

RE: 241089-A
Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr

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

Site Information:

Customer: Premier Building Supply Project Name: 241089-A
Lot/Block: 209 Model:
Address: 2750 SW 11th Terr 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 57 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	R85979578	J4	12/27/2024	21	R85979598	LG1	12/27/2024
2	R85979579	H4	12/27/2024	22	R85979599	A12	12/27/2024
3	R85979580	E1	12/27/2024	23	R85979600	A11	12/27/2024
4	R85979581	CG4	12/27/2024	24	R85979601	A6	12/27/2024
5	R85979582	J5	12/27/2024	25	R85979602	A7	12/27/2024
6	R85979583	J6	12/27/2024	26	R85979603	A8	12/27/2024
7	R85979584	H1	12/27/2024	27	R85979604	A10	12/27/2024
8	R85979585	TG2	12/27/2024	28	R85979605	A9	12/27/2024
9	R85979586	J1	12/27/2024	29	R85979606	J13	12/27/2024
10	R85979587	J2	12/27/2024	30	R85979607	CG2	12/27/2024
11	R85979588	J3	12/27/2024	31	R85979608	J14	12/27/2024
12	R85979589	J8	12/27/2024	32	R85979609	B1	12/27/2024
13	R85979590	J9	12/27/2024	33	R85979610	J21	12/27/2024
14	R85979591	J11	12/27/2024	34	R85979611	A1	12/27/2024
15	R85979592	J15	12/27/2024	35	R85979612	A2	12/27/2024
16	R85979593	LG2	12/27/2024	36	R85979613	A3	12/27/2024
17	R85979594	H2	12/27/2024	37	R85979614	A4	12/27/2024
18	R85979595	H3	12/27/2024	38	R85979615	A5	12/27/2024
19	R85979596	CG6	12/27/2024	39	R85979616	CG3	12/27/2024
20	R85979597	HG1	12/27/2024	40	R85979617	J7	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



RE: 241089-A - Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr

MiTek, Inc.

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Site Information:

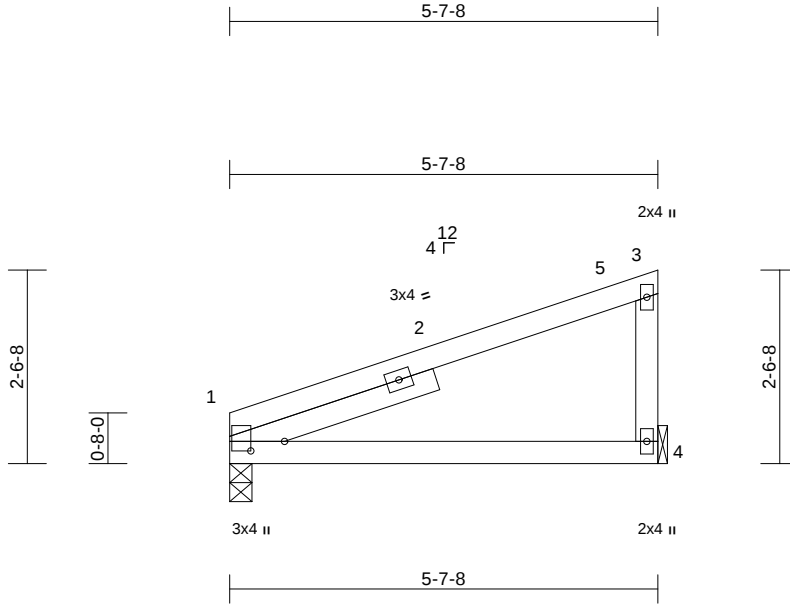
Project Customer: Premier Building Supply Project Name: 241089-A
Lot/Block: 209 Subdivision:
Address: 2750 SW 11th Terr
City, County: Lee's Summit State: MO

No.	Seal#	Truss Name	Date
41	R85979618	J10	12/27/2024
42	R85979619	J12	12/27/2024
43	R85979620	LG6	12/27/2024
44	R85979621	A16	12/27/2024
45	R85979622	A15	12/27/2024
46	R85979623	A14	12/27/2024
47	R85979624	A13	12/27/2024
48	R85979625	CG1	12/27/2024
49	R85979626	J16	12/27/2024
50	R85979627	J17	12/27/2024
51	R85979628	J18	12/27/2024
52	R85979629	LG7	12/27/2024
53	R85979630	LG5	12/27/2024
54	R85979631	LG4	12/27/2024
55	R85979632	CG5	12/27/2024
56	R85979633	J19	12/27/2024
57	R85979634	J20	12/27/2024

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J4	Jack-Closed	3	1	R85979578
Job Reference (optional)					LEE'S SUMMIT, MISSOURI

Direct Lumber of Colorado, Denver, CO - 80221,

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Scale = 1:29

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.05	1-4	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.11	1-4	>608	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: 18 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 -- 2-10-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 4= Mechanical
Max Horiz 1=104 (LC 11)
Max Uplift 1=-45 (LC 8), 4=-64 (LC 12)
Max Grav 1=247 (LC 1), 4=247 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-3=-133/92, 3-4=-240/261
BOT CHORD 1-4=-45/49

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) 0-0-0 to 5-0-0,
Interior (1) 5-0-0 to 5-5-12 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
- 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 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 45 lb uplift at joint
1 and 64 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

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

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

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	H4	Hip Girder	1	2	Job Reference (optional)

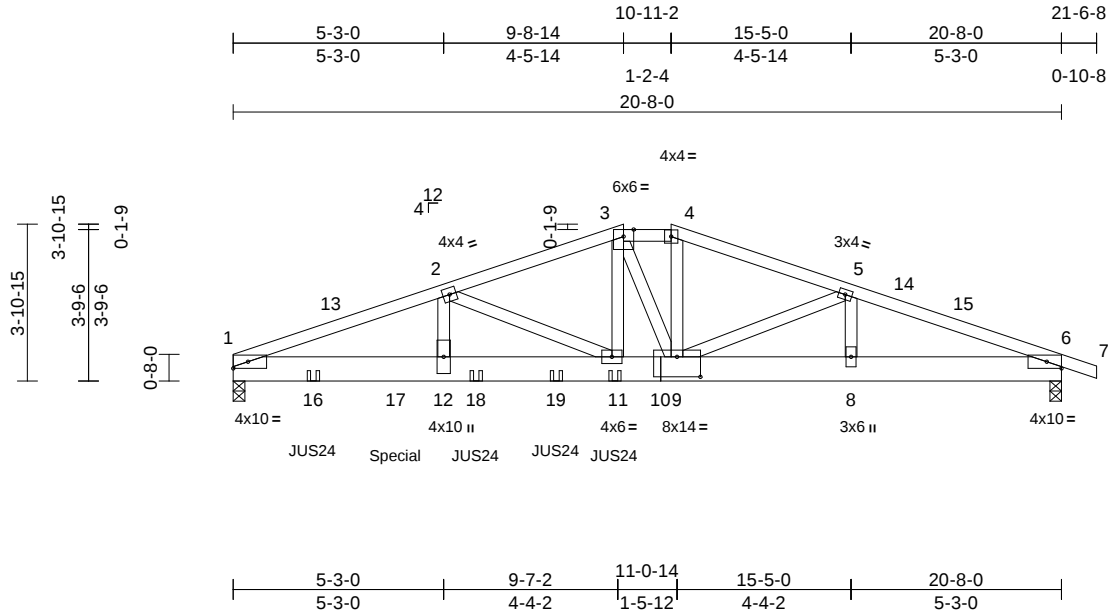
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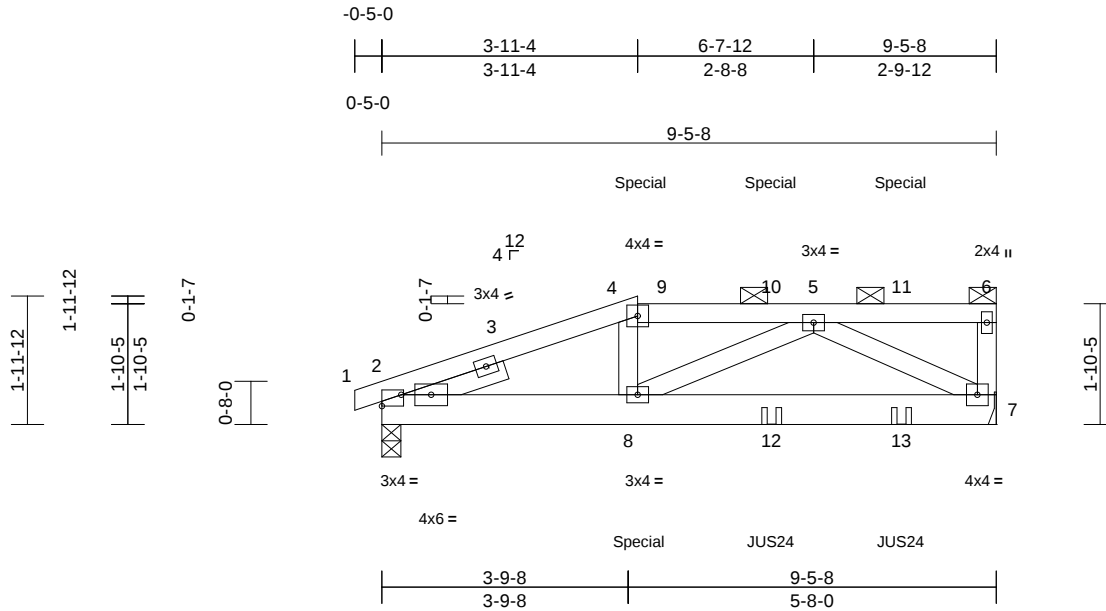
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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
R85979579
LEE'S SUMMIT, MISSOURI

01/07/2025



27/12/2025 Page: 1



Scale = 1:25.9

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

[illegible]

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 -- 1-7-13

BRACING

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

REACTIONS

Max Horiz 2=67 (LC 9)
Max Uplift 2=-195 (LC 8), 7=-184 (LC 8)
Max Grav 2=669 (LC 1), 7=652 (LC 1)

FORCES

Tension

TOP CHORD	1-2=-10/0, 2-4=-1235/488, 4-5=-1084/496, 5-6=-64/40, 6-7=-110/86
BOT CHORD	2-8=-491/1097, 7-8=-463/858
WEBS	4-8=0/230, 5-8=-36/274, 5-7=-927/496

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 1650F 1.5E .
- 6) Refer to girder(s) for truss to truss connections.

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 7 and 195 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) 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 6-0-0 from the left end to 8-0-0 to connect truss(es) to front face of bottom chord.
- 11) Fill all nail holes where hanger is in contact with lumber.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 87 lb down and 90 lb up at 3-11-4, and 64 lb down and 90 lb up at 6-0-0, and 64 lb down and 90 lb up at 8-0-0 on top chord, and 227 lb down and 62 lb up at 3-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15,
Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-6=-70, 2-7=-20
Concentrated Loads (lb)
Vert: 4=-64 (F), 8=-227 (F), 10=-64 (F), 11=-64 (F),
12=-19 (F), 13=-19 (F)



December 27, 2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	CG4	Diagonal Hip Girder	1	1	Job Reference (optional)

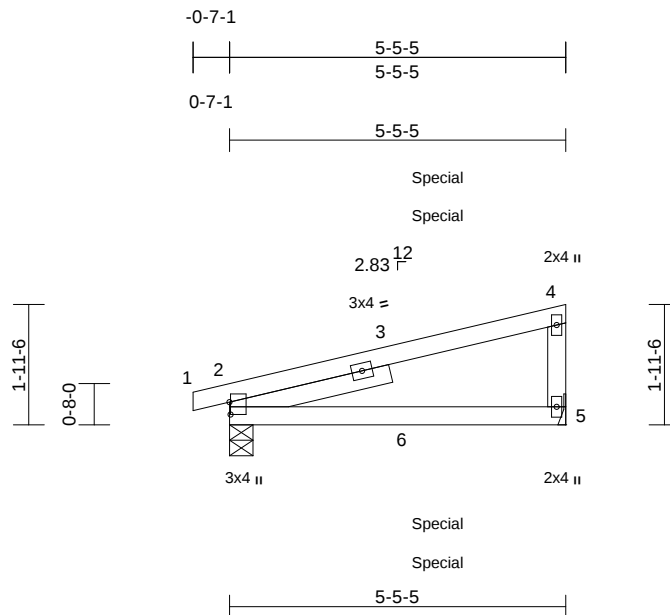
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
R85979581
LEE'S SUMMIT, MISSOURI

Direct Lumber of Colorado, Denver, CO - 80221,

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01/07/2025



Scale = 1:21.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.61	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: 18 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 -- 2-7-15

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=0-4-9, 5= Mechanical
Max Horiz 2=69 (LC 9)
Max Uplift 2=-76 (LC 8), 5=-57 (LC 12)
Max Grav 2=282 (LC 1), 5=236 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-15/0, 2-4=-97/60, 4-5=-183/230
BOT CHORD 2-5=-33/36

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 57 lb uplift at joint
5 and 76 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) 18 lb
down and 66 lb up at 2-9-8, and 18 lb down and 66 lb
up at 2-9-8 on top chord, and 2 lb down at 2-9-8, and 2
lb down at 2-9-8 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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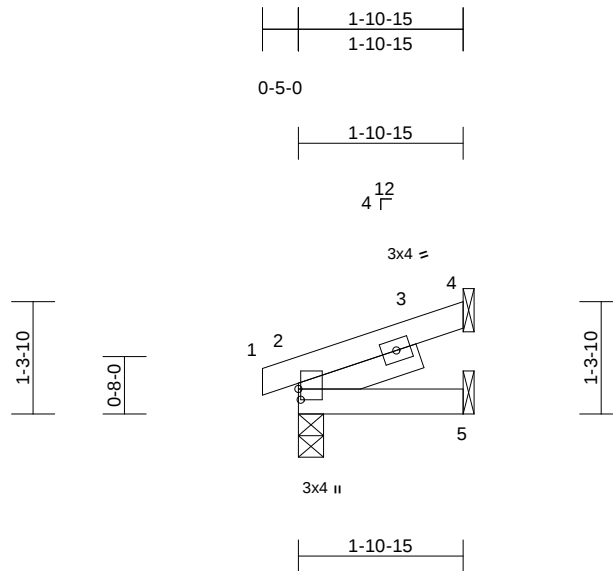
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-0-5-0



Scale = 1:16.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	2-5	>999	240	MT20	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

LOAD CASE(S) Standard

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 1-5-8

BRACING

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

REACTIONS (size) 2=0-3-8, 4= Mechanical, 5= Mechanical
 Max Horiz 2=35 (LC 12)
 Max Uplift 2=-29 (LC 8), 4=-40 (LC 12)
 Max Grav 2=118 (LC 1), 4=63 (LC 1), 5=38 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-14/0, 2-4=-51/22
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 29 lb uplift at joint
2 and 40 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.



December 27, 2024



WARNING – Verify design parameters and READ NOTES ON THIS and INCLUDED REFERENCED PAGE MIF-7473 (rev. 12/2023) BEFORE USE.

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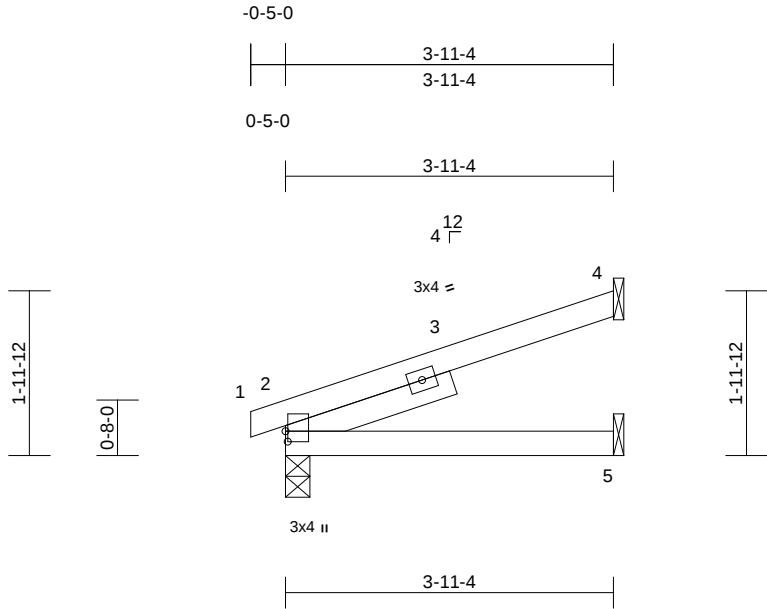
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240985-Lot 209- 2750 SW 11th Terr
241089-A	J6	Jack-Open	3	1	DEVELOPMENT SERVICES R85979583 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File Dec 27 12:46:55 Page: 1
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Scale = 1:18.8									
Plate Offsets (X, Y): [2:0-1-8,0-0-5]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.01	2-5	>999
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	2-5	>999
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P					n/a
						PLATES		GRIP	
						MT20		169/123	
						Weight: 12 lb		FT = 20%	

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

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=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=64 (LC 12)
Max Uplift 2=-43 (LC 8), 4=-76 (LC 12)
Max Grav 2=205 (LC 1), 4=134 (LC 1), 5=77 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-14/0, 2-4=-79/44
BOT CHORD 2-5=0/0

LOAD CASE(S) Standard

- 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 76 lb uplift at joint
4 and 43 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.



December 27,2024

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

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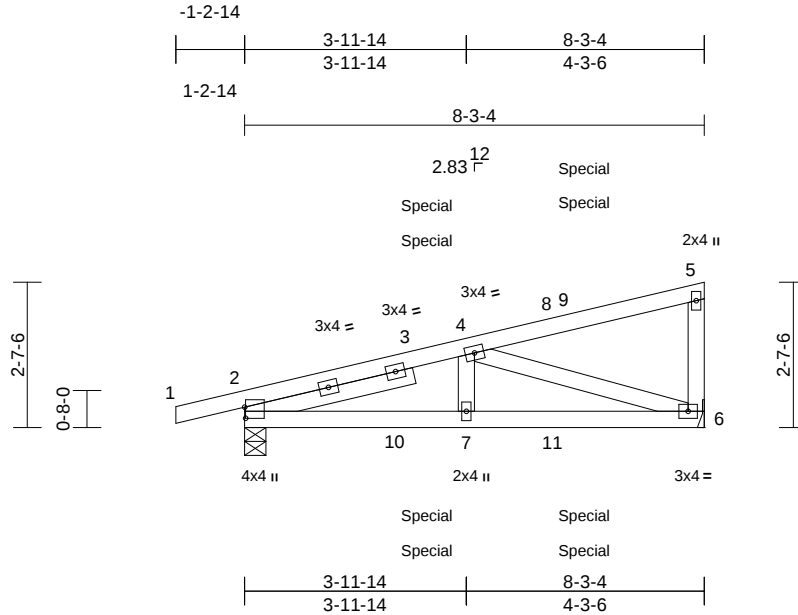
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Roseville, CA 95661
916 755 3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	TG2	Diagonal Hip Girder	2	1	DEVELOPMENT SERVICES R85979585 LEE'S SUMMIT, MISSOURI
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. File: Dec 27 12:46:58 Page: 1
ID: 9RizLT5sxS0XndvBrCTxOMzWRWk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWwCD07J4ZSC?r

01/07/2025



Scale = 1:24.1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	0.02	7	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.04	6-7	>999	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.01	6	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							
Weight: 32 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 -- 3-1-6

BRACING

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

REACTIONS

(size)	2=0-4-9, 6= Mechanical
Max Horiz	2=103 (LC 9)
Max Uplift	2=-150 (LC 8), 6=-116 (LC 12)
Max Grav	2=484 (LC 1), 6=413 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
--	--

TOP CHORD	1-2=-6/0, 2-4=-801/389, 4-5=-88/64, 5-6=-142/131
-----------	--

BOT CHORD	2-7=-457/721, 6-7=-457/721
-----------	----------------------------

WEBS	4-7=0/227, 4-6=-756/459
------	-------------------------

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C 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
- This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SPF No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 116 lb uplift at joint
6 and 150 lb uplift at joint 2.

- This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be
provided sufficient to support concentrated load(s) 16 lb
down and 59 lb up at 2-8-7, 18 lb down and 67 lb up at
2-8-7, and 42 lb down and 99 lb up at 5-6-6, and 44 lb
down and 101 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.
- 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

- 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), 11=-19 (F=-10, B=-10)



December 27, 2024

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Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. F Dec 27 12:46:54 Page: 1
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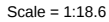
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.07	2-5	>987	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.14	2-5	>493	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

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01/07/2025



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/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	0.14	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: 12 lb	FT = 20%

LOAD CASE(S) Standard

BRACING

REACTIONS	(size)	2=0-3-8, 4= Mechanical, 5= Mechanical
	Max Horiz	2=68 (LC 12)
	Max Uplift	2=-67 (LC 8), 4=-73 (LC 12)
	Max Grav	2=239 (LC 1), 4=125 (LC 1), 5=76 (LC 3)

TOP CHORD 1-2=-5/0, 2-4=-76/42
BOT CHORD 2-5=0/0

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 73 lb uplift at joint 4 and 67 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.



December 27, 2024



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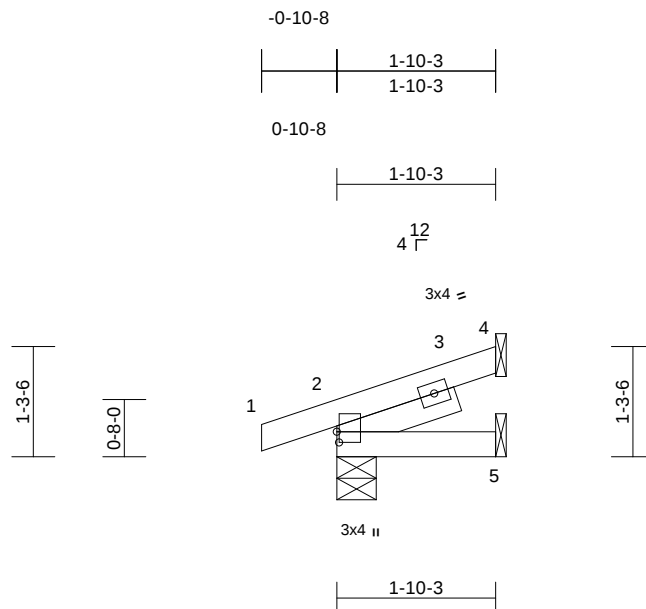
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J3	Jack-Open	6	1	R85979588
Job Reference (optional)					LEE'S SUMMIT, MISSOURI

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File Dec 27 12:46:54 PM Page: 1
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01/07/2025



Scale = 1:16

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

LOAD CASE(S) Standard

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 SLIDER Left 2x4 WW Stud -- 1-5-8

BRACING

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

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5=
 Mechanical
 Max Horiz 2=40 (LC 12)
 Max Uplift 2=-57 (LC 8), 4=-35 (LC 12)
 Max Grav 2=158 (LC 1), 4=50 (LC 1), 5=37
 (LC 3)

FORCES (lb) - Maximum Compression/Maximum
 Tension

TOP CHORD 1-2=-5/0, 2-4=-43/19
 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 57 lb uplift at joint
 2 and 35 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.



