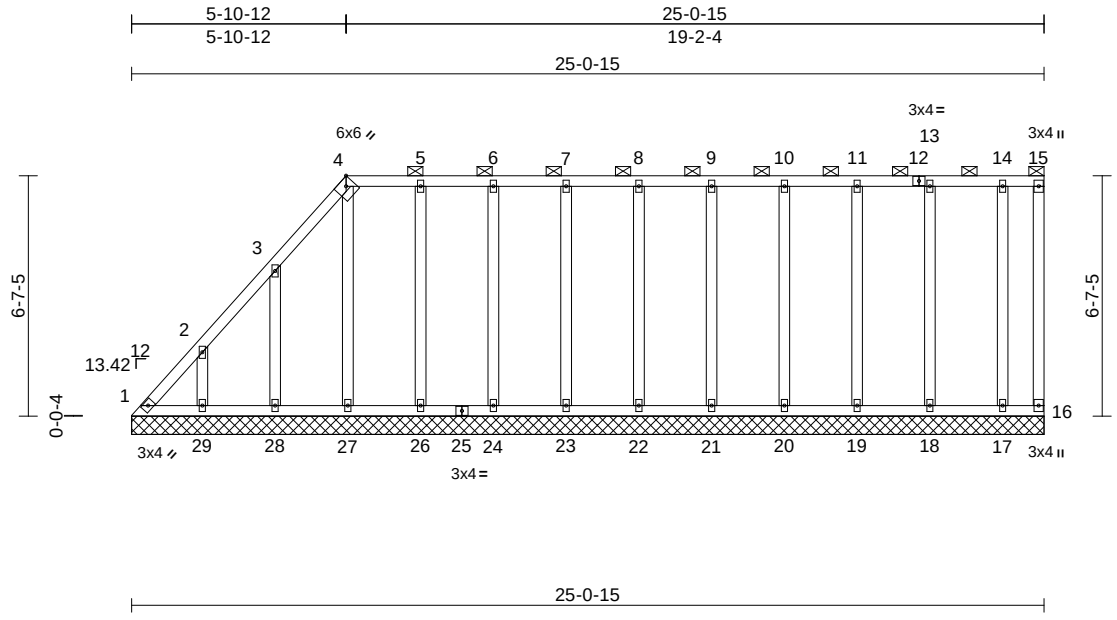


Scale = 1:58.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 142 lb	FT = 20%

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

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

REACTIONS (size) 1=25-0-15, 16=25-0-15, 17=25-0-15, 18=25-0-15, 19=25-0-15, 20=25-0-15, 21=25-0-15, 22=25-0-15, 23=25-0-15, 24=25-0-15, 26=25-0-15, 27=25-0-15, 28=25-0-15, 29=25-0-15
Max Horiz 1=269 (LC 9)
Max Uplift 1=-104 (LC 10), 16=-16 (LC 9), 17=-44 (LC 8), 18=-46 (LC 9), 19=-41 (LC 8), 20=-40 (LC 9), 21=-39 (LC 8), 22=-39 (LC 9), 23=-40 (LC 9), 24=-39 (LC 8), 26=-46 (LC 9), 27=-105 (LC 9), 28=-158 (LC 12), 29=-148 (LC 12)
Max Grav 1=216 (LC 9), 16=27 (LC 1), 17=146 (LC 1), 18=188 (LC 1), 19=179 (LC 1), 20=180 (LC 1), 21=180 (LC 1), 22=180 (LC 1), 23=180 (LC 1), 24=178 (LC 1), 26=190 (LC 1), 27=173 (LC 21), 28=222 (LC 21), 29=212 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-438/434, 2-3=-325/329, 3-4=-194/208, 4-5=-127/138, 5-6=-127/138, 6-7=-127/138, 7-8=-127/138, 8-9=-127/138, 9-10=-127/138, 10-11=-127/138, 11-13=-127/138, 13-14=-127/138, 14-15=-127/138, 15-16=-98/97
BOT CHORD 1-29=-128/140, 28-29=-128/140, 27-28=-128/140, 26-27=-128/139, 24-26=-128/139, 23-24=-128/139, 22-23=-128/139, 21-22=-128/139, 20-21=-128/139, 19-20=-128/139, 18-19=-128/139, 17-18=-128/139, 16-17=-128/139
WEBS 2-29=-221/166, 3-28=-240/184, 4-27=-255/180, 5-26=-179/70, 6-24=-164/63, 7-23=-165/64, 8-22=-165/63, 9-21=-165/63, 10-20=-165/63, 11-19=-164/63, 13-18=-173/67, 14-17=-179/95