December 27, 2024

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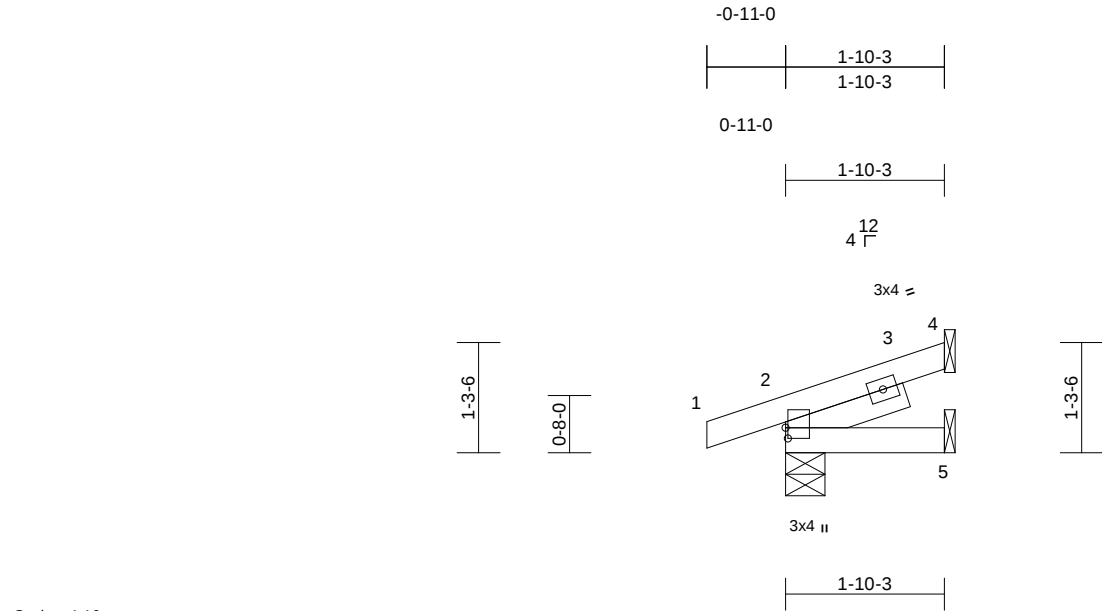
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J9	Jack-Open	1	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
R85979590
LEE'S SUMMIT, MISSOURI

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:55 Page: 1
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01/07/2025



Scale = 1:16
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 LOAD CASE(S) Standard

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 1-5-8

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

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5=
Mechanical
Max Horiz 2=40 (LC 12)
Max Uplift 2=-60 (LC 8), 4=-35 (LC 12)
Max Grav 2=163 (LC 1), 4=48 (LC 1), 5=37
(LC 3)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=-4/0, 2-4=-43/19
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 60 lb uplift at joint
2 and 35 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.



December 27,2024

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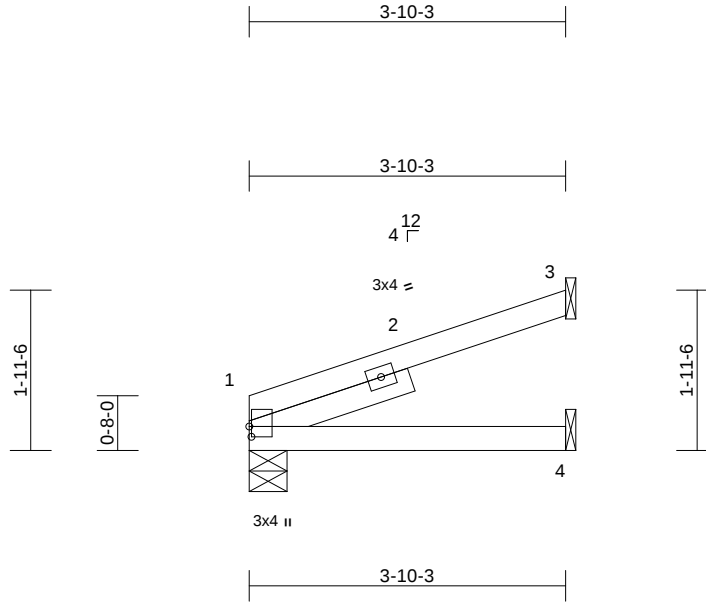
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J11	Jack-Open	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
R85979591
LEE'S SUMMIT, MISSOURI

01/07/2025



Scale = 1:26.7									
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
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.01 1-4	>999	240
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					
						PLATES	GRIP		
						MT20	169/123		
						Weight: 11 lb	FT = 20%		

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 2-0-10

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=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 1=71 (LC 8)
Max Uplift 1=-22 (LC 8), 3=-75 (LC 8)
Max Grav 1=170 (LC 1), 3=133 (LC 1), 4=76 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-78/43
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) Bearings are assumed to be: , Joint 1 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 22 lb uplift at joint
1 and 75 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.



December 27,2024

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

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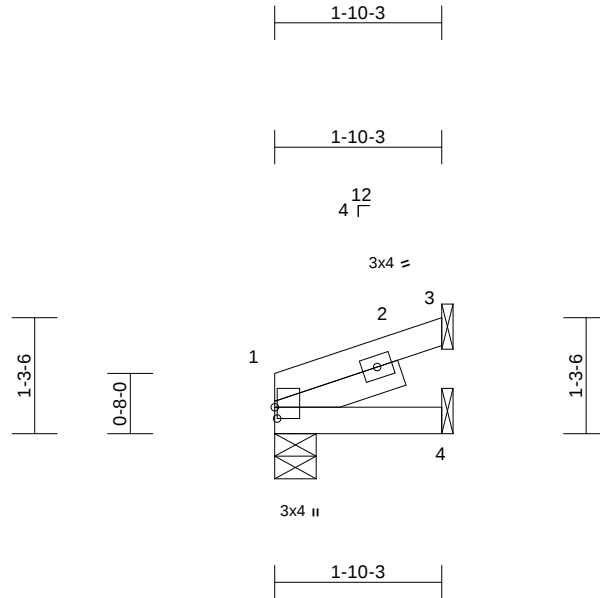
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J15	Jack-Open	1	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
R85979592
LEE'S SUMMIT, MISSOURI

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:56 PM Page: 1
ID:NDoWLUOHbXkx6o?F6ChrZIs2-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrcDofT34z3C7f

01/07/2025



Scale = 1:24.2

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	0.06	Vert(LL)	0.00	1-4	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	1-4	>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-P							Weight: 6 lb	FT = 20%

LUMBER **LOAD CASE(S)** Standard

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 1-5-8

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) 1=0-5-8, 3= Mechanical, 4=
Mechanical
Max Horiz 1=43 (LC 8)
Max Uplift 1=-7 (LC 8), 3=-40 (LC 8)
Max Grav 1=83 (LC 1), 3=64 (LC 1), 4=37
(LC 3)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-3=-52/22
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) Bearings are assumed to be: , Joint 1 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 7 lb uplift at joint 1
and 40 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.



December 27,2024

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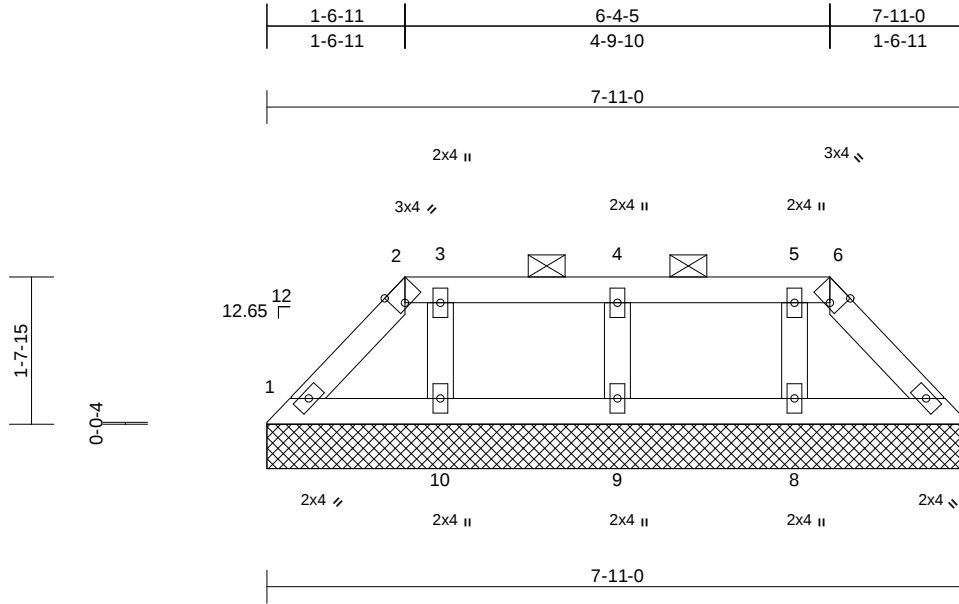
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	LG2	Lay-In Gable	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:57 Page: 1
ID:LHLh4Q15McGO3iR1UyMX85zWRWq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRcD6i7342JC-F

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
R85979593
LEE'S SUMMIT, MISSOURI

01/07/2025



Scale = 1:20.1									
Plate Offsets (X, Y): [2:0-1-7,Edge], [6:0-1-7,Edge]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	PLATES
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	GRIP
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	7	197/144
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					Weight: 22 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.): 2-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS	
(size)	1=7-11-0, 7=7-11-0, 8=7-11-0, 9=7-11-0, 10=7-11-0
Max Horiz	1=-39 (LC 8)
Max Uplift	1=-19 (LC 13), 7=-19 (LC 13), 8=-37 (LC 8), 9=-47 (LC 8), 10=-45 (LC 9)
Max Grav	1=74 (LC 1), 7=74 (LC 1), 8=170 (LC 28), 9=189 (LC 27), 10=170 (LC 27)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-67/35, 2-3=-49/44, 3-4=-49/44, 4-5=-49/44, 5-6=-49/44, 6-7=-67/28
BOT CHORD	1-10=-7/30, 9-10=-7/30, 8-9=-7/30, 7-8=-7/30
WEBS	3-10=-142/66, 4-9=-181/71, 5-8=-142/58

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

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) Gable requires continuous bottom chord bearing.
- 6) 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 19 lb uplift at joint 1, 19 lb uplift at joint 7, 45 lb uplift at joint 10, 47 lb uplift at joint 9 and 37 lb uplift at joint 8.
- 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

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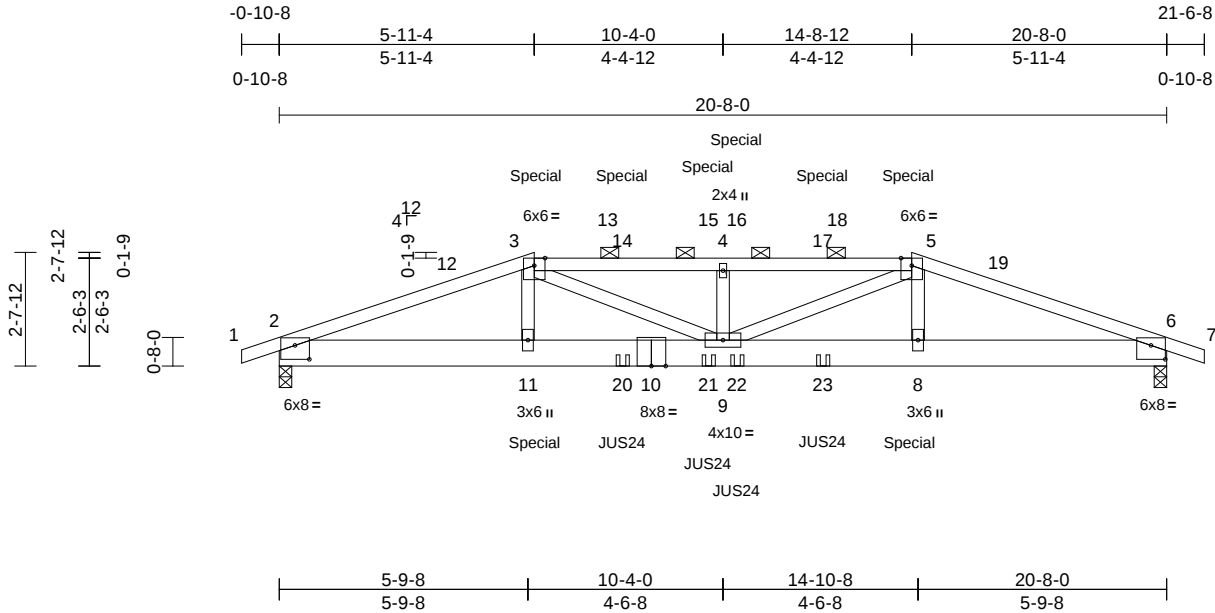
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Roseville, CA 95661
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	H2	Hip Girder	1	1	DEVELOPMENT SERVICES R85979594 LEE'S SUMMIT, MISSOURI
Job Reference (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. File Dec 27 12:46:53 Page: 1
ID:11996M?pteYLQOARel70hzzBdMY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDof7423C#f

01/07/2025



Scale = 1:45.9

Plate Offsets (X, Y): [2:0-4-0,0-3-14], [6:0-4-0,0-3-14]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.22	9	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.38	9	>636	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.29	Horz(CT)	0.05	6	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
										Weight: 92 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SPF 1650F 1.5E
 BOT CHORD 2x8 SPF 1950F 1.7E
 WEBS 2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-10-3 oc purlins, except 2-0-0 oc purlins (2-4-2 max.): 3-5.
 BOT CHORD Rigid ceiling directly applied or 9-9-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 6=0-3-8
 Max Horiz 2=-42 (LC 13)
 Max Uplift 2=-538 (LC 8), 6=-538 (LC 9)
 Max Grav 2=1878 (LC 1), 6=1878 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/6, 2-3=-4493/1402, 3-4=-5092/1644, 4-5=-5092/1644, 5-6=-4493/1416, 6-7=0/6
 BOT CHORD 2-11=-1231/4146, 9-11=-1226/4105, 8-9=-1239/4105, 6-8=-1244/4146
 WEBS 3-11=-69/596, 5-8=-72/596, 3-9=-341/1199, 5-9=-342/1199, 4-9=-874/451

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 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 14-8-12, Exterior(2E) 14-8-12 to 21-6-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- All bearings are assumed to be SPF 1950F 1.7E.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 538 lb uplift at joint 2 and 538 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 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 12-8-0 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 155 lb down and 118 lb up at 5-11-4, 131 lb down and 118 lb up at 8-0-0, 131 lb down and 118 lb up at 10-0-0, 131 lb down and 118 lb up at 10-8-0, and 131 lb down and 118 lb up at 12-8-0, and 155 lb down and 118 lb up at 14-8-12 on top chord, and 419 lb down and 108 lb up at 5-11-4, and 419 lb down and 108 lb up at 14-8-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20
 Concentrated Loads (lb)
 Vert: 3=-131 (F), 5=-131 (F), 11=-419 (F), 8=-419 (F), 14=-131 (F), 15=-131 (F), 16=-131 (F), 17=-131 (F), 20=-39 (F), 21=-39 (F), 22=-39 (F), 23=-39 (F)



December 27, 2024

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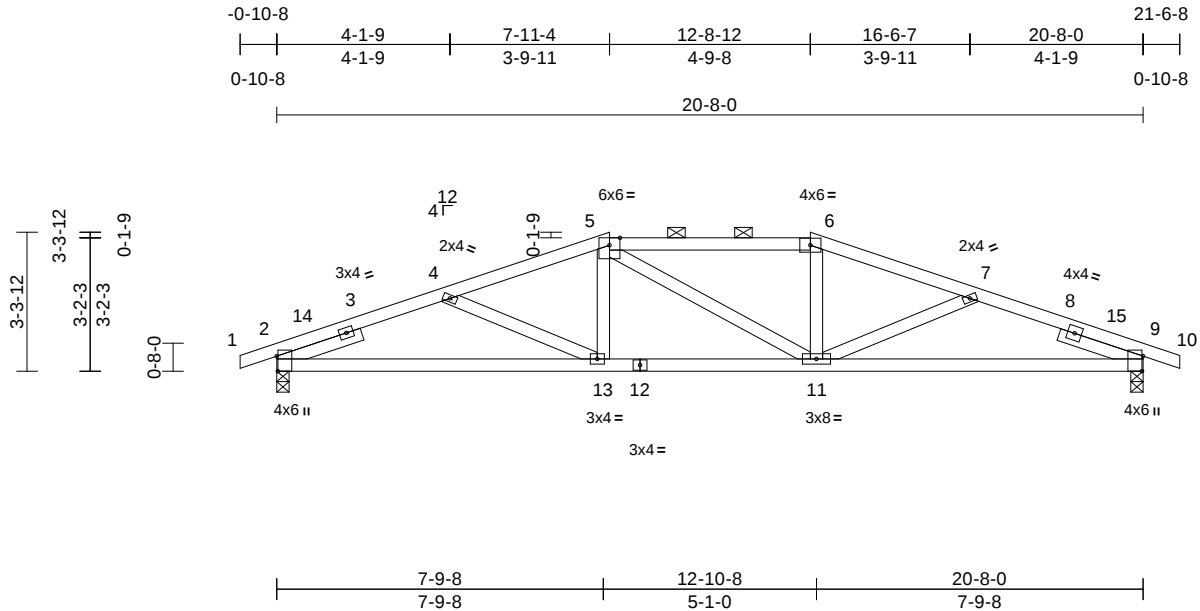
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	H3	Hip	1	1	DEVELOPMENT SERVICES R85979595 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:53 Page: 1

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01/07/2025



Scale = 1:48.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.11	2-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.25	2-13	>998	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 76 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 -- 2-1-7, Right 2x4 WW Stud -- 2-1-1

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-9-14 oc purlins, except 2-0-0 oc purlins (4-2-11 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 7-6-1 oc bracing.

REACTIONS

(size)	2=0-3-8, 9=0-3-8
Max Horiz	2=54 (LC 12)
Max Uplift	2=-220 (LC 8), 9=-220 (LC 9)
Max Grav	2=991 (LC 1), 9=991 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-5/0, 2-4=-1892/689, 4-5=-1701/576, 5-6=-1601/604, 6-7=-1701/599, 7-9=-1891/711, 9-10=-5/0
BOT CHORD	2-13=-590/1690, 11-13=-431/1579, 9-11=-600/1688
WEBS	5-13=0/246, 5-11=-154/154, 6-11=0/246, 4-13=-146/174, 7-11=-145/173

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior (1) 3-11-2 to 7-11-4, Exterior(2E) 7-11-4 to 12-8-12, Exterior(2R) 12-8-12 to 19-9-10, Interior (1) 19-9-10 to 21-6-8 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

- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SPF No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 220 lb uplift at joint 2 and 220 lb uplift at joint 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.
- 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

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

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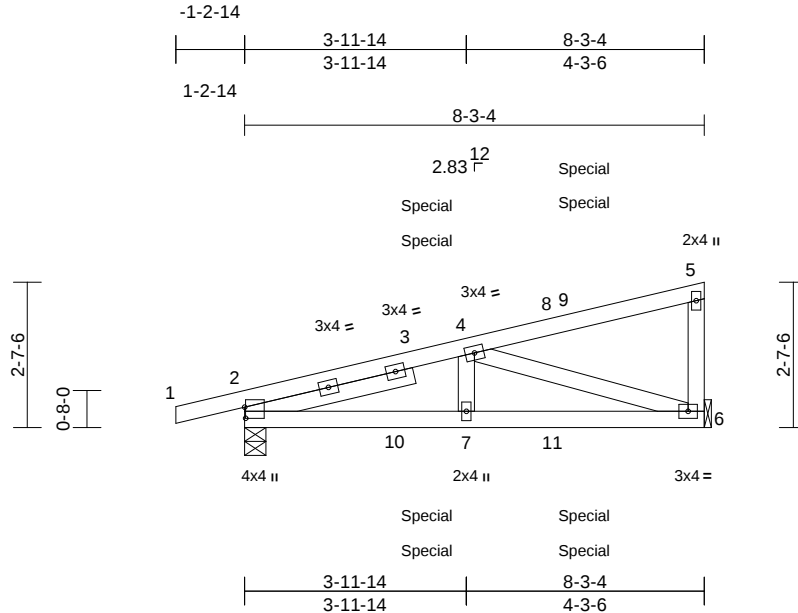
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	CG6	Diagonal Hip Girder	2	1	Job Reference (optional)

AS NOTED FOR PLAN REVIEW
 DEVELOPMENT SERVICES
 R85979596
 LEE'S SUMMIT, MISSOURI

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:52 Page: 1
 ID:k9AfVKV5W2NA?5XZlduPXJzBdNB-RfC?PsB70Hq3NSgPqnL8w3ulTXbCKWwCDnJ42307

01/07/2025



Scale = 1:25.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	0.02	7	>999	240	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.04	6-7	>999	180	197/144
BCLL	0.0	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.01	6	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 32 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 -- 3-1-6

BRACING

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

REACTIONS

(size)	2=0-4-9, 6= Mechanical
Max Horiz	2=103 (LC 30)
Max Uplift	2=-149 (LC 8), 6=-115 (LC 12)
Max Grav	2=482 (LC 1), 6=408 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
--	--

TOP CHORD	1-2=-6/0, 2-4=-792/391, 4-5=-87/64, 5-6=-140/131
-----------	--

BOT CHORD	2-7=-459/712, 6-7=-459/712
-----------	----------------------------

WEBS	4-7=0/227, 4-6=-747/461
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NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SPF No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 6 and 149 lb uplift at joint 2.