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-3-15 to 5-3-15, Interior (1) 5-3-15 to 5-10-15, Exterior(2R) 5-10-15 to 12-11-13, Interior (1) 12-11-13 to 24-11-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 (||) MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 0-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) All bearings are assumed to be SPF No.2 .
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 1, 16 lb uplift at joint 16, 148 lb uplift at joint 29, 158 lb uplift at joint 28, 105 lb uplift at joint 27, 46 lb uplift at joint 26, 39 lb uplift at joint 24, 40 lb uplift at joint 23, 39 lb uplift at joint 22, 39 lb uplift at joint 21, 40 lb uplift at joint 20, 41 lb uplift at joint 19, 46 lb uplift at joint 18 and 44 lb uplift at joint 17.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

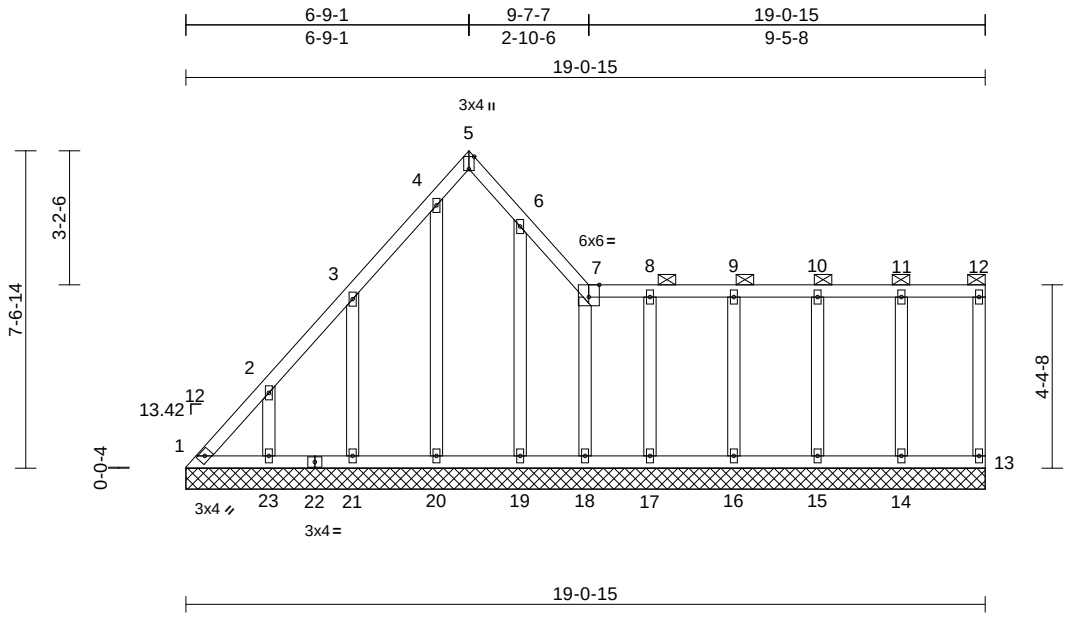
December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980115
241090-A	LG8	Lay-In Gable	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:37 Page: 1
ID:eBbLKOmgQiXh_c0CesZvxkz?odc-RfC?PsB70Hq3NSgPqnL8w3uITXbGhWrCDoi794zsC?4



Scale = 1:50.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 95 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-12.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=19-0-15, 13=19-0-15, 14=19-0-15, 15=19-0-15, 16=19-0-15, 17=19-0-15, 18=19-0-15, 19=19-0-15, 20=19-0-15, 21=19-0-15, 23=19-0-15
Max Horiz 1=265 (LC 11)
Max Uplift 1=-147 (LC 10), 13=-24 (LC 9), 14=-52 (LC 13), 15=-42 (LC 9), 16=-42 (LC 13), 17=-42 (LC 9), 18=-102 (LC 8), 19=-28 (LC 13), 20=-132 (LC 11), 21=-189 (LC 12), 23=-143 (LC 12)
Max Grav 1=231 (LC 9), 13=72 (LC 1), 14=186 (LC 28), 15=179 (LC 1), 16=184 (LC 28), 17=164 (LC 1), 18=182 (LC 22), 19=171 (LC 1), 20=266 (LC 21), 21=200 (LC 21), 23=219 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-314/313, 2-3=-249/203, 3-4=-232/272, 4-5=-115/117, 5-6=-160/187, 6-7=-190/240, 7-8=-78/103, 8-9=-78/103, 9-10=-78/103, 10-11=-78/103, 11-12=-78/103, 12-13=-72/35
BOT CHORD 1-23=-95/128, 21-23=-95/128, 20-21=-95/128, 19-20=-95/128, 18-19=-95/128, 17-18=-90/122, 16-17=-90/122, 15-16=-90/122, 14-15=-90/122, 13-14=-90/122
WEBS 2-23=-228/160, 3-21=-276/241, 4-20=-225/173, 6-19=-201/78, 11-14=-190/81, 10-15=-167/62, 9-16=-172/67, 8-17=-148/63, 7-18=-237/253

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-3-15 to 5-3-15, Exterior(2N) 5-3-15 to 6-9-5, Corner(3E) 6-9-5 to 9-7-10, Exterior(2N) 9-7-10 to 18-11-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 (||) MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) All bearings are assumed to be SPF No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 147 lb uplift at joint 1, 24 lb uplift at joint 13, 143 lb uplift at joint 23, 189 lb uplift at joint 21, 132 lb uplift at joint 20, 28 lb uplift at joint 19, 52 lb uplift at joint 14, 42 lb uplift at joint 15, 42 lb uplift at joint 16, 42 lb uplift at joint 17 and 102 lb uplift at joint 18.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

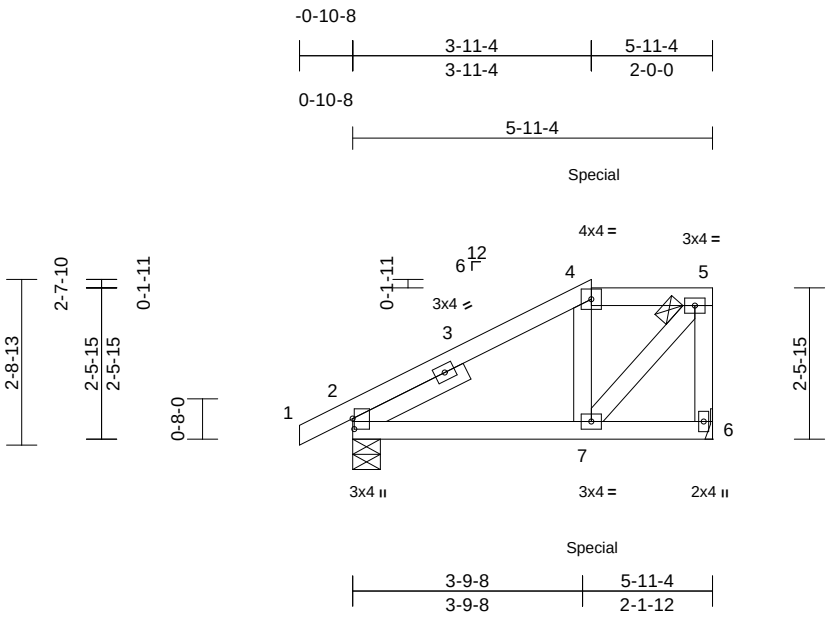
December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980116
241090-A	D1	Half Hip Girder	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:33 Page: 1
ID:U_zxwQOg5h0Sjv?hrCpptizZ4P?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4ZJc?Y



Scale = 1:24.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.01	2-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	2-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 2-0-12

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

REACTIONS (size) 2=0-5-8, 6= Mechanical
Max Horiz 2=99 (LC 9)
Max Uplift 2=-109 (LC 12), 6=-138 (LC 9)
Max Grav 2=421 (LC 1), 6=439 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-448/142, 4-5=-323/193, 5-6=-430/251
BOT CHORD 2-7=-192/321, 6-7=-45/49
WEBS 4-7=-104/168, 5-7=-255/478

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: Joint 2 SPF No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 138 lb uplift at joint 6 and 109 lb uplift at joint 2.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 82 lb down and 100 lb up at 3-11-4 on top chord, and 219 lb down and 65 lb up at 3-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-5=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 4=-59 (F), 7=-219 (F)

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980117
241090-A	D2	Common	2	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221, Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Fri Dec 27 12:55:33 Page: 1
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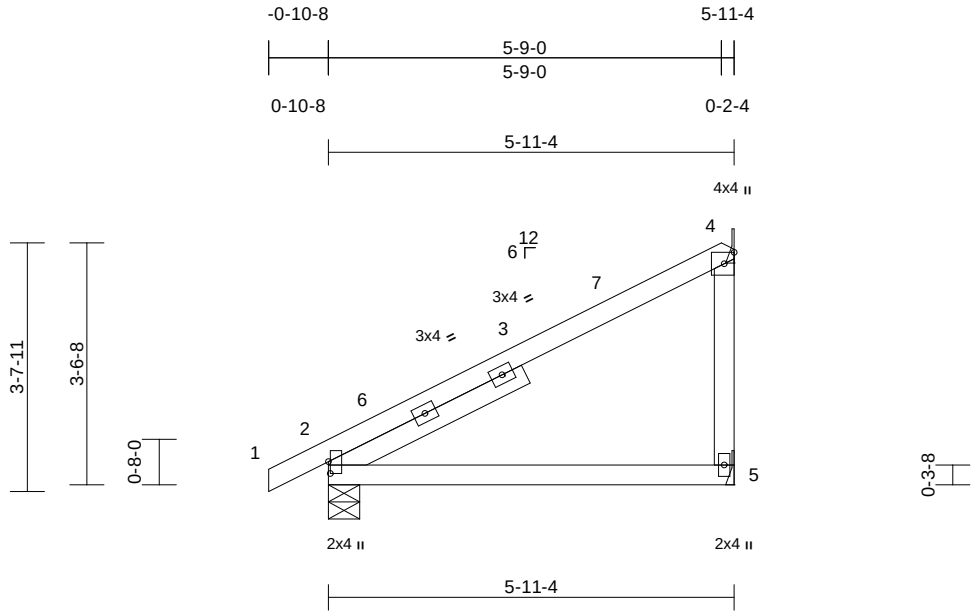