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 16 lb down and 59 lb up at 2-8-7, 16 lb down and 59 lb up at 2-8-7, and 42 lb down and 99 lb up at 5-6-6, and 42 lb down and 99 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.
- 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

- 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=-53 (F=-26, B=-26), 11=-19 (F=-10, B=-10)



December 27, 2024

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

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Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. F Dec 27 12:46:54 Page: 1
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01/07/2025

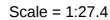


Plate Offsets (X, Y): [3:0-2-8,0-1-12], [4:0-2-8,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 35 lb	FT = 20%

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

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.

	9=8-7-0, 10=8-7-0
Max Horiz	1=110 (LC 11)
Max Uplift	1=-33 (LC 8), 6=-10 (LC 9), 7=-159 (LC 13), 9=-15 (LC 9), 10=-158 (LC 12)
Max Grav	1=95 (LC 22), 6=81 (LC 24), 7=233 (LC 22), 8=91 (LC 28), 9=102 (LC 24), 10=233 (LC 21)

Tension

TOP CHORD	1-2=-114/99, 2-3=-130/94, 3-4=-93/93, 4-5=-130/89, 5-6=-93/69
BOT CHORD	1-10=-58/88, 9-10=-58/88, 8-9=-58/88, 7-8=-58/88, 6-7=-58/88
WEBS	2-10=-273/184, 3-9=-76/30, 4-8=-66/7, 5-7=-273/184

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

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) Gable requires continuous bottom chord bearing.
- 6) 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 33 lb uplift at joint 1, 10 lb uplift at joint 6, 158 lb uplift at joint 10, 15 lb uplift at joint 9 and 159 lb uplift at joint 7.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) 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



WARNING – verify design parameters and READ NOTES ON THIS and INCLUDED REFERENCED PAGE MIF-743 (rev. 12/2022) BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1-1 Quality Criteria and D5B-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcsccomponents.com)

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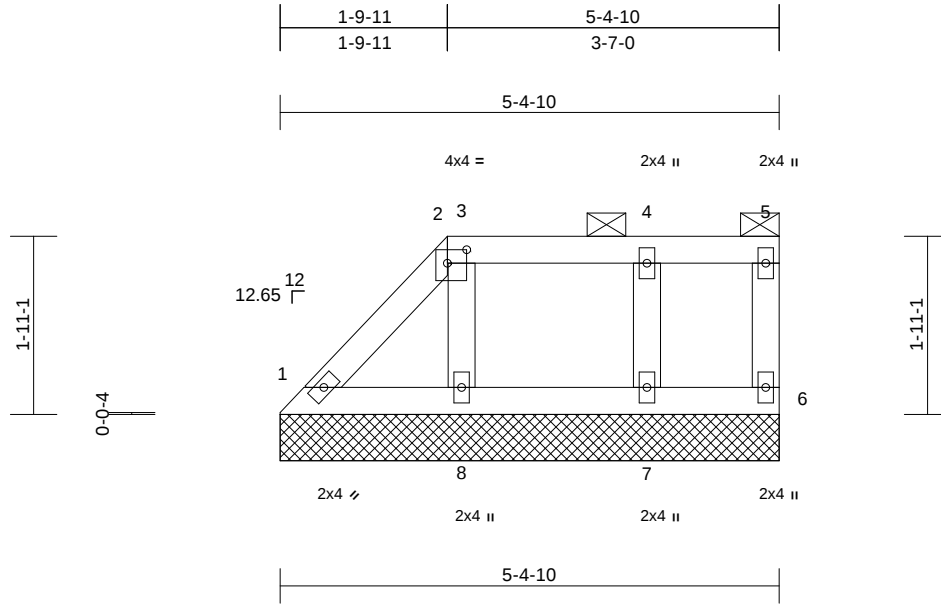
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	LG1	Lay-In Gable	1	1	DEVELOPMENT SERVICES R85979598 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File Dec 27 12:46:57 Page: 1

ID: CXX8HWJBaUCxpUqm1IT6ozDhDc-RfC?PsB70Hq3NSgPqnL8w3uITxbCKWwCD0rJ425C?r

01/07/2025



Scale = 1:16.9

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

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	0.04	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	6	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 17 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 5-4-14 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)	1=5-4-10, 6=5-4-10, 7=5-4-10, 8=5-4-10
Max Horiz	1=69 (LC 9)
Max Uplift	1=-2 (LC 8), 6=-11 (LC 9), 7=-47 (LC 8), 8=63 (LC 9)
Max Grav	1=73 (LC 22), 6=41 (LC 1), 7=163 (LC 1), 8=180 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-89/94, 2-3=-36/38, 3-4=-36/38, 4-5=-36/38, 5-6=-43/20
BOT CHORD	1-8=-31/35, 7-8=-31/35, 6-7=-31/35
WEBS	3-8=-218/127, 4-7=-158/65

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) Provide adequate drainage to prevent water ponding.

- 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 2 lb uplift at joint 1, 11 lb uplift at joint 6, 63 lb uplift at joint 8 and 47 lb uplift at joint 7.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

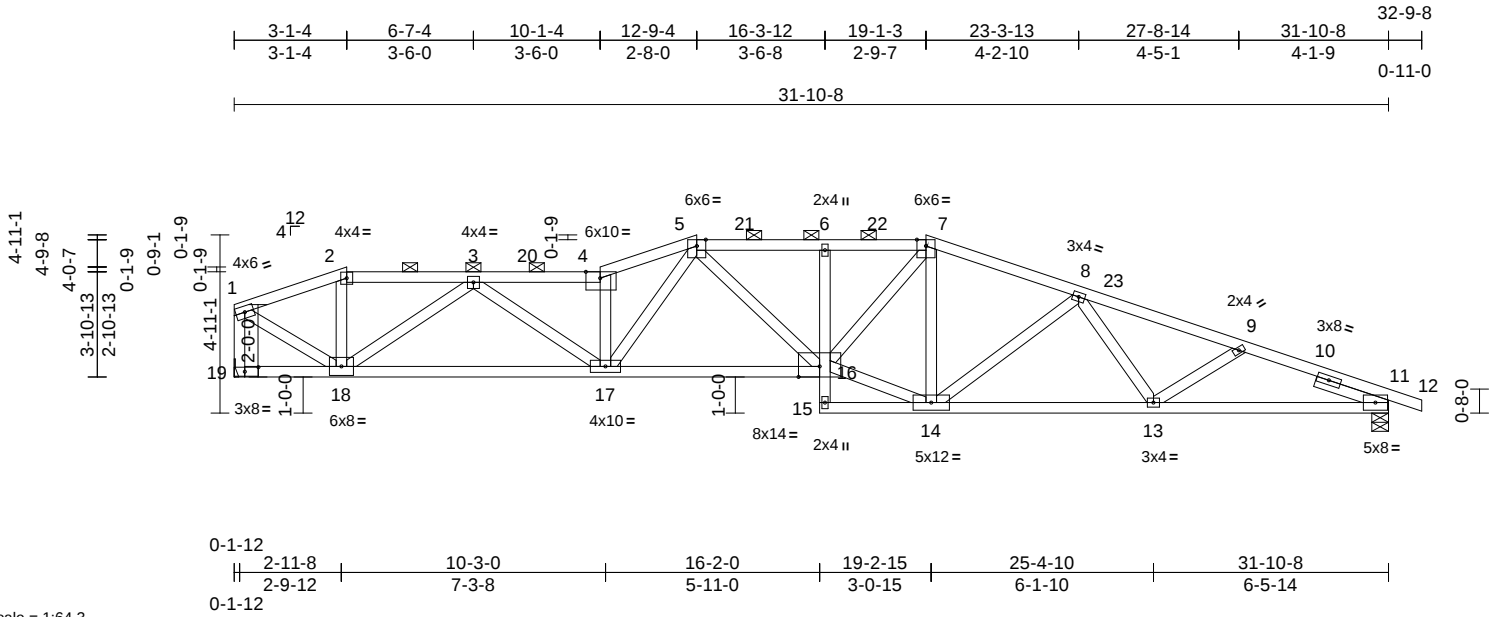
December 27, 2024

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

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

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01/07/2025



Scale = 1:64.3

Plate Offsets (X, Y): [4:0-4-12,Edge], [11:0-0-5,0-3-5], [19:0-4-8,0-1-8]

[illegible]

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x4 WW Stud -- 2-1-4

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-0-7 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-3 max.): 2-4, 5-7.
BOT CHORD	Rigid ceiling directly applied or 7-0-14 oc bracing.

REACTIONS

Max Horiz 19=-115 (LC 13)
Max Uplift 11=-310 (LC 9), 19=-276 (LC 8)
Max Grav 11=1493 (LC 1), 19=1427 (LC 1)

FORCES

Tension

TOP CHORD 1-2=-1538/395, 2-3=-1438/398,
3-4=-3728/976, 4-5=-3871/1030,
5-6=-3275/922, 6-7=-3244/914,
7-8=-2607/738, 8-9=-3055/778,
9-11=-3139/801, 11-12=-4/0, 1-19=-1418/400

BOT CHORD 18-19=-62/127, 17-18=-643/2811,
16-17=-666/3041, 15-16=0/34,
6-16=-346/163, 14-15=-42/105,
13-14=-670/2801, 11-13=-692/2833

WEBS 2-18=-13/262, 4-17=-1333/385,
14-16=-513/2454, 7-16=-300/1276,
7-14=-423/114, 1-18=-420/1656,
3-17=-218/1097, 3-18=-1730/505,
8-14=-515/193, 8-13=0/218, 9-13=-6/161,
5-17=-214/1029, 5-16=-109/458

NOTES

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=9.0mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.01; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) 4-1-12 to 7-1-4,
Exterior(2R) 7-1-4 to 12-1-4, Interior (1) 12-1-4 to
16-9-4, Exterior(2R) 16-9-4 to 21-9-4, Interior (1) 21-9-4
to 23-1-3, Exterior(2R) 23-1-3 to 28-1-3, Interior (1)
28-1-3 to 36-9-8 zone; cantilever left and right exposed ;
end vertical left and right exposed; C-C for members and
forces & MWFRS for reactions shown; Lumber
DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 5) 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 310 lb uplift at joint
11 and 276 lb uplift at joint 19.
- 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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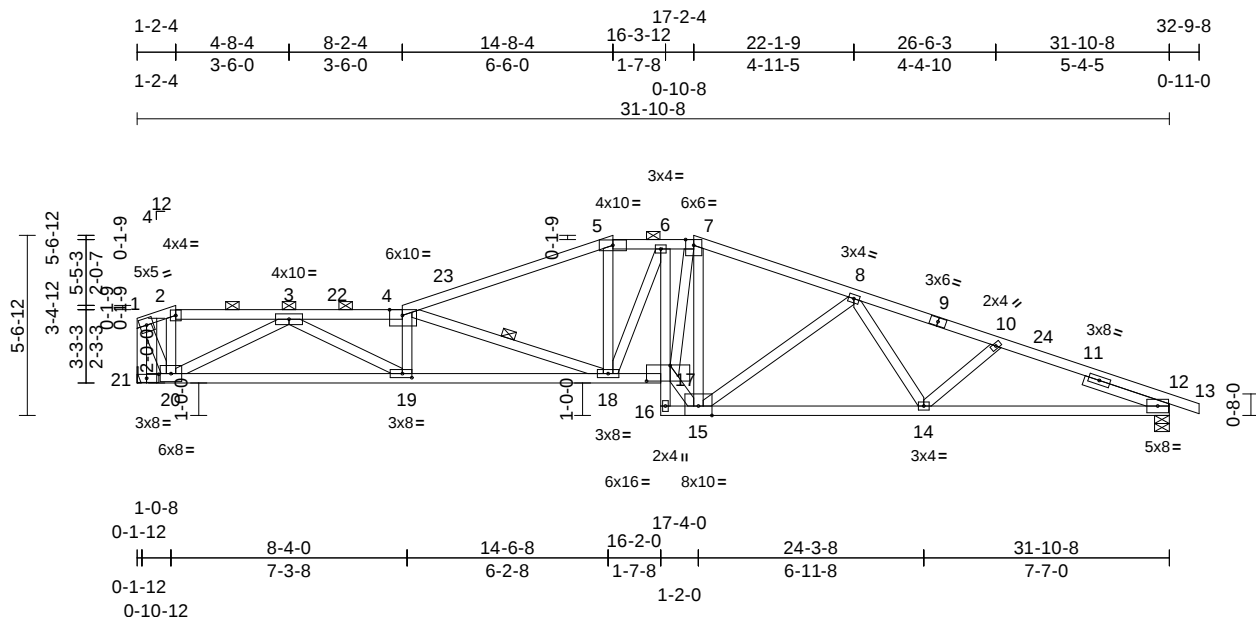
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A11	Roof Special	1	1	DEVELOPMENT SERVICES R85979600 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File Dec 27 12:46:48 Page: 1

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01/07/2025



Scale = 1:63.7

Plate Offsets (X, Y): [4:0-4-12,Edge], [12:0-0-5,0-3-5], [17:0-8-12,0-5-12], [19:0-3-8,0-1-8], [21:0-4-8,0-1-8]

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	0.77	Vert(LL)	-0.30	18-19	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.56	18-19	>677	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.18	12	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 143 lb FT = 20%											

LUMBER

TOP CHORD	2x4 SPF No.2 *Except* 4-5:2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2 *Except* 21-17:2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
SLIDER	Right 2x4 WW Stud -- 2-9-2

BRACING

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

WEBS	1 Row at midpt 4-18
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REACTIONS	(size) 12=0-5-8, 21= Mechanical Max Horiz 21=-125 (LC 13) Max Uplift 12=-300 (LC 9), 21=-263 (LC 8) Max Grav 12=1493 (LC 1), 21=1427 (LC 1)
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FORCES	(lb) - Maximum Compression/Maximum Tension
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TOP CHORD	1-2=-739/173, 2-3=-712/176, 3-4=-4343/1050, 4-5=-2972/763, 5-6=-2758/758, 6-7=-2675/744, 7-8=-2416/665, 8-10=-3009/737, 10-12=-3183/785, 12-13=-40, 1-21=-1493/311
-----------	---

BOT CHORD	20-21=-61/141, 19-20=-592/2796, 18-19=-904/4263, 17-18=-524/2672, 16-17=-102/0, 6-17=-117/225, 15-16=-56/253, 14-15=-599/2701, 12-14=-659/2883
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WEBS	2-20=-8/94, 4-19=-711/273, 4-18=-1614/394, 5-18=-68/555, 6-18=-132/316, 15-17=-550/2837, 7-17=-360/1773, 7-15=-1496/348, 1-20=-307/1458, 3-19=-382/1733, 3-20=-2406/667, 8-15=-620/215, 8-14=-7/299, 10-14=-133/154
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NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 4-1-12 to 5-2-4, Exterior(2R) 5-2-4 to 10-2-4, Interior (1) 10-2-4 to 18-8-4, Exterior(2E) 18-8-4 to 21-2-4, Exterior(2R) 21-2-4 to 26-1-9, Interior (1) 26-1-9 to 36-9-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: , Joint 12 SPF No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 300 lb uplift at joint 12 and 263 lb uplift at joint 21.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27, 2024

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

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A6	Roof Special	1	1	Job Reference (optional)

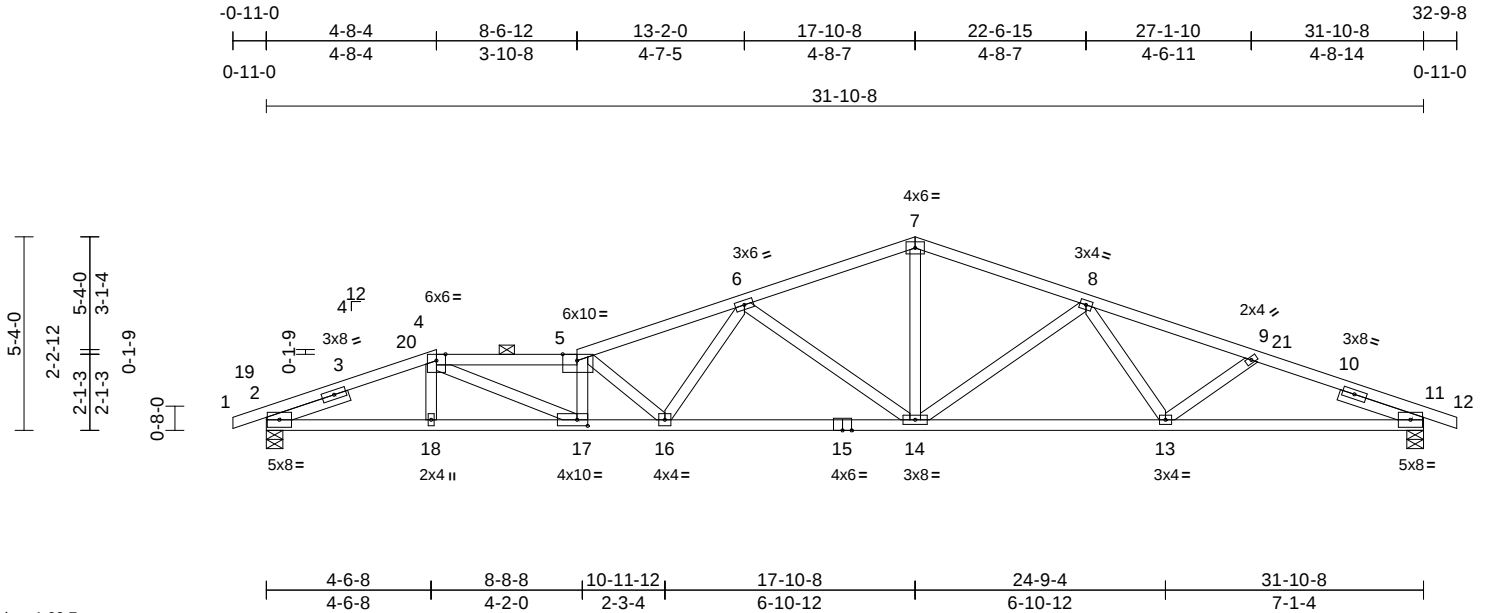
Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File Dec 27 12:46:46 Page: 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
R85979601
LEE'S SUMMIT, MISSOURI

01/07/2025



Scale = 1:60.7									
Plate Offsets (X, Y): [2:0-0-5,0-3-5], [5:0-4-12,Edge], [11:0-0-5,0-3-5], [17:0-3-8,0-2-0]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.35 14-16	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.65 14-16	>588	180
BCLL	0.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.16 11	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
							Weight: 124 lb	FT = 20%	

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 1-4:2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E *Except* 15-11:2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -- 2-4-9, Right 2x4 WW Stud -- 2-5-2

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-11-5 oc purlins, except 2-0-0 oc purlins (2-0-14 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 6-8-13 oc bracing.

REACTIONS (size) 2=0-5-8, 11=0-5-8
Max Horiz 2=-94 (LC 17)
Max Uplift 2=-308 (LC 8), 11=-277 (LC 9)
Max Grav 2=1498 (LC 1), 11=1498 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4/0, 2-4=-3300/844, 4-5=-4870/1250, 5-6=-4059/1006, 6-7=-2458/652, 7-8=-2460/645, 8-9=-3045/719, 9-11=-3188/777, 11-12=-4/0
BOT CHORD 2-18=-726/3011, 17-18=-731/3006, 16-17=-1141/4786, 14-16=-705/3215, 13-14=-594/2753, 11-13=-654/2885
WEBS 4-18=0/169, 4-17=-472/2035, 5-17=-837/226, 7-14=-258/1233, 6-14=-1199/360, 6-16=-217/1067, 5-16=-1281/404, 8-14=-650/223, 8-13=0/266, 9-13=-114/147

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 4-8-4, Exterior(2E) 4-8-4 to 8-6-12, Interior (1) 8-6-12 to 17-10-8, Exterior(2R) 17-10-8 to 22-6-15, Interior (1) 22-6-15 to 32-9-8 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
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearings are assumed to be: Joint 2 SPF 1650F 1.5E , Joint 11 SPF No.2 .
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 308 lb uplift at joint 2 and 277 lb uplift at joint 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.
 - 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

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

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

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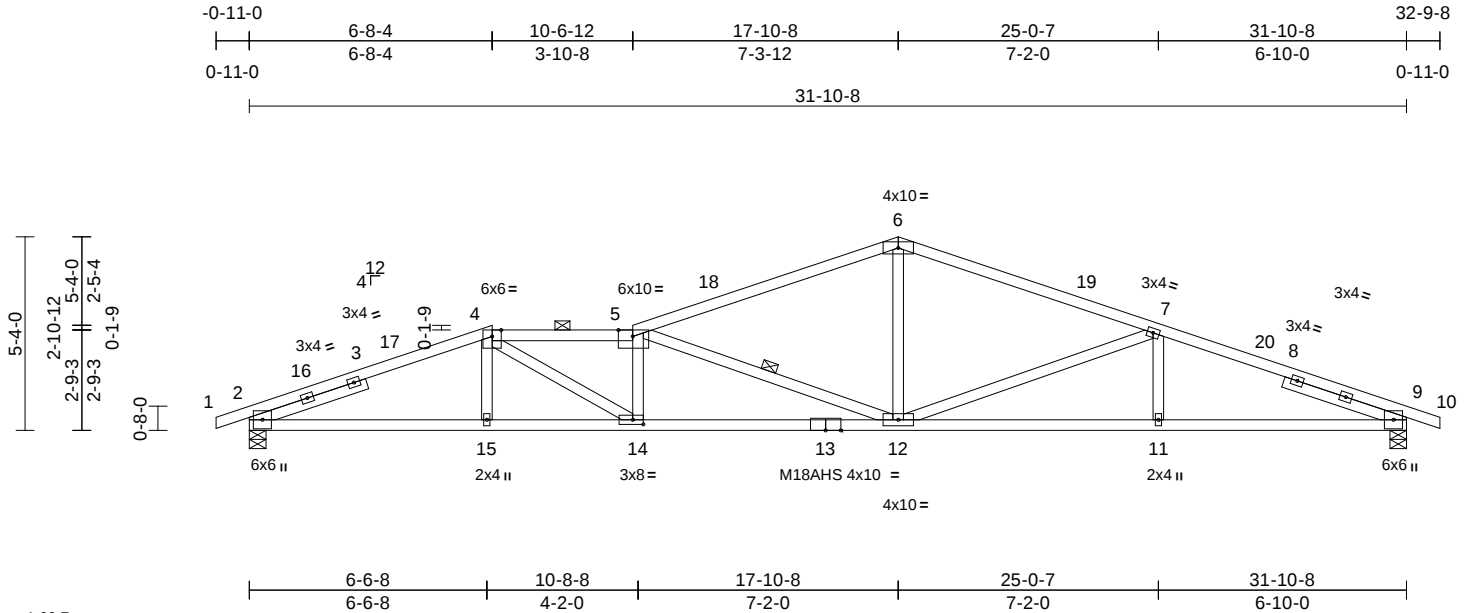
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A7	Roof Special	1	1	DEVELOPMENT SERVICES R85979602 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:46 Page: 1

ID:hLsX_EryHxLB0L?l4TuoWrzDunr-RfC?PsB70Hq3NSgPqnL8w3ulTXbGK?VrCDoi7J42JC&f

01/07/2025



Scale = 1:60.7

Plate Offsets (X, Y): [2:0-3-13,0-1-5], [5:0-4-12,Edge], [9:0-3-13,0-1-5], [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	0.94	Vert(LL)	-0.31	12-14	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.60	12-14	>637	180	M18AHS 142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.16	9	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 119 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SPF 1650F 1.5E *Except* 4-5:2x4 SPF No.2
 BOT CHORD 2x4 SPF 1650F 1.5E
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 WW Stud -- 3-4-11, Right 2x4 WW Stud -- 3-6-9

BRACING

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (2-6-10 max.): 4-5.
 BOT CHORD Rigid ceiling directly applied or 7-5-4 oc bracing.