Scale = 1:25.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.07	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.13	2-5	>515	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 3-2-2

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

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=146 (LC 9)
Max Uplift 2=-60 (LC 12), 4=-110 (LC 12)
Max Grav 2=327 (LC 1), 4=198 (LC 1), 5=116 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-192/141, 4-5=0/0
BOT CHORD 2-5=-67/73

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-9-8 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: , Joint 2 SPF No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 4 and 60 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard

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

December 27,2024

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240941-Lot 187- 3219 SW Arboridge Circle R85980118
241090-A	J7	Jack-Open	2	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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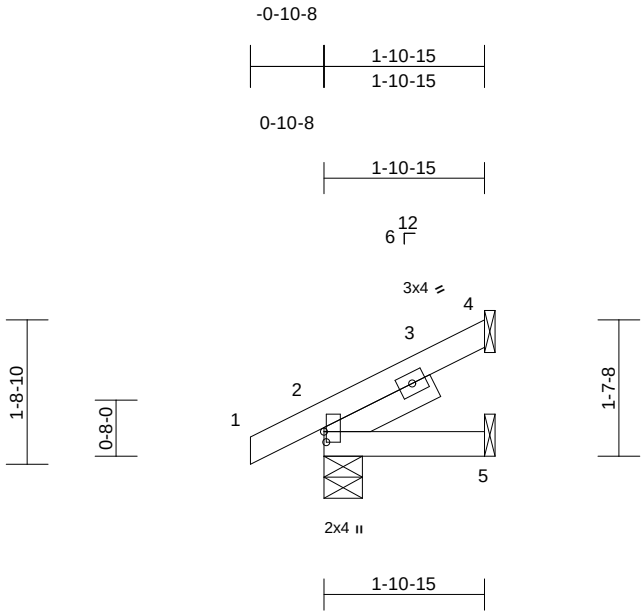


Scale = 1:17.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	2-5	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 7 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 1-5-3

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

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=60 (LC 12)
Max Uplift 2=-26 (LC 12), 4=-45 (LC 12)
Max Grav 2=161 (LC 1), 4=52 (LC 1), 5=38 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-54/30
BOT CHORD 2-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: , Joint 2 SPF No.2 .
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 2 and 45 lb uplift at joint 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

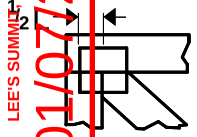
LOAD CASE(S) Standard

December 27,2024

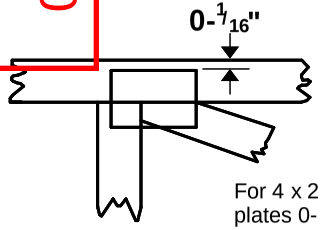
MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
916.755.3571 / MiTek-US.com

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.

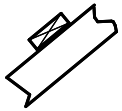
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

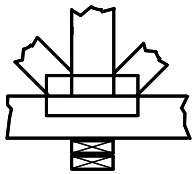
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

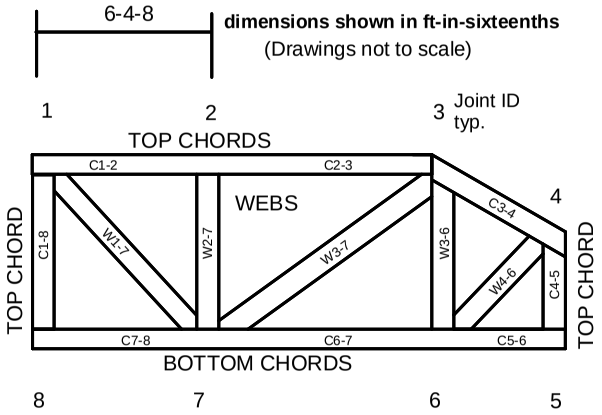


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.