WEBS 1 Row at midpt 5-12

REACTIONS (size) 2=0-5-8, 9=0-5-8
 Max Horiz 2=-94 (LC 13)
 Max Uplift 2=-308 (LC 8), 9=-276 (LC 9)
 Max Grav 2=1498 (LC 1), 9=1498 (LC 1)

FORCES

TOP CHORD (lb) - Maximum Compression/Maximum Tension
 1-2=-4/0, 2-4=-3267/831, 4-5=-4099/1072,
 5-6=-2513/664, 6-7=-2505/655,
 7-9=-3247/775, 9-10=-4/0

BOT CHORD 2-15=-695/2979, 14-15=-699/2974,
 12-14=-939/4042, 11-12=-657/2967,
 9-11=-657/2967

WEBS 4-15=0/203, 4-14=-300/1305, 5-14=-602/233,
 5-12=-1866/522, 6-12=-166/1035,
 7-12=-818/270, 7-11=0/273

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
 Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
 Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
 exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0,
 Interior (1) 4-1-0 to 6-8-4, Exterior(2E) 6-8-4 to 10-6-12,
 Interior (1) 10-6-12 to 17-10-8, Exterior(2R) 17-10-8 to
 22-10-8, Interior (1) 22-10-8 to 32-9-8 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
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom
 chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SPF 1650F 1.5E .
- Provide mechanical connection (by others) of truss to
 bearing plate capable of withstanding 308 lb uplift at joint
 2 and 276 lb uplift at joint 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.
- 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

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

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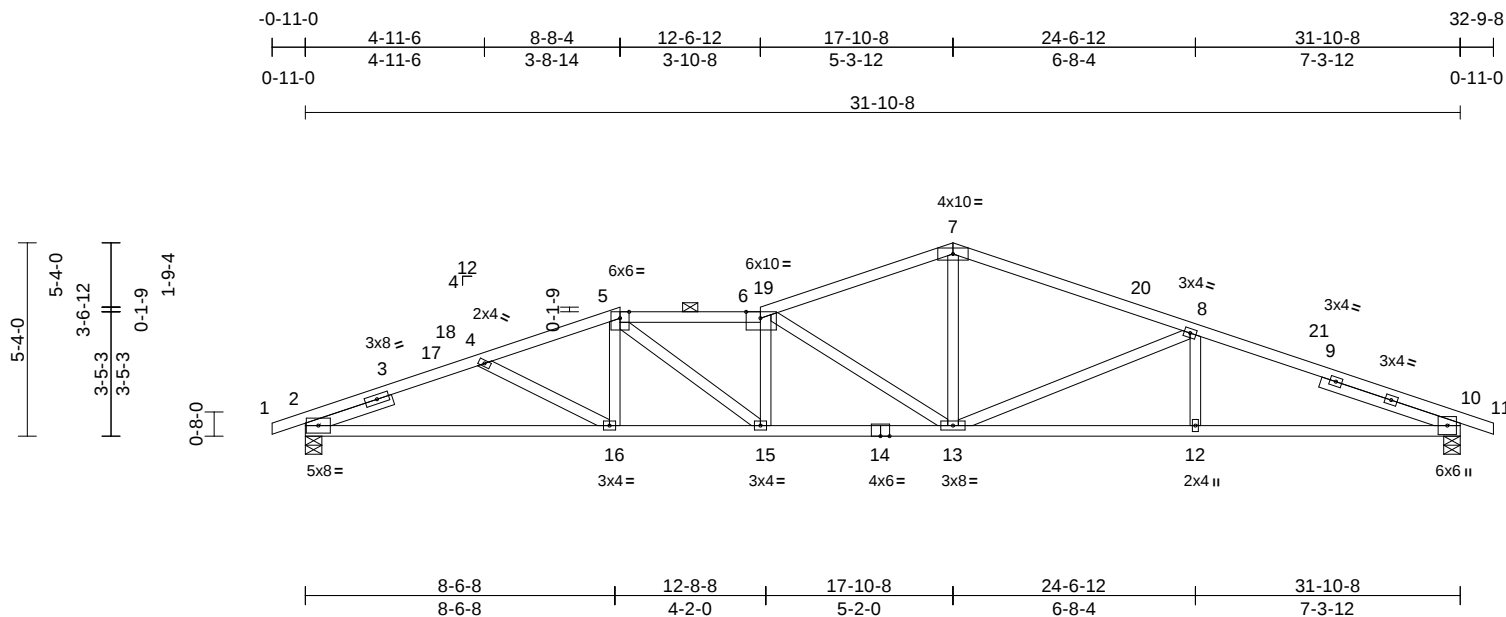
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A8	Roof Special	1	1	DEVELOPMENT SERVICES R85979603 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:46 Page: 1

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01/07/2025



Scale = 1:60.7

Plate Offsets (X, Y): [2:0-0-5,0-3-5], [6:0-4-12,Edge], [10:0-3-13,0-1-5]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.27	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.49	13-15	>774	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.16	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 124 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SPF No.2 *Except* 7-11:2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 WW Stud -- 2-6-5, Right 2x4 SPF No.2 -- 4-0-8

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-11-4 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 6-8-3 oc bracing.

REACTIONS

(size)	2=0-5-8, 10=0-5-8
Max Horiz	2=-94 (LC 17)
Max Uplift	2=-308 (LC 8), 10=-274 (LC 9)
Max Grav	2=1498 (LC 1), 10=1498 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-4/0, 2-4=-3166/857, 4-5=-3048/790, 5-6=-3460/941, 6-7=-2477/681, 7-8=-2483/666, 8-10=-3223/779, 10-11=-4/0
BOT CHORD	2-16=-735/2865, 15-16=-628/2867, 13-15=-786/3417, 12-13=-657/2945, 10-12=-657/2945
WEBS	5-16=0/243, 5-15=-213/728, 6-15=-399/171, 7-13=-218/1122, 6-13=-1347/395, 8-13=-808/259, 8-12=0/289, 4-16=-55/140

NOTES

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 8-8-4, Exterior(2E) 8-8-4 to 12-6-12, Interior (1) 12-6-12 to 17-10-8, Exterior(2R) 17-10-8 to 22-10-8, Interior (1) 22-10-8 to 32-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) All bearings are assumed to be SPF No.2 .
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 308 lb uplift at joint 2 and 274 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

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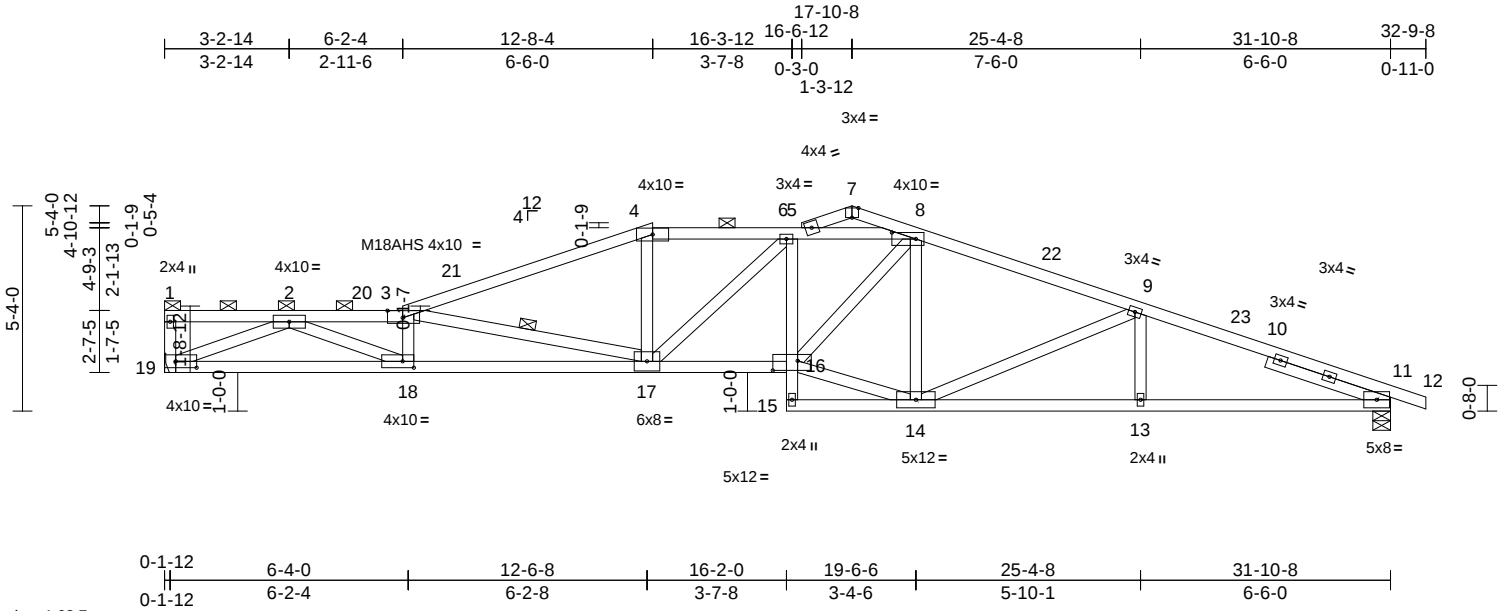
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989
241089-A	A10	Roof Special	1	1	Job Reference (optional)

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 12:33:06
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01/07/2025



Scale = 1:63.7

Plate Offsets (X, Y): [3:0-4-12,Edge], [7:0-2-0,Edge], [8:0-7-8,0-2-0], [11:0-0-5,0-3-5], [16:0-7-12,0-3-0], [18:0-3-8,0-2-0], [19:0-6-8,0-2-0]

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	0.91	Vert(LL)	-0.37	17-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.68	17-18	>561	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.19	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 135 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SPF No.2 *Except* 3-4:2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2 *Except* 19-16:2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
SLIDER	Right 2x4 WW Stud -- 3-4-7

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-15 max.): 1-3, 4-8.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 3-17

REACTIONS	(lb/size) 11=1493/0-5-8, 19=1427/Mechanical
-----------	---

Max Horiz 19=122 (LC 13)
Max Uplift 11=271 (LC 9), 19=266 (LC 8)

FORCES

TOP CHORD	(lb) - Maximum Compression/Maximum Tension 1-19=-129/68, 1-2=-113/38, 2-20=-5211/1288, 3-20=-5209/1288, 3-21=-3385/862, 4-21=-3329/880, 4-5=-3146/864, 5-6=-3278/913, 6-8=-3128/927, 6-7=-206/34, 7-8=-211/57, 8-22=-2595/727, 9-22=-2645/713, 9-23=-3137/790, 10-23=-3155/777, 10-11=-3221/770, 11-12=-4/0
BOT CHORD	18-19=-693/2954, 17-18=-1143/5095, 16-17=-724/3285, 15-16=0/46, 5-16=-308/132, 14-15=-37/145, 13-14=-671/2937, 11-13=-671/2937
WEBS	3-18=-873/301, 3-17=-2017/488, 4-17=-98/693, 5-17=-340/98, 8-14=-449/163, 14-16=-535/2457, 8-16=-270/1241, 2-18=-527/2434, 2-19=-3117/882, 9-14=-618/205, 9-13=0/251

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 12-8-4, Exterior(2E) 12-8-4 to 16-6-12, Interior (1) 16-6-12 to 17-10-8, Exterior(2R) 17-10-8 to 22-10-8, Interior (1) 22-10-8 to 32-9-8 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
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: , Joint 11 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 271 lb uplift at joint 11 and 266 lb uplift at joint 19.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



December 27, 2024

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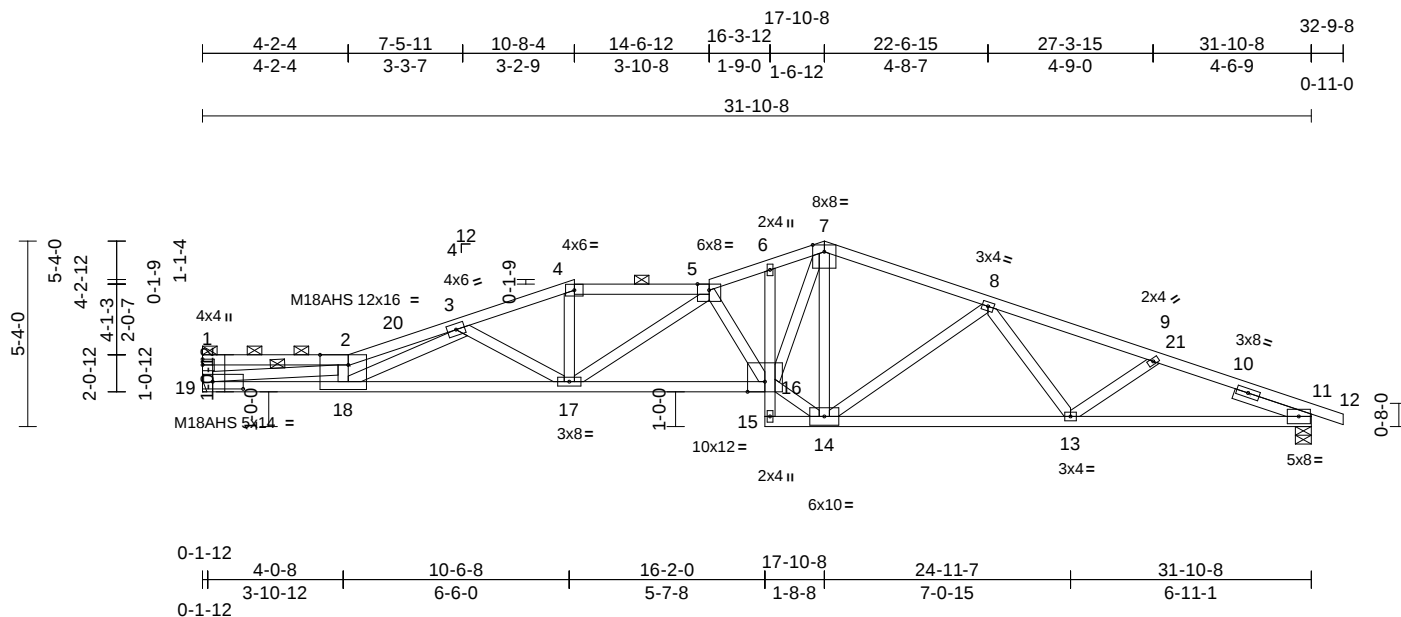
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A9	Roof Special	1	1	DEVELOPMENT SERVICES R85979605 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:47 Page: 1

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01/07/2025



Scale = 1:63.7

Plate Offsets (X, Y): [2:0-9-12,Edge], [11:0-0-5,0-3-5], [19:0-10-8,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.50	17-18	>769	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.92	17-18	>414	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.21	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
Weight: 134 lb FT = 20%												

LUMBER

TOP CHORD	2x4 SPF No.2 *Except* 2-4:2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2 *Except* 19-16:2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.2
SLIDER	Right 2x4 WW Stud -- 2-3-14

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-0-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-8-14 max.): 1-2, 4-5.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 2-19

REACTIONS	(size) 11=0-5-8, 19= Mechanical Max Horiz 19=-120 (LC 13) Max Uplift 11=-274 (LC 9), 19=-265 (LC 8) Max Grav 11=1493 (LC 1), 19=1427 (LC 1)
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FORCES

TOP CHORD	(lb) - Maximum Compression/Maximum Tension 1-19=-222/108, 1-2=-486/133, 2-3=-6535/1632, 3-4=-3817/975, 4-5=-3570/937, 5-6=-3458/923, 6-7=-3344/911, 7-8=-2445/676, 8-9=-3036/741, 9-11=-3171/784, 11-12=-4/0
BOT CHORD	18-19=-1373/5978, 17-18=-1010/4349, 16-17=-887/3900, 15-16=-61/0, 6-16=-34/135, 14-15=-62/167, 13-14=-623/2740, 11-13=-667/2868
WEBS	2-19=-5610/1357, 4-17=-159/894, 5-16=-1357/416, 7-16=-594/2524, 7-14=-831/195, 14-16=-458/2469, 8-14=-649/224, 8-13=0/274, 9-13=-108/148, 5-17=-433/152, 2-18=-1115/359, 3-17=-875/311, 3-18=-493/2109

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 4-2-4, Interior (1) 4-2-4 to 10-8-4, Exterior(2E) 10-8-4 to 14-6-12, Interior (1) 14-6-12 to 17-10-8, Exterior(2R) 17-10-8 to 22-6-15, Interior (1) 22-6-15 to 32-9-8 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
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 11 SPF No.2.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 274 lb uplift at joint 11 and 265 lb uplift at joint 19.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27, 2024

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

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

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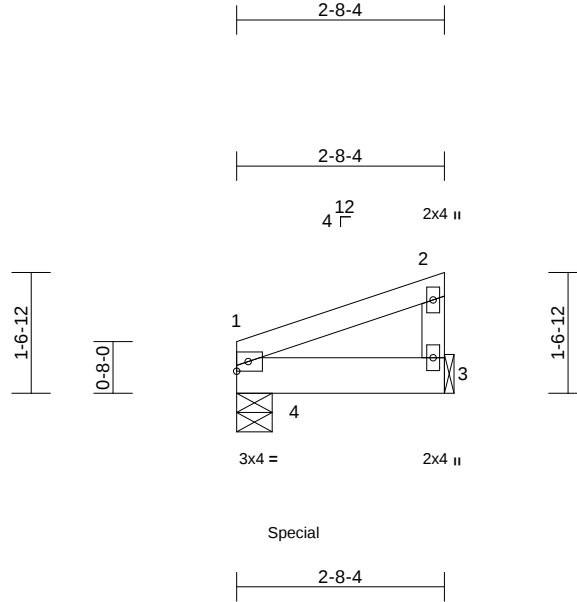
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J13	Jack-Closed Girder	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File Dec 27 12:46:56 Page: 1
ID:IF2X84tDX90jfxwFsa?tDgzDusz-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWCD0i7J4z3C0

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
R85979606
LEE'S SUMMIT, MISSOURI

01/07/2025



Scale = 1:26.7

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	0.50	Vert(LL)	-0.01	1-3	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.01	1-3	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-8-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-5-8, 3= Mechanical
Max Horiz 1=54 (LC 9)
Max Uplift 1=-210 (LC 8), 3=-85 (LC 12)
Max Grav 1=1068 (LC 1), 3=384 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-80/53, 2-3=-106/123
BOT CHORD 1-3=-23/25

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) zone; cantilever left
and right exposed ; end vertical left and right exposed;C-
C for members and forces & MWFRS for reactions
shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 1 SPF 2100F 1.8E .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 210 lb uplift at joint
1 and 85 lb uplift at joint 3.
- This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.

- Hanger(s) or other connection device(s) shall be
provided sufficient to support concentrated load(s) 1244
lb down and 249 lb up at 0-9-0 on bottom chord. The
design/selection of such connection device(s) is the
responsibility of others.
 - 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
- 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: 4=-1244 (B)



December 27, 2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	CG2	Detail Girder	1	1	Job Reference (optional)

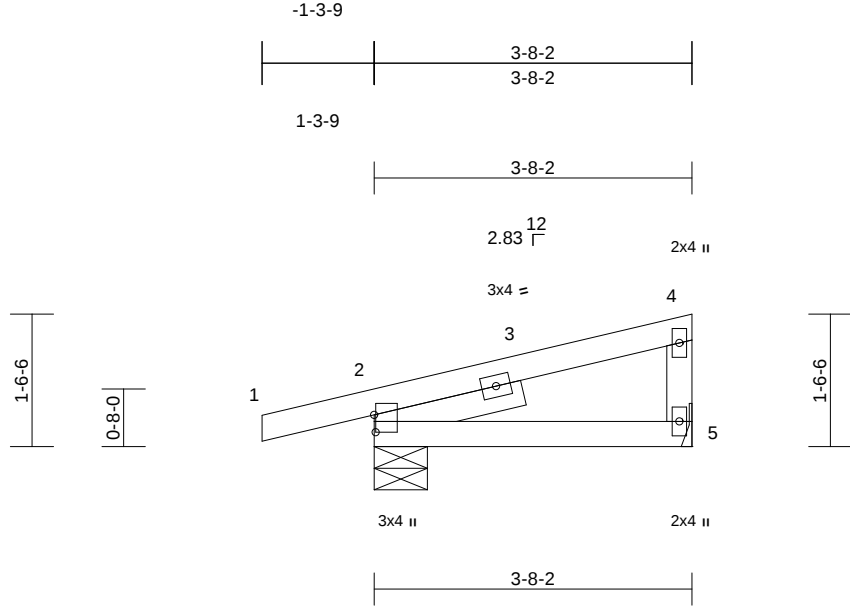
Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:51 Page: 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
R85979607
LEE'S SUMMIT, MISSOURI

01/07/2025



Scale = 1:17

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	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: 13 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 -- 1-9-1

BRACING

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

REACTIONS

(size) 2=0-7-6, 5= Mechanical
Max Horiz 2=120 (LC 11)
Max Uplift 2=-156 (LC 10), 5=-82 (LC 16)
Max Grav 2=156 (LC 1), 5=81 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-50/23, 4-5=-59/103
BOT CHORD 2-5=-25/27

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 82 lb uplift at joint
5 and 156 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) 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
Trapezoidal Loads (lb/ft)
Vert: 2=0 (F=35, B=35)-to-3=-30 (F=20, B=20),
3=-30 (F=20, B=20)-to-4=-64 (F=3, B=3), 2=0 (F=10,
B=10)-to-5=-18 (F=1, B=1)



December 27, 2024

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

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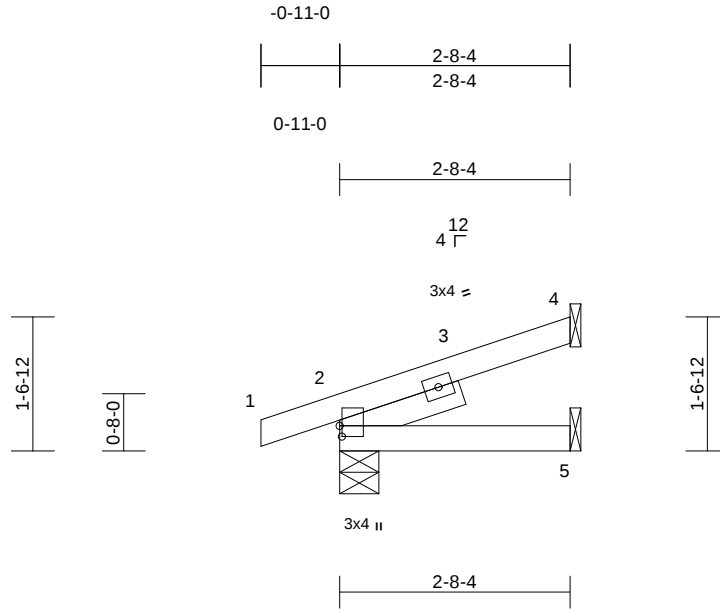
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Roseville, CA 95661
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J14	Jack-Open	1	1	DEVELOPMENT SERVICES R85979608 LEE'S SUMMIT, MISSOURI
Job Reference (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. File: Dec 27 12:46:56 PM
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01/07/2025



Scale = 1:17.1

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	0.12	Vert(LL)	0.00	2-5	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 20%

LUMBER

LOAD CASE(S) Standard

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 SLIDER Left 2x4 WW Stud -- 1-5-12

BRACING

TOP CHORD Structural wood sheathing directly applied or
 2-8-4 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=52 (LC 12)
 Max Uplift 2=-63 (LC 8), 4=-50 (LC 12)
 Max Grav 2=193 (LC 1), 4=81 (LC 1), 5=52
 (LC 3)

FORCES (lb) - Maximum Compression/Maximum
 Tension

TOP CHORD 1-2=-4/0, 2-4=-54/28
 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 50 lb uplift at joint
 4 and 63 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.



December 27, 2024

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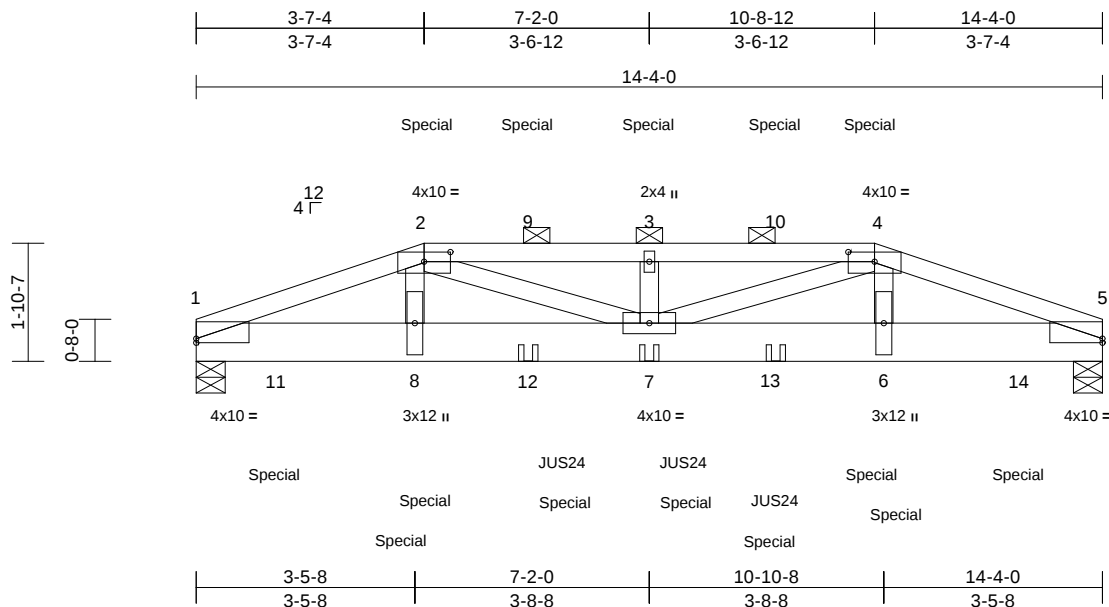
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989	AS NOTED FOR PLAN REVIEW Lot 209- 2750 SW 11th Terr DEVELOPMENT SERVICES R85979609 LEE'S SUMMIT, MISSOURI
241089-A	B1	Hip Girder	1	3	Job Reference (optional)	

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:50 Page: 1

ID: Bb5QVthVwWM4UllMJaEo8lzDs?t-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCD0i734z3C9

01/07/2025



Scale = 1:29.1

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

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	0.64	Vert(LL)	-0.14	7	>999	240	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.25	7	>660	180	197/144
BCLL	0.0	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.03	5	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 187 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 6-0-0 oc purlins, except 2-0-0 oc purlins (5-2-11 max.): 2-4.
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=-27 (LC 13)
Max Uplift	1=-1258 (LC 8), 5=-1307 (LC 9)
Max Grav	1=5887 (LC 1), 5=5874 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-12084/2814, 2-3=-13946/3314, 3-4=-13946/3314, 4-5=-12128/2893
BOT CHORD	1-8=-2539/11114, 7-8=-2480/10802, 6-7=-2547/10840, 5-6=-2612/11155
WEBS	2-8=-571/3040, 4-6=-628/3071, 4-7=-718/3391, 3-7=-222/210, 2-7=-790/3431

NOTES

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-6-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-5-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

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

- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SPF 1950F 1.7E.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1258 lb uplift at joint 1 and 1307 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 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 5-3-0 from the left end to 9-2-0 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 70 lb down and 83 lb up at 3-7-4, 46 lb down and 83 lb up at 5-3-0, 46 lb down and 83 lb up at 7-2-0, and 46 lb down and 83 lb up at 9-2-0, and 70 lb down and 83 lb up at 10-8-12 on top chord, and 1407 lb down and 277 lb up at 1-3-0, 1407 lb down and 278 lb up at 3-3-0, 193 lb down and 56 lb up at 3-7-4, 193 lb down and 56 lb up at 10-8-0, and 1407 lb down and 306 lb up at 11-1-0, and 1407 lb down and 313 lb up at 13-0-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-4=-70, 4-5=-70, 1-5=-20
Concentrated Loads (lb)
Vert: 4=-46 (F), 8=-1600 (F=-193, B=-1407), 6=-1600 (F=-193, B=-1407), 3=-46 (F), 7=-1422 (F=-15, B=-1407), 2=-46 (F), 9=-46 (F), 10=-46 (F), 11=-1407 (B), 12=-1422 (F=-15, B=-1407), 13=-1422 (F=-15, B=-1407), 14=-1407 (B)



December 27, 2024

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

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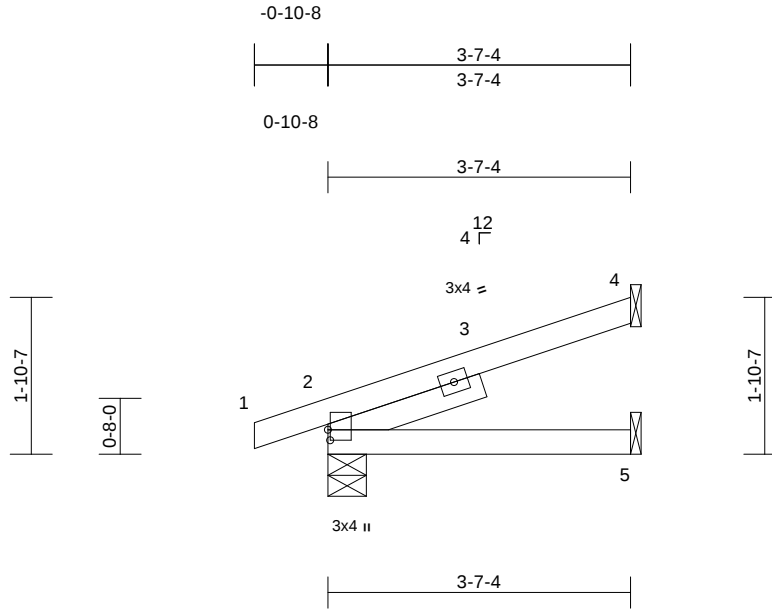
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J21	Jack-Open	5	1	DEVELOPMENT SERVICES R85979610 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:57 Page: 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
01/07/2025



Scale = 1:18.3

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	0.23	Vert(LL)	-0.01	2-5	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.12	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: 11 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 1-11-1

BRACING

TOP CHORD Structural wood sheathing directly applied or
3-7-4 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=65 (LC 12)
Max Uplift 2=-65 (LC 8), 4=-68 (LC 12)
Max Grav 2=228 (LC 1), 4=116 (LC 1), 5=71
(LC 3)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-2=-5/0, 2-4=-71/39
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 68 lb uplift at joint
4 and 65 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.



December 27, 2024

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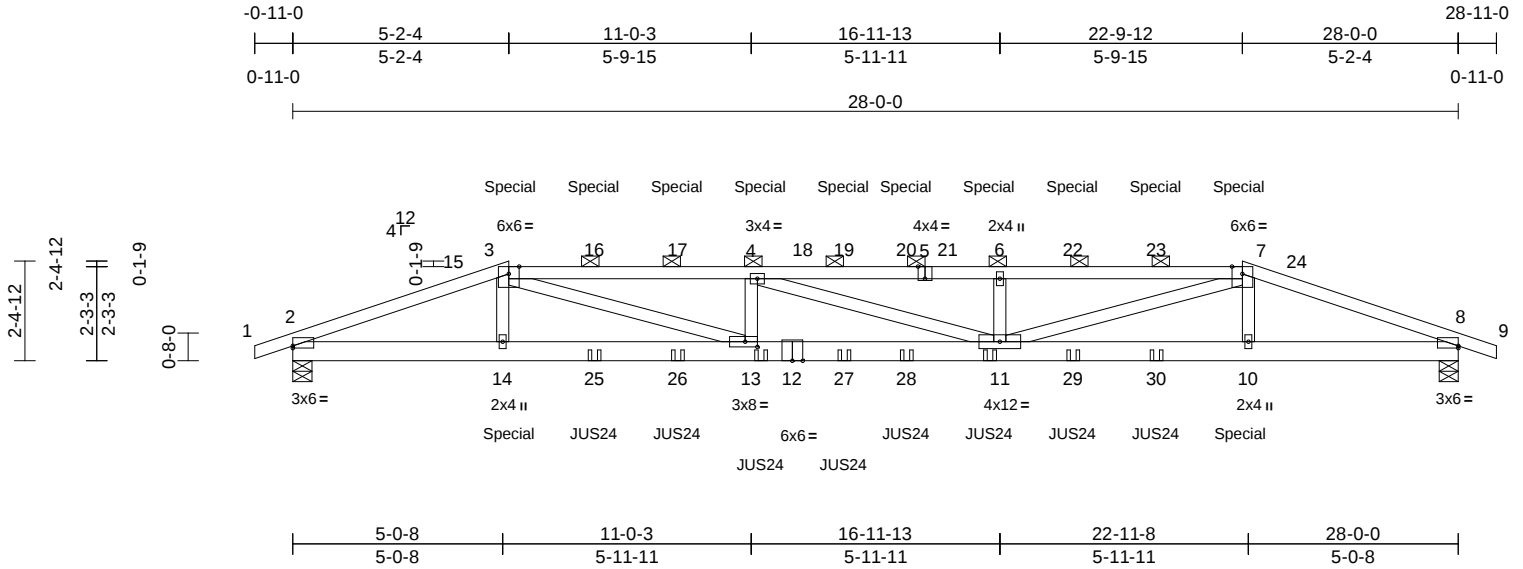
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A1	Hip Girder	1	2	DEVELOPMENT SERVICES R85979611 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:43 Page: 1

ID:3BJX?HGbO3e?9VWstBCFLIzDuRM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDwJ423C?

01/07/2025



Scale = 1:54.4									
Plate Offsets (X, Y): [2:Edge,0-0-10], [5:0-2-0,Edge], [8:Edge,0-0-10], [13:0-3-8,0-1-8]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.33 11-13	>988	240
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.60 11-13	>550	180
BCLL	0.0	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.08 8	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
Weight: 225 lb FT = 20%									
PLATES MT20 GRIP 197/144									

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 3-5,5-7:2x4 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 5-2-1 oc purlins, except 2-0-0 oc purlins (4-4-14 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 8=0-5-8
Max Horiz 2=-37 (LC 13)
Max Uplift 2=-647 (LC 8), 8=-647 (LC 9)
Max Grav 2=2264 (LC 1), 8=2264 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/2, 2-3=-5451/1583, 3-4=-8096/2395, 4-6=-8034/2366, 6-7=-8038/2368, 7-8=-5465/1584, 8-9=0/2
BOT CHORD 2-14=-1401/5015, 13-14=-1401/4980, 11-13=-2287/8092, 10-11=-1407/4991, 8-10=-1407/5028
WEBS 3-14=-5/507, 7-10=-14/521, 3-13=-936/3355, 7-11=-914/3283, 4-13=-854/434, 4-11=-109/53, 6-11=-846/446

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.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 5-2-4, Exterior(2R) 5-2-4 to 12-3-2, Interior (1) 12-3-2 to 22-9-12, Exterior(2E) 22-9-12 to 28-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SPF 1650F 1.5E .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 647 lb uplift at joint 2 and 647 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 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 7-3-0 from the left end to 20-9-0 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 127 lb down and 107 lb up at 5-2-4, 104 lb down and 107 lb up at 7-3-0, 104 lb down and 107 lb up at 9-3-0, 104 lb down and 107 lb up at 11-3-0, 104 lb down and 107 lb up at 13-3-0, 104 lb down and 107 lb up at 14-9-0, 104 lb down and 107 lb up at 16-9-0, 104 lb down and 107 lb up at 18-9-0, and 104 lb down and 107 lb up at 20-9-0, and 127 lb down and 107 lb up at 22-9-12 on top chord, and 301 lb down and 75 lb up at 5-2-4, and 301 lb down and 75 lb up at 22-9-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

- LOAD CASE(S)** Standard
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-7=-70, 7-9=-70, 2-8=-20
Concentrated Loads (lb)



December 27, 2024

Continued on page 2

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

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A1	Hip Girder	1	2	R85979611
Job Reference (optional)					LEE'S SUMMIT, MISSOURI

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File Dec 27 12:46:43 PM Page: 2

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Vert: 3=-104 (B), 14=-301 (B), 10=-301 (B), 13=-31 (B), 7=-104 (B), 11=-31 (B), 4=-104 (B), 6=-104 (B), 16=-104 (B), 17=-104 (B), 19=-104 (B), 20=-104 (B), 22=-104 (B), 23=-104 (B), 25=-31 (B), 26=-31 (B), 27=-31 (B), 28=-31 (B), 29=-31 (B), 30=-31 (B)

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

01/07/2025

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

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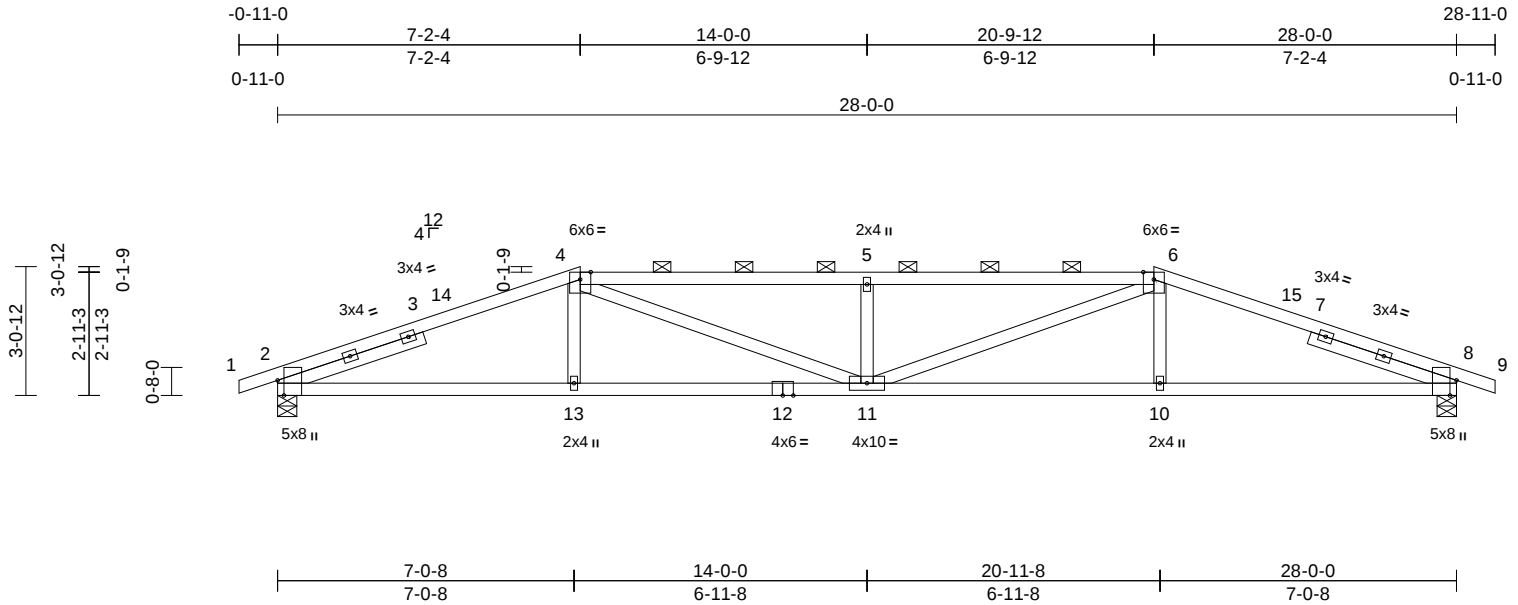
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A2	Hip	1	1	DEVELOPMENT SERVICES R85979612 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:44 Page: 1

ID:amL0vgFTcg9NeGbXq0IxEizDuZ6-RfC?PsB70Hq3NSgPqnL8w3ulTXbGkWrCDol734z3C7f

01/07/2025



Scale = 1:54.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.25	11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.47	11-13	>719	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.12	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 99 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 WW Stud -- 3-7-14, Right 2x4 WW Stud -- 3-7-14

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-9-5 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 7-7-14 oc bracing.

REACTIONS

(size)	2=0-5-8, 8=0-5-8
Max Horiz	2=-50 (LC 13)
Max Uplift	2=-303 (LC 8), 8=-303 (LC 9)
Max Grav	2=1324 (LC 1), 8=1324 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-4/0, 2-4=-2781/719, 4-5=-3500/951, 5-6=-3500/951, 6-8=-2781/719, 8-9=-4/0
BOT CHORD	2-13=-577/2535, 11-13=-581/2528, 10-11=-589/2528, 8-10=-585/2535
WEBS	4-13=0/289, 4-11=-278/1177, 5-11=-628/276, 6-11=-279/1177, 6-10=0/289

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 7-2-4, Exterior(2R) 7-2-4 to 14-0-0, Interior (1) 14-0-0 to 20-9-12, Exterior(2R) 20-9-12 to 28-0-0, Interior (1) 28-0-0 to 28-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SPF No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 303 lb uplift at joint 2 and 303 lb uplift at joint 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.
- 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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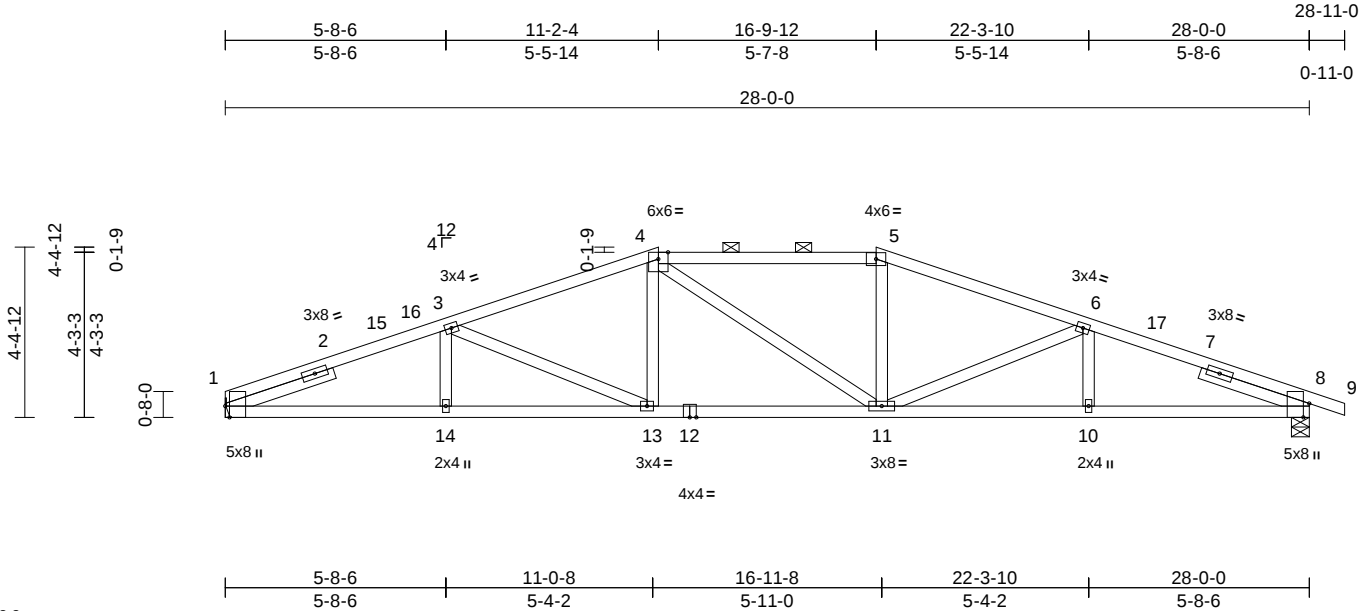
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A4	Hip	1	1	DEVELOPMENT SERVICES R85979614 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File Dec 27 12:46:45 PM Page: 1
ID: mh5Swt0Mcyj4oKRS1QTlmzDuY8-RfC?PsB7Hq3NSgPqnL8w3ulTXbGKWrcDoh7J4z3C9f

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
01/07/2025



Scale = 1:53.3									
Plate Offsets (X, Y): [1:0-3-8,Edge], [8:0-4-5,Edge]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.17 13-14	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.33 11-13	>999	180
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.11 8	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
Weight: 106 lb FT = 20%									
PLATES MT20 GRIP 169/123									

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 2-11-6, Right 2x4 WW Stud -- 2-11-6

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

REACTIONS (size) 1= Mechanical, 8=0-5-8
Max Horiz 1=77 (LC 12)
Max Uplift 1=-240 (LC 8), 8=-283 (LC 9)
Max Grav 1=1259 (LC 1), 8=1325 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2807/783, 3-4=-2318/701, 4-5=-2165/719, 5-6=-2318/717, 6-8=-2795/801, 8-9=-4/0
BOT CHORD 1-14=-662/2542, 13-14=-662/2542, 11-13=-505/2137, 10-11=-686/2532, 8-10=-686/2532
WEBS 3-14=0/213, 3-13=-470/197, 4-13=-10/337, 4-11=-208/207, 5-11=-12/337, 6-11=-460/195, 6-10=0/210

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 11-2-4, Exterior(2E) 11-2-4 to 16-9-12, Exterior(2R) 16-9-12 to 23-10-10, Interior (1) 23-10-10 to 28-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: , Joint 8 SPF No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 240 lb uplift at joint 1 and 283 lb uplift at joint 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.
- 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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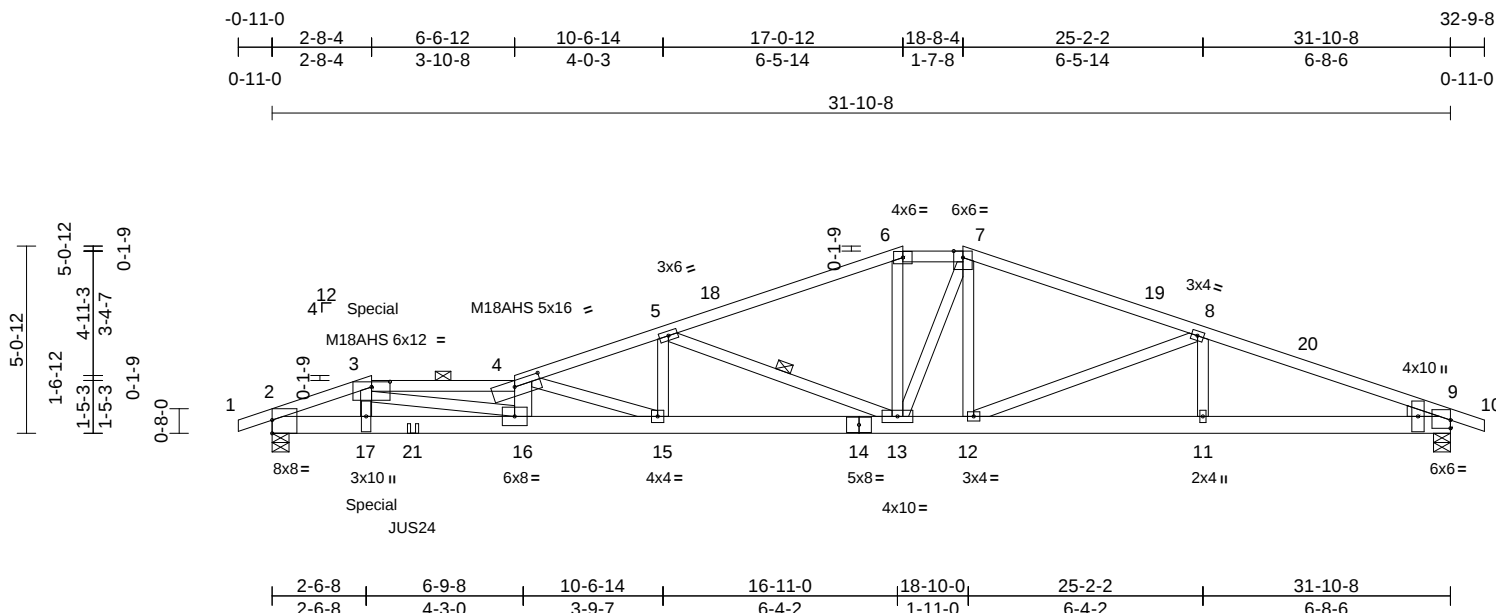
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A5	Roof Special Girder	1	1	DEVELOPMENT SERVICES R85979615 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

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01/07/2025



Scale = 1:60.7

Plate Offsets (X, Y): [2:Edge,0-4-5], [3:0-6-0,0-1-11], [4:0-8-8,0-2-0], [9:Edge,0-2-10]

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	Ver(LL)	-0.39	15-16	>963	240	M18AHS 142/136
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Ver(CT)	-0.70	15-16	>540	180	MT20 197/144
BCLL	0.0	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.11	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* 3-4:2x4 SPF 2100F 1.8E, 4-6:2x4 SPF 1650F 1.5E

BOT CHORD 2x6 SPF 2100F 1.8E *Except* 14-9:2x6 SPF 1650F 1.5E

WEBS 2x4 SPF No.2 *Except* 16-4:2x6 SPF 1650F 1.5E

WEDGE Right: 2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-4-4 max.): 3-4, 6-7.

BOT CHORD Rigid ceiling directly applied or 7-3-9 oc bracing.

WEBS 1 Row at midpt 5-13

REACTIONS

(size) 2=0-5-8, 9=0-5-8

Max Horiz 2=-87 (LC 17)

Max Uplift 2=-525 (LC 8), 9=-314 (LC 9)

Max Grav 2=1881 (LC 1), 9=1541 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/2, 2-3=-4506/1339, 3-4=-6980/1908, 4-5=-4641/1211, 5-6=-2795/762, 6-7=-2569/750, 7-8=-2698/737, 8-9=-3386/835, 9-10=0/2

BOT CHORD 2-17=-1193/4111, 16-17=-1170/4024, 15-16=-1791/6788, 13-15=-1052/4370, 12-13=-530/2482, 11-12=-717/3085, 9-11=-717/3085

WEBS 3-17=-180/635, 4-16=-955/319, 4-15=-2510/766, 5-15=-178/936, 5-13=-1918/551, 6-13=-119/564, 7-13=-142/433, 7-12=-45/344, 8-12=-705/244, 8-11=0/273, 3-16=-704/3048

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 6-6-12, Interior (1) 6-6-12 to 17-0-12, Exterior(2E) 17-0-12 to 18-8-4, Exterior(2R) 18-8-4 to 23-8-4, Interior (1) 23-8-4 to 32-9-8 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
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SPF 2100F 1.8E, Joint 9 SPF 1650F 1.5E.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 525 lb uplift at joint 2 and 314 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use MiTek JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 3-9-12 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 61 lb down and 68 lb up at 2-8-4 on top chord, and 74 lb down and 126 lb up at 2-8-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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

- 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, 6-7=-70, 7-10=-70, 2-9=-20
- Concentrated Loads (lb)
Vert: 3=-11 (B), 17=-59 (B), 21=-364 (B)



December 27, 2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	CG3	Diagonal Hip Girder	2	1	Job Reference (optional)

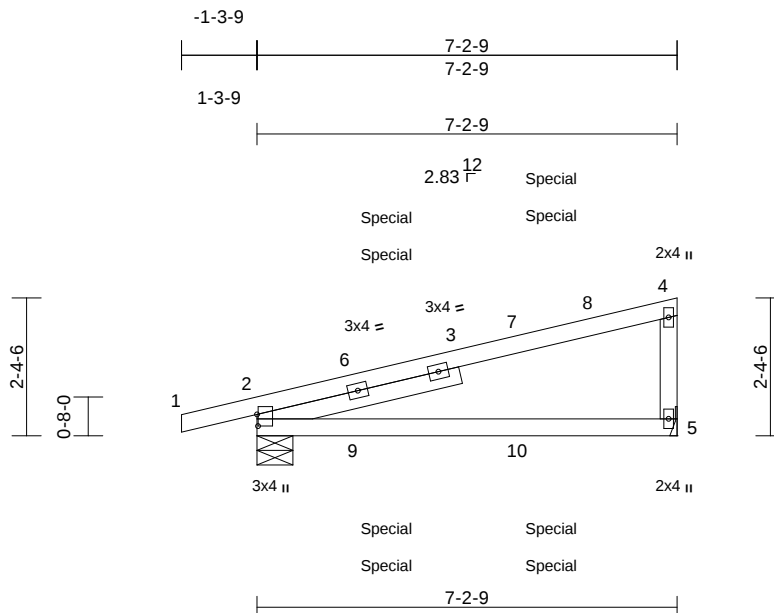
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
R85979616
LEE'S SUMMIT, MISSOURI

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:51 Page: 1

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01/07/2025



Scale = 1:23.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.16	2-5	>544	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.31	2-5	>272	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: 24 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 -- 3-6-14

BRACING

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

REACTIONS (size) 2=0-7-6, 5= Mechanical
Max Horiz 2=92 (LC 9)
Max Uplift 2=-102 (LC 8), 5=-77 (LC 12)
Max Grav 2=371 (LC 1), 5=298 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-182/75, 4-5=-225/237
BOT CHORD 2-5=-42/45

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) -1-3-9 to 5-9-5,
Exterior(2R) 5-9-5 to 7-0-13 zone; cantilever left and
right exposed; end 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 77 lb uplift at joint
5 and 102 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) 130
lb down and 108 lb up at 1-7-11, 130 lb down and 108
lb up at 1-7-11, and 31 lb down and 86 lb up at 4-5-10,
and 31 lb down and 86 lb up at 4-5-10 on top chord,
and 13 lb up at 1-7-11, 13 lb up at 1-7-11, and 13 lb
down at 4-5-10, and 13 lb down at 4-5-10 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
Concentrated Loads (lb)
Vert: 6=62 (F=31, B=31), 10=-4 (F=-2, B=-2)



December 27, 2024

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

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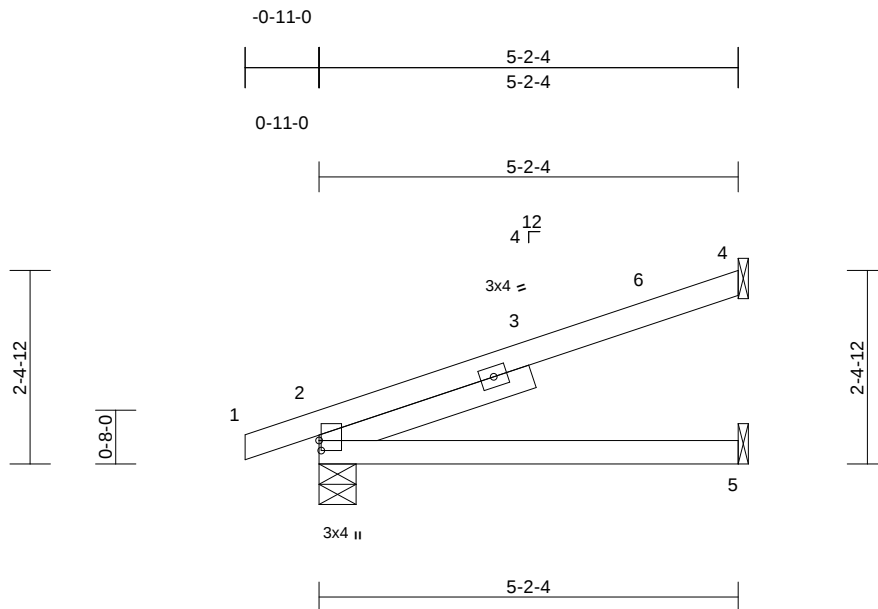
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J7	Jack-Open	10	1	DEVELOPMENT SERVICES R85979617 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:55 Page: 1

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01/07/2025



Scale = 1:20.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.04	2-5	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.08	2-5	>743	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: 16 lb	FT = 20%

LUMBER

LOAD CASE(S) Standard

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

BRACING

TOP CHORD Structural wood sheathing directly applied or
 5-2-4 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=88 (LC 12)
 Max Uplift 2=-78 (LC 8), 4=-97 (LC 12)
 Max Grav 2=301 (LC 1), 4=174 (LC 1), 5=102
 (LC 3)

FORCES (lb) - Maximum Compression/Maximum
 Tension

TOP CHORD 1-2=-4/0, 2-4=-93/57
 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) -0-11-0 to 4-1-0,
 Interior (1) 4-1-0 to 5-1-8 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 97 lb uplift at joint
 4 and 78 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.



December 27, 2024

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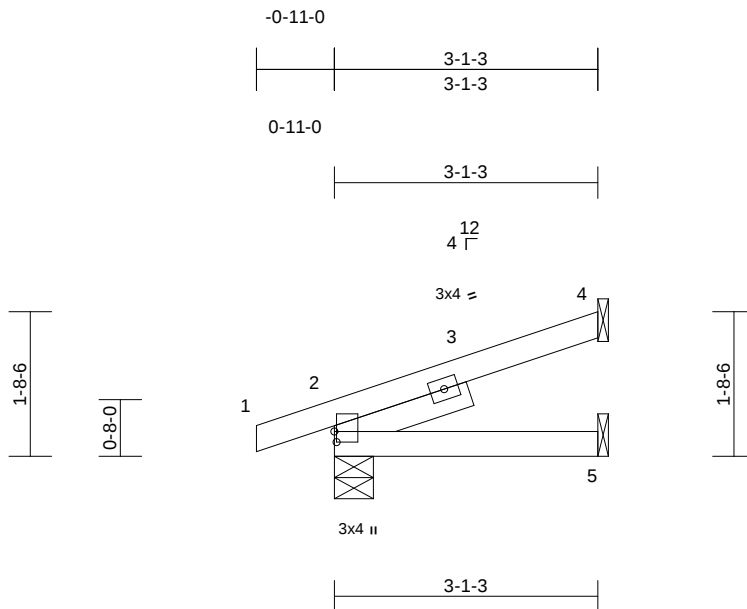
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J10	Jack-Open	4	1	DEVELOPMENT SERVICES R85979618 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:55 Page: 1

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01/07/2025



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	0.16	Vert(LL)	-0.01	2-5	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%

LUMBER

LOAD CASE(S) Standard

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 SLIDER Left 2x4 WW Stud -- 1-7-14

BRACING

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

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5=
 Mechanical
 Max Horiz 2=58 (LC 12)
 Max Uplift 2=-65 (LC 8), 4=-58 (LC 12)
 Max Grav 2=210 (LC 1), 4=97 (LC 1), 5=61
 (LC 3)

FORCES (lb) - Maximum Compression/Maximum
 Tension

TOP CHORD 1-2=-4/0, 2-4=-60/33
 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 58 lb uplift at joint
 4 and 65 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.



December 27, 2024

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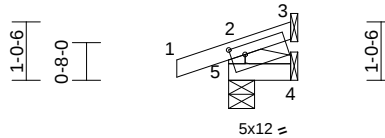
1-1-3

-0-11-0



0-11-0

1-1-3

 $4\frac{12}{17}$ 

1-1-3

0-8-13



0-8-13

0-4-6

Scale = 1:23.1

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

[illegible]

LUMBER

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

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

LOAD CASE(S) Standard

BRACING

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

REACTIONS

(size)	3= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz	5=26 (LC 11)
Max Uplift	3=-9 (LC 1), 4=-7 (LC 8), 5=-75 (LC 8)
Max Grav	3=14 (LC 8), 4=19 (LC 3), 5=159 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-161/176, 1-2=0/24, 2-3=-24/9
BOT CHORD 4-5=-59/10
WEBS 2-4=-11/65

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. I; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) zone; cantilever left
and right exposed ; end vertical left and right exposed; C-
C for members and forces & MWFRS for reactions
shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: , Joint 5 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 75 lb uplift at joint
5, 7 lb uplift at joint 4 and 9 lb uplift at joint 3.



December 27, 2024



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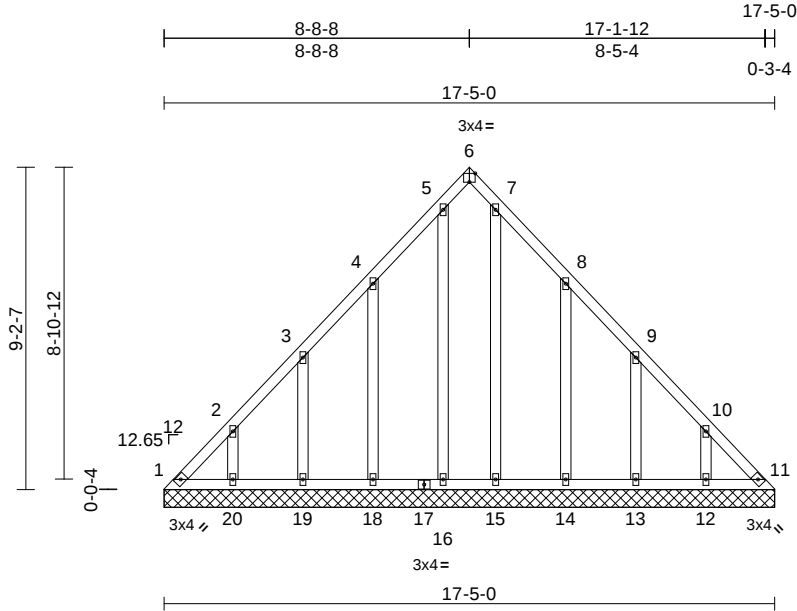
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr DEVELOPMENT SERVICES R85979620 LEE'S SUMMIT, MISSOURI
241089-A	LG6	Lay-In Gable	1	1	Job Reference (optional)

Direct Lumber of Colorado, Denver, CO - 80221,

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Scale = 1:58.5															
Plate Offsets (X, Y): [6:Edge,0-3-0]															
Loading		(psf)	Spacing		2-0-0	CSI		DEFL		in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		25.0	Plate Grip DOL		1.15	TC		0.08	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		0.15	Horiz(TL)	0.01	11	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

WEBS
2-20=-223/156, 3-19=-223/157,
4-18=-248/182, 5-16=-131/45, 7-15=-106/11,
8-14=-248/185, 9-13=-223/157,
10-12=-223/156

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (size) 1=17-5-0, 11=17-5-0, 12=17-5-0, 13=17-5-0, 14=17-5-0, 15=17-5-0, 16=17-5-0, 18=17-5-0, 19=17-5-0, 20=17-5-0
Max Horiz 1=-251 (LC 10)
Max Uplift 1=-110 (LC 10), 11=-80 (LC 11), 12=-139 (LC 13), 13=-132 (LC 13), 14=-161 (LC 13), 16=-24 (LC 9), 18=-157 (LC 12), 19=-132 (LC 12), 20=-139 (LC 12)
Max Grav 1=272 (LC 12), 11=252 (LC 13), 12=209 (LC 22), 13=204 (LC 22), 14=219 (LC 22), 15=139 (LC 22), 16=165 (LC 21), 18=215 (LC 21), 19=204 (LC 21), 20=209 (LC 21)

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-1 to 5-4-1, Interior (1) 5-4-1 to 8-8-12, Exterior(2R) 8-8-12 to 13-5-12, Interior (1) 13-5-12 to 17-1-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 (II) 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 110 lb uplift at joint 1, 80 lb uplift at joint 11, 139 lb uplift at joint 20, 132 lb uplift at joint 19, 157 lb uplift at joint 18, 24 lb uplift at joint 16, 161 lb uplift at joint 14, 132 lb uplift at joint 13 and 139 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.

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-393/274, 2-3=-265/169, 3-4=-134/114, 4-5=-112/108, 5-6=-88/76, 6-7=-88/76, 7-8=-112/79, 8-9=-113/75, 9-10=-238/169, 10-11=-366/274
BOT CHORD 1-20=-204/279, 19-20=-204/279, 18-19=-204/279, 16-18=-204/279, 15-16=-204/279, 14-15=-204/279, 13-14=-204/279, 12-13=-204/279, 11-12=-204/279

LOAD CASE(S) Standard



December 27,2024

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

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

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989	Dec 27 12:46:50
241089-A	A16	Hip Girder	1	2	Job Reference (optional)	

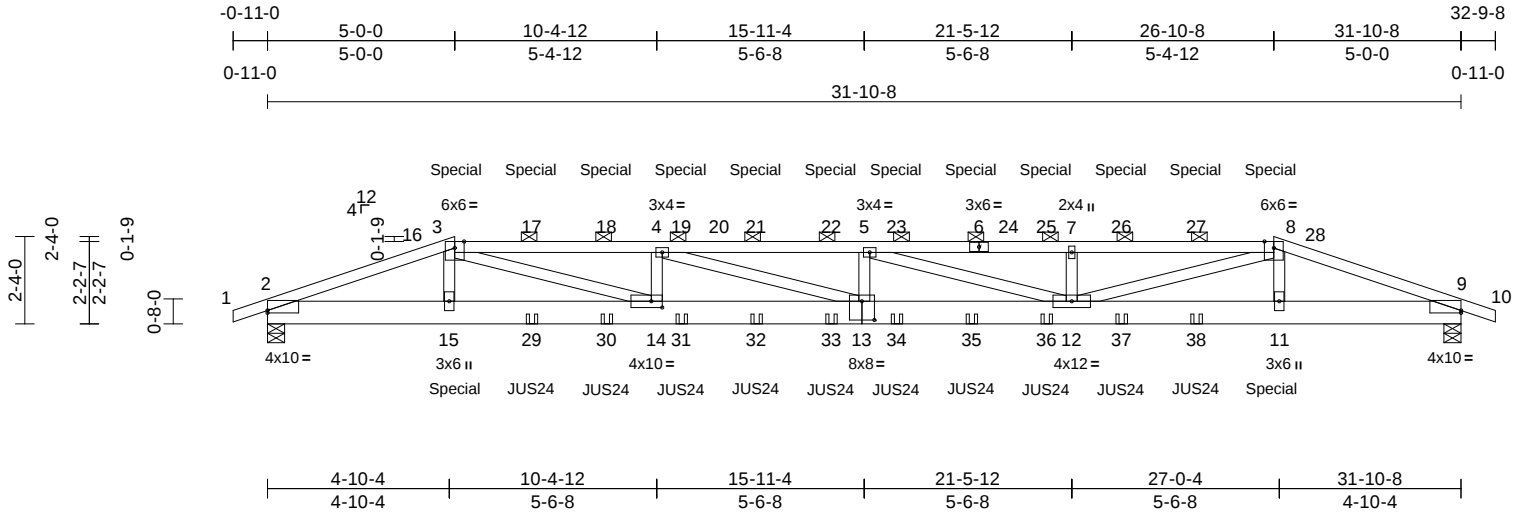
Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:50 Page: 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
Lot 209- 2750 SW 11th Terr
DEVELOPMENT SERVICES
R85979621
LEE'S SUMMIT, MISSOURI

01/07/2025



Scale = 1:60.4									
Plate Offsets (X, Y): [2:Edge,0-0-12], [9:Edge,0-0-12], [13:0-4-0,0-6-0], [14:0-3-8,0-2-0]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.50 12-13	>751	240
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.90 12-13	>419	180
BCLL	0.0	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.08 9	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
					Weight: 294 lb		FT = 20%		

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 3-6,6-8:2x4 SPF 1650F 1.5E
BOT CHORD 2x8 SPF 1950F 1.7E
WEBS 2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-9-13 oc purlins, except 2-0-0 oc purlins (3-10-11 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 9=0-5-8
Max Horiz 2=-36 (LC 36)
Max Uplift 2=-708 (LC 8), 9=-709 (LC 9)
Max Grav 2=2506 (LC 1), 9=2507 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/7, 2-3=-6231/1781, 3-4=-9617/2782, 4-5=-10970/3118, 5-7=-9433/2720, 7-8=-9437/2722, 8-9=-6272/1791, 9-10=0/7
BOT CHORD 2-15=-1593/5767, 14-15=-1591/5728, 12-14=-3023/10976, 11-12=-1602/5760, 9-11=-1605/5806
WEBS 3-15=-21/500, 8-11=-46/572, 3-14=-1147/4153, 8-12=-1084/3933, 4-14=-1240/520, 4-13=-408/1464, 5-13=-181/215, 5-12=-1654/467, 7-12=-785/410

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 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 5-0-0, Exterior(2R) 5-0-0 to 12-0-14, Interior (1) 12-0-14 to 26-10-8, Exterior(2E) 26-10-8 to 32-9-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SPF 1950F 1.7E .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 708 lb uplift at joint 2 and 709 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 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 7-0-12 from the left end to 24-9-12 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 120 lb down and 104 lb up at 5-0-0, 97 lb down and 104 lb up at 7-0-12, 97 lb down and 104 lb up at 9-0-12, 97 lb down and 104 lb up at 11-0-12, 97 lb down and 104 lb up at 13-0-12, 97 lb down and 104 lb up at 15-0-12, 97 lb down and 104 lb up at 16-9-12, 97 lb down and 104 lb up at 18-9-12, 97 lb down and 104 lb up at 20-9-12, 97 lb down and 104 lb up at 22-9-12, and 97 lb down and 104 lb up at 24-9-12, and 120 lb down and 104 lb up at 26-10-8 on top chord, and 284 lb down and 66 lb up at 5-0-0, and 284 lb down and 66 lb up at 26-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

- LOAD CASE(S)** Standard
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-8=-70, 8-10=-70, 2-9=-20
Concentrated Loads (lb)



December 27, 2024

Continued on page 2

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

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A16	Hip Girder	1	2	R85979621
Job Reference (optional)					LEE'S SUMMIT, MISSOURI

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File Dec 27 12:46:50 Page: 2
ID:rsxYZJtub8KKW?1gn8Gkl9zDucB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwVrCDoi754zJC2F

Vert: 3=-97 (F), 6=-97 (F), 15=-284 (F), 11=-284 (F),
8=-97 (F), 17=-97 (F), 18=-97 (F), 19=-97 (F),
21=-97 (F), 22=-97 (F), 23=-97 (F), 25=-97 (F),
26=-97 (F), 27=-97 (F), 29=-29 (F), 30=-29 (F),
31=-29 (F), 32=-29 (F), 33=-29 (F), 34=-29 (F),
35=-29 (F), 36=-29 (F), 37=-29 (F), 38=-29 (F)

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
R85979621
LEE'S SUMMIT, MISSOURI

01/07/2025

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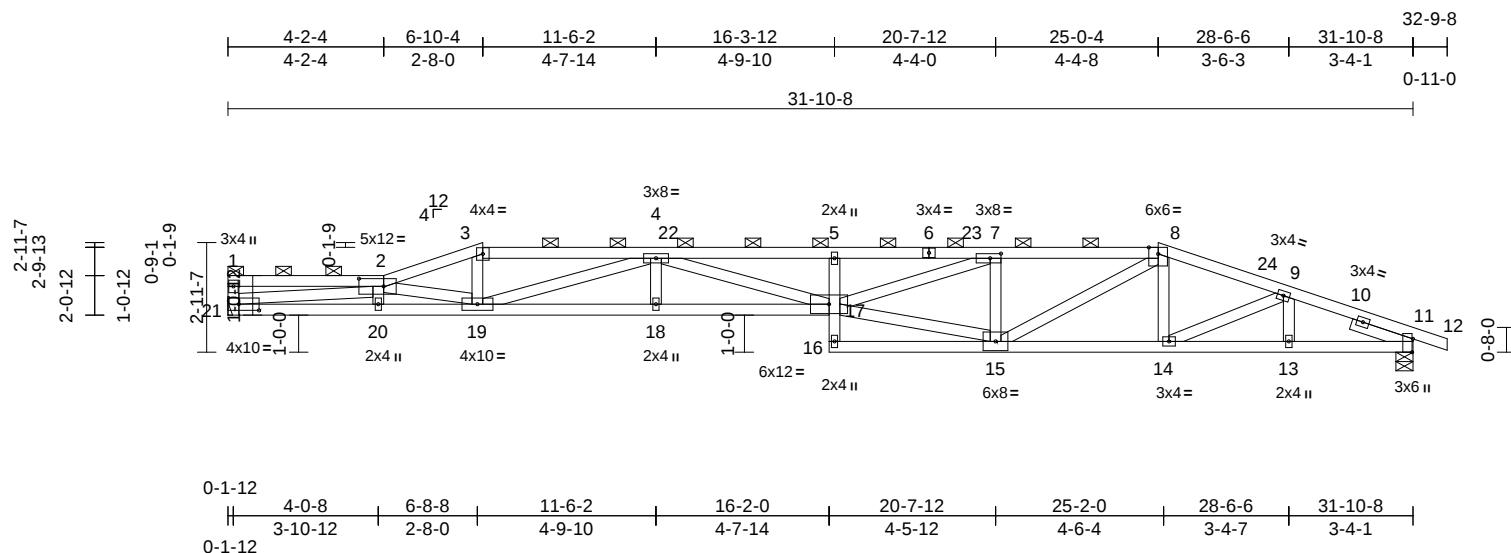
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A15	Roof Special	1	2	DEVELOPMENT SERVICES R85979622 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:49 Page: 1

ID: vHFX2BnPx17EdVfYLFQpmgzDs4-RfC?PsB70Hq3NSgPqnL8w3ulTXbGkWrCDol13423071

01/07/2025



Scale = 1:63.6

Plate Offsets (X, Y): [2:0-8-0,0-2-8], [7:0-3-8,0-1-8], [11:0-4-5,Edge], [21:0-6-8,0-2-0]

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	0.41	Vert(LL)	-0.48	17-18	>797	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.86	17-18	>440	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.16	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 252 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 21-17:2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
SLIDER	Right 2x4 SPF No.2 -- 1-8-11

BRACING

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

REACTIONS	(size) 11=0-5-8, 21= Mechanical
	Max Horiz 21=-74 (LC 13)
	Max Uplift 11=-343 (LC 9), 21=-301 (LC 8)
	Max Grav 11=1493 (LC 1), 21=1427 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-21=-216/106, 1-2=-482/120, 2-3=-5109/1236, 3-4=-4780/1176, 4-5=-7396/1702, 5-7=-7067/1635, 7-8=-4163/1029, 8-9=-3160/789, 9-11=-3037/748, 11-12=-4/0
BOT CHORD	20-21=-1360/5928, 19-20=-1380/5968, 18-19=-1512/6820, 17-18=-1512/6820, 16-17=0/92, 5-17=-278/132, 15-16=-123/563, 14-15=-650/2992, 13-14=-635/2728, 11-13=-635/2728
WEBS	2-21=-5564/1356, 2-19=-1153/319, 3-19=-237/1242, 8-14=-59/105, 4-17=-169/698, 4-19=-2268/509, 4-18=0/197, 7-15=-1447/399, 7-17=-681/3088, 8-15=-314/1408, 15-17=-802/3670, 2-20=-216/108, 9-14=-76/434, 9-13=-17/78

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 4-2-4, Interior (1) 4-2-4 to 6-10-4, Exterior(2R) 6-10-4 to 11-10-4, Interior (1) 11-10-4 to 25-0-4, Exterior(2R) 25-0-4 to 30-0-4, Interior (1) 30-0-4 to 32-9-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: , Joint 11 SPF No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 343 lb uplift at joint 11 and 301 lb uplift at joint 21.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27, 2024

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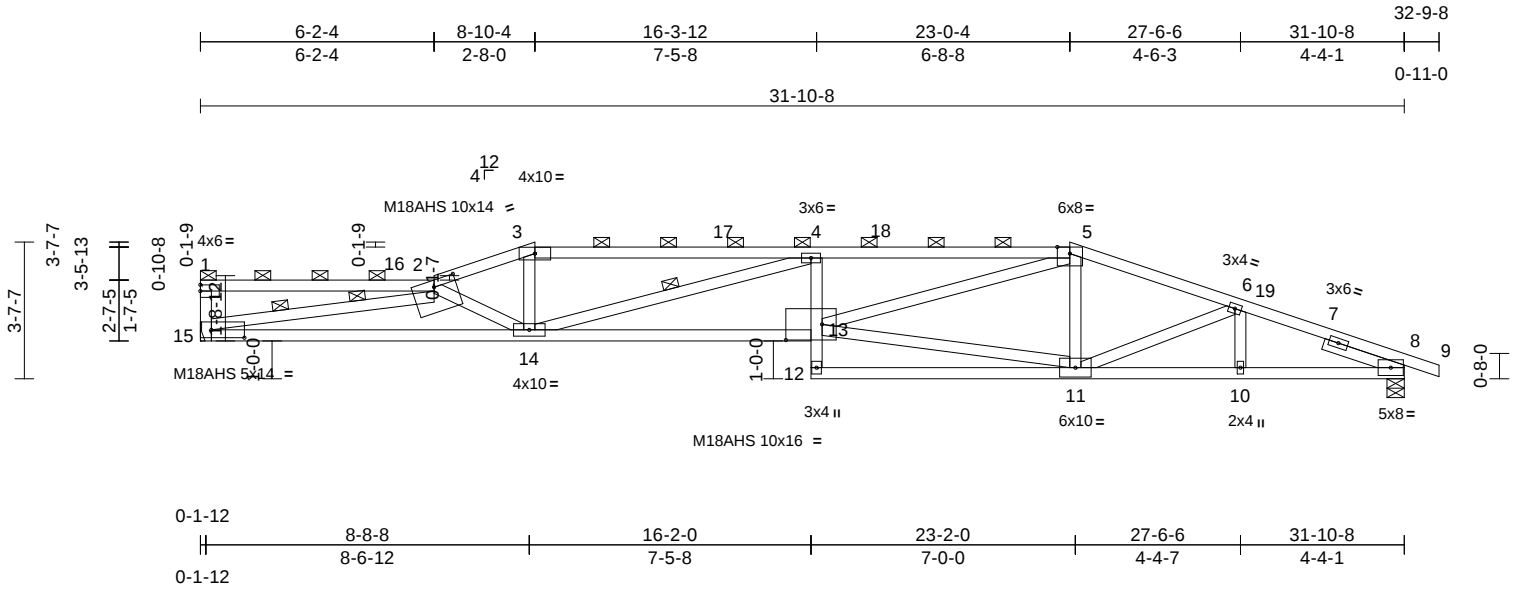
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A14	Roof Special	1	1	DEVELOPMENT SERVICES R85979623 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:49 Page: 1

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01/07/2025



Scale = 1:63.7

Plate Offsets (X, Y): [2:0-7-0,0-2-2], [8:0-0-5,0-3-5], [13:0-11-8,0-5-0], [15:0-10-8,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.60	13-14	>632	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-1.11	13-14	>342	180	M18AHS 142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.25	8	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 128 lb FT = 20%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 3-5:2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except* 15-13:2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2
SLIDER Right 2x4 SPF No.2 -- 2-2-12

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-0-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 1-2, 3-5.
BOT CHORD Rigid ceiling directly applied or 6-10-12 oc bracing.
WEBS 1 Row at midpt 4-14
WEBS 2 Rows at 1/3 pts 2-15

REACTIONS

(size) 8=0-5-8, 15= Mechanical
Max Horiz 15=-88 (LC 13)
Max Uplift 8=-334 (LC 9), 15=-294 (LC 8)
Max Grav 8=1493 (LC 1), 15=1427 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-242/138, 1-2=-235/62, 2-3=-4400/1051, 3-4=-4076/997, 4-5=-5550/1375, 5-6=-3036/760, 6-8=-3163/782, 8-9=-4/0
BOT CHORD 14-15=-1238/5239, 13-14=-1280/5717, 12-13=0/130, 4-13=-215/168, 11-12=-69/336, 10-11=-672/2862, 8-10=-672/2862
WEBS 2-15=-5152/1344, 2-14=-1271/426, 3-14=-178/1120, 4-14=-1884/490, 11-13=-550/2573, 5-13=-650/2782, 5-11=-316/151, 6-11=-32/237, 6-10=0/118

NOTES

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 8-10-4, Exterior(2R) 8-10-4 to 13-10-4, Interior (1) 13-10-4 to 23-0-4, Exterior(2R) 23-0-4 to 28-0-4, Interior (1) 28-0-4 to 32-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) 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 334 lb uplift at joint 8 and 294 lb uplift at joint 15.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27, 2024

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916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	A13	Roof Special	1	1	DEVELOPMENT SERVICES R85979624 LEE'S SUMMIT, MISSOURI
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. File Dec 27 12:46:48 Page: 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
01/07/2025

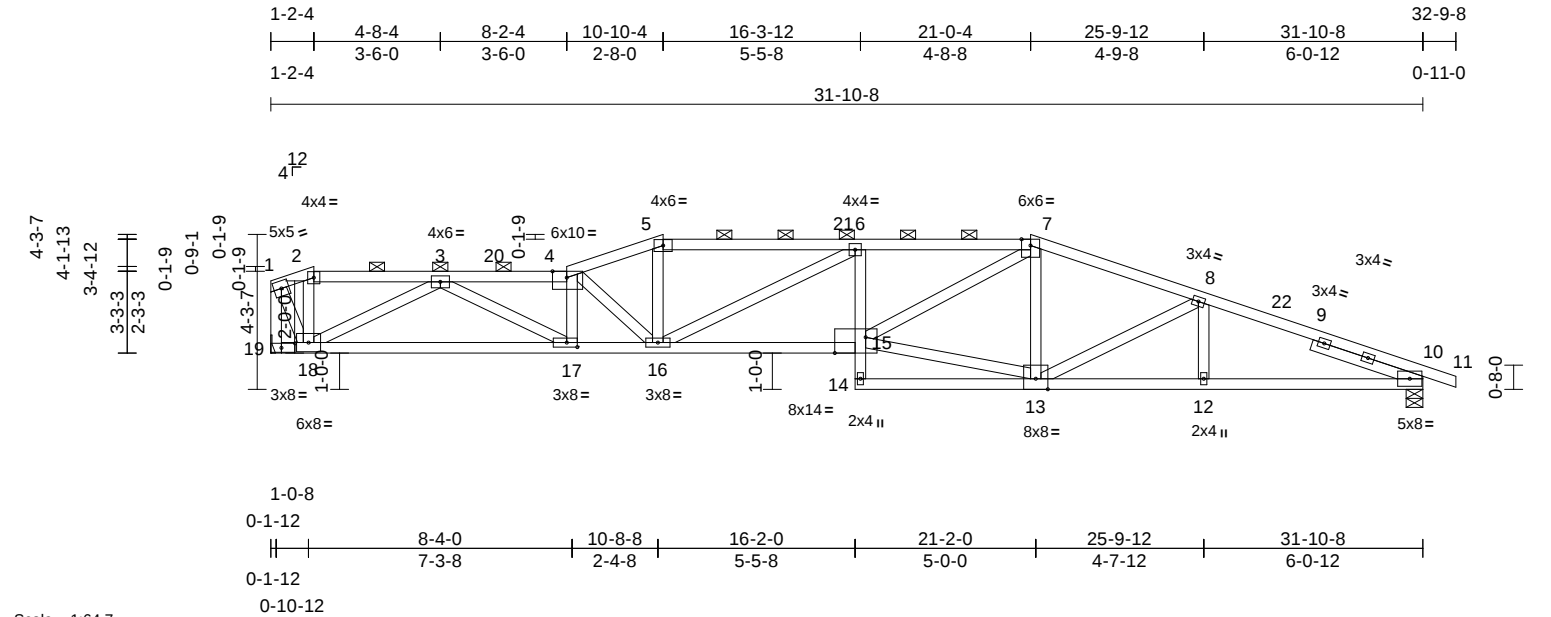


Plate Offsets (X, Y): [4:0-4-12,Edge], [10:0-0-5,0-3-5], [15:0-10-4,Edge], [17:0-3-8,0-1-8], [19:0-4-8,0-1-8]

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	0.73	Vert(LL)	-0.36	15-16	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.67	15-16	>565	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.19	10	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 *Except* 19-15:2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
SLIDER Right 2x4 SPF No.2 -- 3-2-9
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-3-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-5-3 max.): 2-4, 5-7.
BOT CHORD Rigid ceiling directly applied or 7-2-2 oc bracing.
REACTIONS (size) 10=0-5-8, 19= Mechanical
Max Horiz 19=-103 (LC 13)
Max Uplift 10=-323 (LC 9), 19=-286 (LC 8)
Max Grav 10=1493 (LC 1), 19=1427 (LC 1)
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-738/168, 2-3=-710/170, 3-4=-4290/1045, 4-5=-3755/948, 5-6=-3514/908, 6-7=-4211/1086, 7-8=-2816/738, 8-10=-3214/789, 10-11=-4/0, 1-19=-1496/310
BOT CHORD 18-19=-61/139, 17-18=-613/2807, 16-17=-890/4210, 15-16=-935/4261, 14-15=0/93, 6-15=-187/139, 13-14=-47/184, 12-13=-673/2924, 10-12=-673/2924
WEBS 2-18=0/100, 4-17=-721/233, 4-16=-884/202, 5-16=-168/927, 6-16=-1020/249, 13-15=-529/2534, 7-15=-410/1780, 7-13=-379/131, 8-13=-359/176, 8-12=0/208, 1-18=-302/1456, 3-17=-340/1659, 3-18=-2422/694

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 4-1-12 to 5-2-4, Exterior(2R) 5-2-4 to 10-2-4, Interior (1) 10-2-4 to 14-10-4, Exterior(2R) 14-10-4 to 19-10-4, Interior (1) 19-10-4 to 25-0-4, Exterior(2R) 25-0-4 to 29-9-12, Interior (1) 29-9-12 to 36-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Bearings are assumed to be: , Joint 10 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 323 lb uplift at joint 10 and 286 lb uplift at joint 19.
- 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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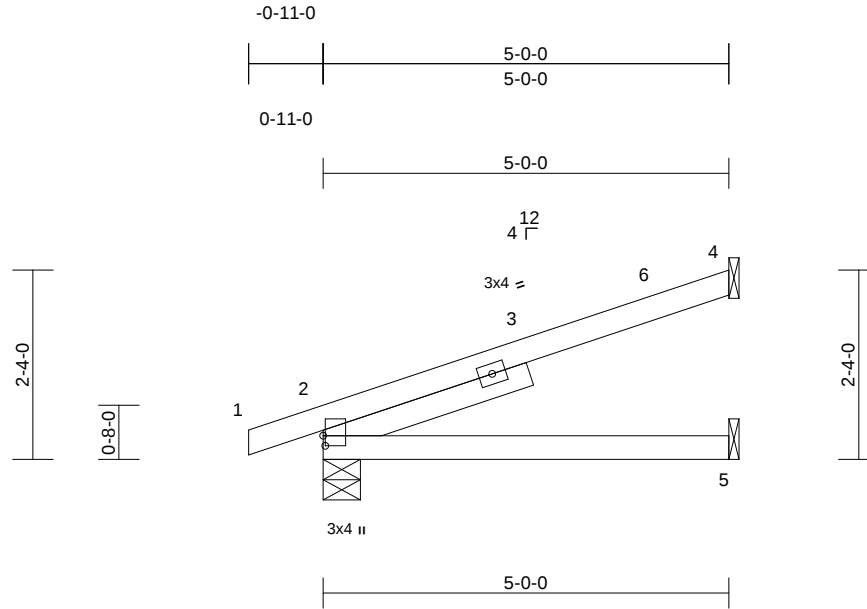
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J16	Jack-Open	12	1	DEVELOPMENT SERVICES R85979626 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:56 PM 2024 Page: 1
ID:TxNrG0ecV6T9DPK178kLAMzDuzk-RfC?PsB70Hq3NSgPqnL8w3ulTXbCKWrCDon7J423C2f

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
01/07/2025



Scale = 1:20.1									
Plate Offsets (X, Y): [2:0-1-8,0-0-5]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.04	2-5	>999
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.07	2-5	>831
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P					n/a
							Weight: 16 lb		
							FT = 20%		

LUMBER **LOAD CASE(S)** Standard

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 WW Stud -- 2-7-14

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-0 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=86 (LC 12)
Max Uplift 2=-77 (LC 8), 4=-94 (LC 12)
Max Grav 2=292 (LC 1), 4=167 (LC 1), 5=99 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4/0, 2-4=-90/55
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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 4-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 94 lb uplift at joint 4 and 77 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.



December 27, 2024

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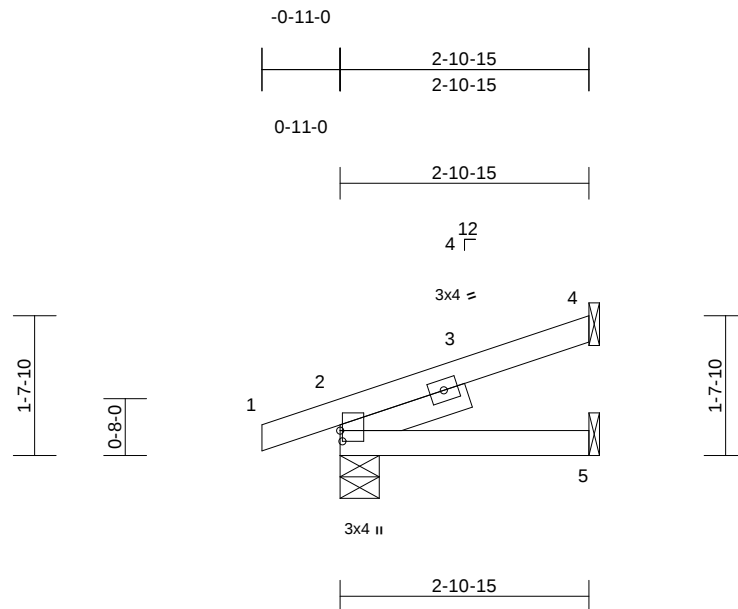
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Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J17	Jack-Open	4	1	DEVELOPMENT SERVICES R85979627 LEE'S SUMMIT, MISSOURI
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. File: Dec 27 12:46:56 Page: 1
ID: 7F6Nn7n8gozSfFFLf9fuzDuzY-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWCDoi7J4z3C

01/07/2025



Scale = 1:17.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	0.00	2-5	>999	240	MT20	169/123
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%

LUMBER

LOAD CASE(S) Standard

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 SLIDER Left 2x4 WW Stud -- 1-6-11

BRACING

TOP CHORD Structural wood sheathing directly applied or
 2-10-15 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=55 (LC 12)
 Max Uplift 2=-64 (LC 8), 4=-55 (LC 12)
 Max Grav 2=203 (LC 1), 4=89 (LC 1), 5=57
 (LC 3)

FORCES (lb) - Maximum Compression/Maximum
 Tension

TOP CHORD 1-2=-4/0, 2-4=-57/31
 BOT CHORD 2-5=0/0

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
 Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
 Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
 exterior zone and C-C Exterior(2E) zone; cantilever left
 and right exposed ; end vertical left and right exposed;C-
 C for members and forces & MWFRS for reactions
 shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom
 chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: , Joint 2 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 55 lb uplift at joint
 4 and 64 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.



December 27, 2024

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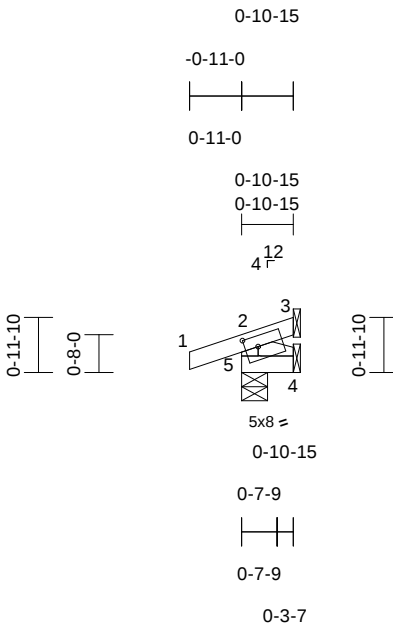
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J18	Jack-Open	4	1	DEVELOPMENT SERVICES R85979628 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:56 Page: 1
ID: 7F6Nn7n8gozSfFFl9fuzDuzY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWCDoi7J4z3Cg

01/07/2025



Scale = 1:22.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.00	Vert(CT)	0.00	5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	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

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

LOAD CASE(S) Standard

BRACING

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

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-5-8
 Max Horiz 5=25 (LC 11)
 Max Uplift 3=-26 (LC 1), 4=-10 (LC 8), 5=-79 (LC 8)
 Max Grav 3=26 (LC 8), 4=15 (LC 3), 5=161 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-165/182, 1-2=0/24, 2-3=-25/14
 BOT CHORD 4-5=-53/8
 WEBS 2-4=-9/61

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 5 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 79 lb uplift at joint 5, 10 lb uplift at joint 4 and 26 lb uplift at joint 3.



December 27, 2024

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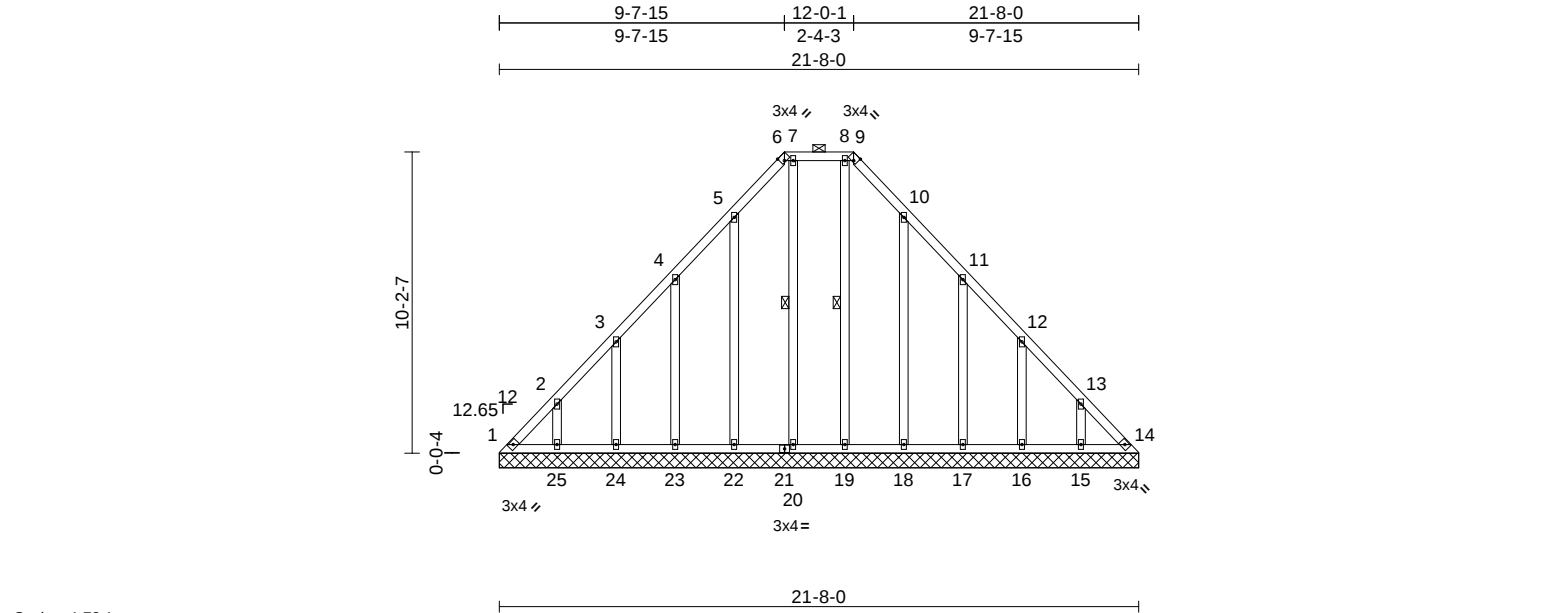
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989	AS NOTED FOR PLAN REVIEW Lot 209- 2750 SW 11th Terr DEVELOPMENT SERVICES R85979629 LEE'S SUMMIT, MISSOURI
241089-A	LG7	Lay-In Gable	1	1	Job Reference (optional)	

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:58 Page: 1

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01/07/2025



Scale = 1:72.1									
Plate Offsets (X, Y): [6:0-1-7,Edge], [9:0-1-7,Edge]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horiz(TL)	0.01	14	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
Weight: 123 lb FT = 20%									
PLATES MT20 GRIP 197/144									

LUMBER		BOT CHORD	1-25=-157/249, 24-25=-157/249, 23-24=-157/249, 22-23=-157/249, 20-22=-157/249, 19-20=-157/249, 18-19=-157/249, 17-18=-157/249, 16-17=-157/249, 15-16=-157/249, 14-15=-157/249	10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 137 lb uplift at joint 1, 82 lb uplift at joint 14, 138 lb uplift at joint 25, 135 lb uplift at joint 24, 143 lb uplift at joint 23, 121 lb uplift at joint 22, 27 lb uplift at joint 20, 117 lb uplift at joint 18, 145 lb uplift at joint 17, 134 lb uplift at joint 16 and 138 lb uplift at joint 15.
TOP CHORD	2x4 SPF No.2			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.
BOT CHORD	2x4 SPF No.2			12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
OTHERS	2x4 SPF No.2			LOAD CASE(S) Standard
BRACING		WEBS	2-25=-218/156, 3-24=-222/160, 4-23=-229/167, 5-22=-207/146, 7-20=-155/63, 8-19=-130/46, 10-18=-207/141, 11-17=-229/169, 12-16=-222/160, 13-15=-218/156	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-9.			
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.			
WEBS	1 Row at midpt 7-20, 8-19			
REACTIONS	(size)	NOTES	1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-1 to 5-4-1, Interior (1) 5-4-1 to 9-8-2, Exterior(2E) 9-8-2 to 12-0-5, Exterior(2R) 12-0-5 to 19-1-3, Interior (1) 19-1-3 to 21-4-6 zone; cantilever left and right exposed ; end 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 .	
Max Horiz	1=281 (LC 9)			
Max Uplift	1=-137 (LC 10), 14=-82 (LC 11), 15=-138 (LC 13), 16=-134 (LC 13), 17=-145 (LC 13), 18=-117 (LC 13), 20=-27 (LC 11), 22=-121 (LC 12), 23=-143 (LC 12), 24=-135 (LC 12), 25=-138 (LC 12)			
Max Grav	1=257 (LC 12), 14=220 (LC 13), 15=209 (LC 22), 16=206 (LC 22), 17=208 (LC 22), 18=205 (LC 22), 19=167 (LC 23), 20=192 (LC 24), 22=210 (LC 21), 23=206 (LC 21), 24=206 (LC 21), 25=209 (LC 21)			
FORCES	(lb) - Maximum Compression/Maximum Tension			
TOP CHORD	1-2=-372/249, 2-3=-245/201, 3-4=-175/151, 4-5=-156/174, 5-6=-226/234, 6-7=-178/183, 7-8=-178/183, 8-9=-178/183, 9-10=-226/220, 10-11=-156/125, 11-12=-119/75, 12-13=-195/125, 13-14=-322/208			



December 27,2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989
241089-A	LG5	Lay-In Gable	1	1	Job Reference (optional)

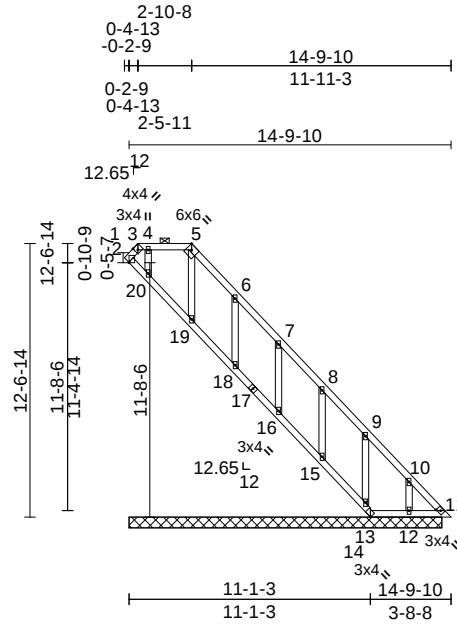
AS NOTED FOR PLAN REVIEW
 Lot 209- 2750 SW 11th Terr
 DEVELOPMENT SERVICES
 R85979630
 LEE'S SUMMIT, MISSOURI

Direct Lumber of Colorado, Denver, CO - 80221,

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. File: Dec 27 12:46:58 Page: 1

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01/07/2025



Scale = 1:76.4

Plate Offsets (X, Y): [3:0-1-7,Edge], [5:0-2-9,Edge], [11:0-2-1,0-1-8]

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.01	11	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 68 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.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 2-20,16-18.

REACTIONS

(size)	2=14-4-9, 11=14-4-9, 12=14-4-9, 13=14-4-9, 14=14-4-9, 15=14-4-9, 16=14-4-9, 18=14-4-9, 19=14-4-9, 20=14-4-9
Max Horiz	2=-524 (LC 13)
Max Uplift	2=-152 (LC 13), 11=-43 (LC 11), 12=-138 (LC 13), 13=-270 (LC 13), 14=-96 (LC 13), 15=-135 (LC 13), 16=-137 (LC 13), 18=-144 (LC 13), 19=-29 (LC 11), 20=-153 (LC 11)
Max Grav	2=68 (LC 11), 11=190 (LC 13), 12=207 (LC 22), 13=103 (LC 11), 14=194 (LC 22), 15=207 (LC 22), 16=204 (LC 22), 18=217 (LC 22), 19=252 (LC 24), 20=412 (LC 13)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-7/0, 2-3=-271/339, 3-4=-265/317, 4-5=-265/317, 5-6=-349/407, 6-7=-231/266, 7-8=-126/132, 8-9=-57/45, 9-10=-153/129, 10-11=-279/235
BOT CHORD	2-20=-195/230, 19-20=-275/330, 18-19=-270/325, 16-18=-271/326, 15-16=-271/325, 14-15=-271/327, 13-14=-272/359, 12-13=-176/218, 11-12=-176/218

WEBS

5-19=-222/117, 4-20=-267/138, 6-18=-242/170, 7-16=-227/160, 8-15=-229/160, 9-14=-230/161, 10-12=-222/154
--

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-3 to 3-1-1, Exterior(2R) 3-1-1 to 10-1-15, Interior (1) 10-1-15 to 14-8-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 (II) MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SPF No.2.
- Bearing at joint(s) 2, 19, 20, 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 11, 152 lb uplift at joint 2, 270 lb uplift at joint 13, 29 lb uplift at joint 19, 153 lb uplift at joint 20, 144 lb uplift at joint 18, 137 lb uplift at joint 16, 135 lb uplift at joint 15, 96 lb uplift at joint 14 and 138 lb uplift at joint 12.
- Non Standard bearing condition. Review required.

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

December 27, 2024

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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	CG5	Diagonal Hip Girder	2	1	Job Reference (optional)

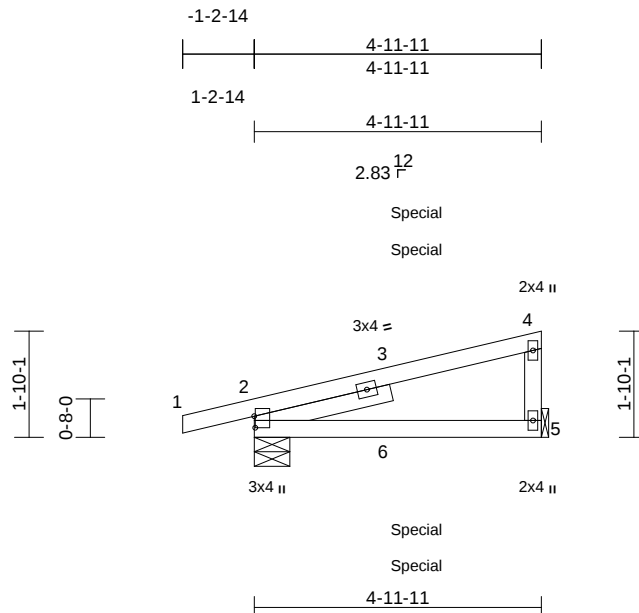
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
R85979632
LEE'S SUMMIT, MISSOURI

Direct Lumber of Colorado, Denver, CO - 80221,

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01/07/2025



Scale = 1:21.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.03	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.07	2-5	>890	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: 17 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 -- 2-5-1

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-11-11 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=67 (LC 9)
Max Uplift 2=-107 (LC 8), 5=-49 (LC 12)
Max Grav 2=315 (LC 1), 5=206 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-6/0, 2-4=-89/56, 4-5=-165/205
BOT CHORD 2-5=-31/34

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 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 49 lb uplift at joint
5 and 107 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 50 lb up at 2-2-13, and 15 lb down and 51 lb
up at 2-2-13 on top chord, and at 2-2-13, and at
2-2-13 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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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

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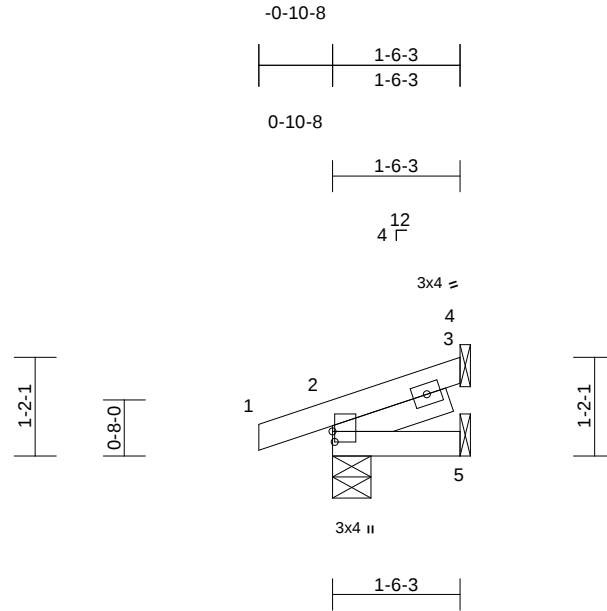
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Roseville, CA 95661
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Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J19	Jack-Open	2	1	DEVELOPMENT SERVICES R85979633 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

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01/07/2025



Scale = 1:15.6

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	0.02	Vert(CT)	0.00	2-5	>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-P							Weight: 6 lb	FT = 20%

LUMBER

LOAD CASE(S) Standard

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

BRACING

TOP CHORD Structural wood sheathing directly applied or
 1-6-3 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
 bracing.

REACTIONS (size) 2=0-5-8, 3= Mechanical, 5=
 Mechanical
 Max Horiz 2=35 (LC 12)
 Max Uplift 2=-56 (LC 8), 3=-28 (LC 12)
 Max Grav 2=147 (LC 1), 3=35 (LC 1), 5=30
 (LC 3)

FORCES (lb) - Maximum Compression/Maximum
 Tension

TOP CHORD 1-2=-5/0, 2-3=-41/24, 3-4=0/0
 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 56 lb uplift at joint
 2 and 28 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.



December 27, 2024

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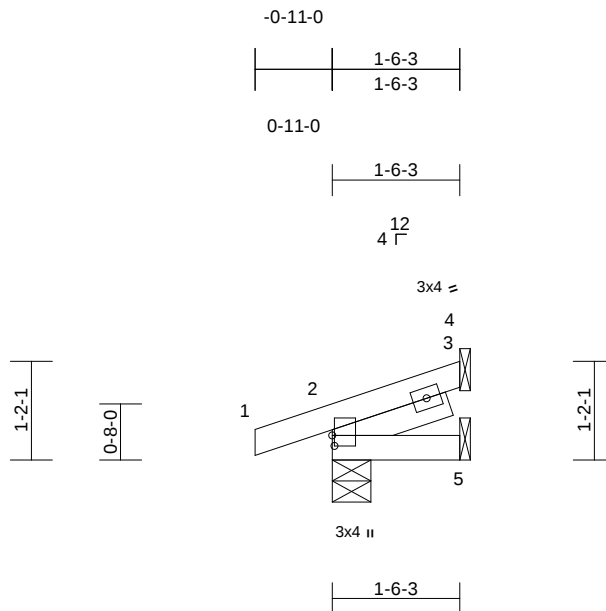
Job	Truss	Truss Type	Qty	Ply	Clayton Builder-P240989-Lot 209- 2750 SW 11th Terr
241089-A	J20	Jack-Open	2	1	DEVELOPMENT SERVICES R85979634 LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Direct Lumber of Colorado, Denver, CO - 80221,

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01/07/2025



Scale = 1:15.6

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	0.02	Vert(CT)	0.00	2-5	>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-P							Weight: 6 lb	FT = 20%

LUMBER

LOAD CASE(S) Standard

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

BRACING

TOP CHORD Structural wood sheathing directly applied or
 1-6-3 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
 bracing.

REACTIONS (size) 2=0-5-8, 3= Mechanical, 5=
 Mechanical
 Max Horiz 2=36 (LC 12)
 Max Uplift 2=-59 (LC 8), 3=-28 (LC 12)
 Max Grav 2=151 (LC 1), 3=33 (LC 1), 5=30
 (LC 3)

FORCES(lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-2=-4/0, 2-3=-40/23, 3-4=0/0
 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 59 lb uplift at joint
 2 and 28 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.



December 27, 2024

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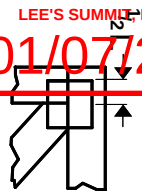
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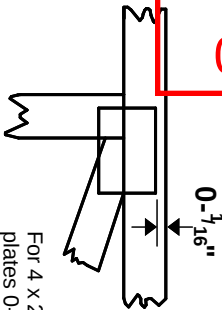
01/07/2025

25 Symbols

STATE 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- $\frac{1}{16}$ " 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

4x4

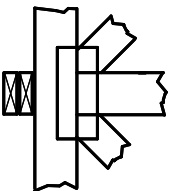
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

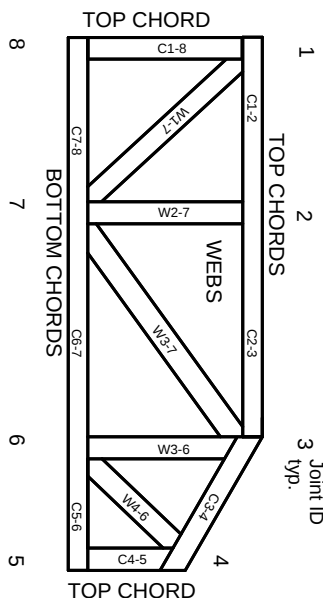


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI-1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraint & 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 ANS/TP1 section 6.3. These truss designs rely on lumber values established by others.

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 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 BCSP.
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.