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

Re: 5134327 Bid

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource (Arlington, WA).

Pages or sheets covered by this seal: R91546238 thru R91546264

My license renewal date for the state of Washington is September 28, 2027.

December 4,2025

Zhao, Xiaoming

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

Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F01	Floor	6	1	R91546238
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:38
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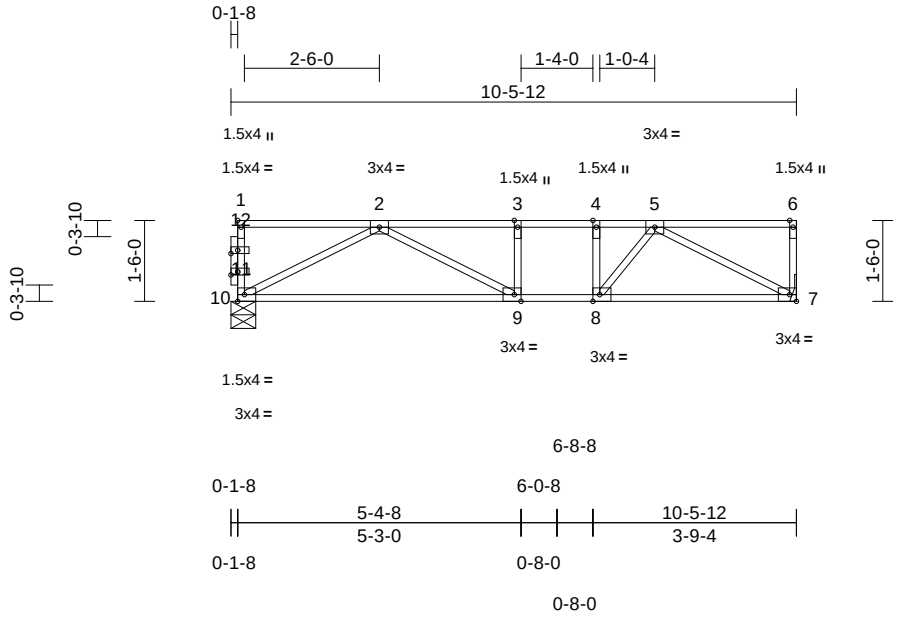

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Plate Offsets (X, Y): [1:Edge,0-0-12], [8:0-1-8,Edge], [9:0-1-8,Edge], [11:0-1-8,0-0-12], [12:0-1-8,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.51	Vert(LL)	-0.11	9-10	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.44	Vert(CT)	-0.20	9-10	>611	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 43 lb	FT = 0%F, 10%E

LUMBER

TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

BRACING

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

REACTIONS (size) 7= Mechanical, 10=0-5-8
Max Grav 7=563 (LC 1), 10=563 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-10=-96/0, 6-7=-109/0, 1-2=0/0, 2-3=-1034/0, 3-4=-1034/0, 4-5=-1034/0, 5-6=0/0
BOT CHORD 9-10=0/821, 8-9=0/1034, 7-8=0/830
WEBS 3-9=-109/0, 4-8=-270/0, 2-10=-931/0, 2-9=0/335, 5-7=-942/0, 5-8=0/447

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

December 4,2025

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Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F02	Floor Supported Gable	1	1	R91546239
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:39 Page: 1
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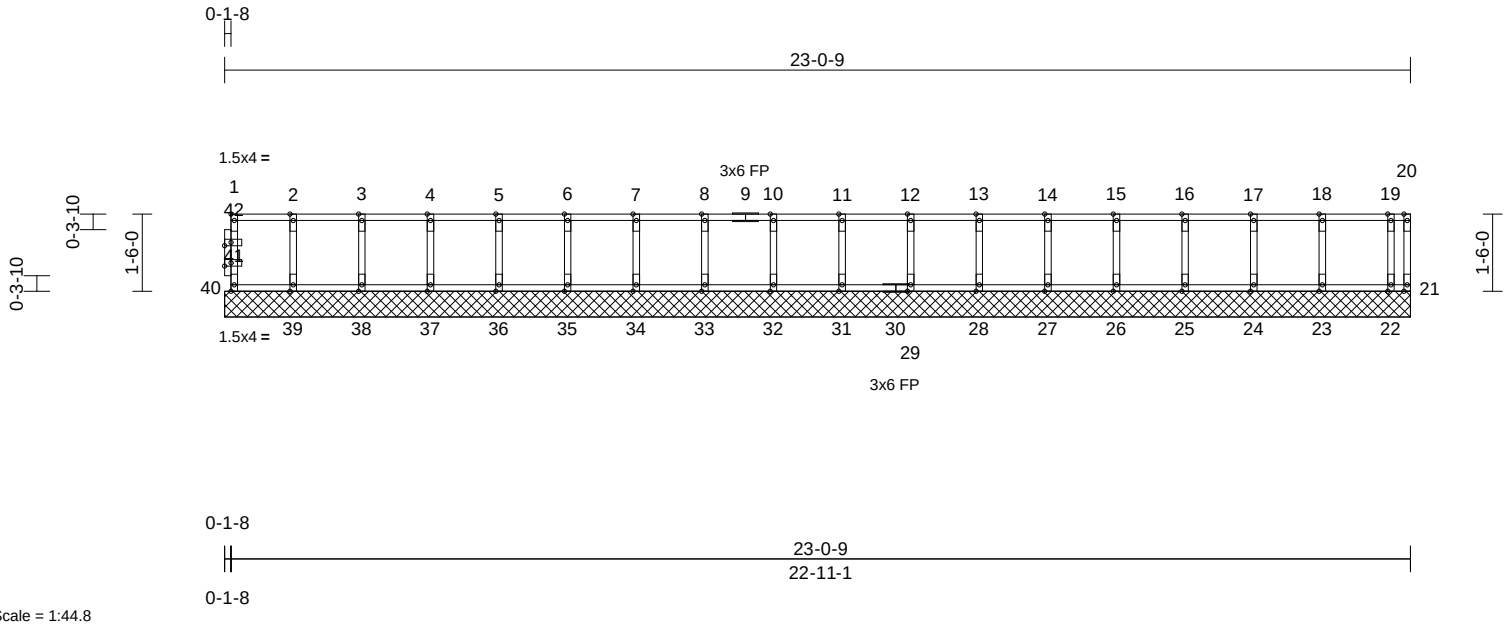

Scale = 1:44.8

Plate Offsets (X, Y): [1:Edge,0-0-12], [40:Edge,0-0-12], [41:0-1-8,0-0-12], [42:0-1-8,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	21	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 82 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

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

REACTIONS (size) 21=23-0-9, 22=23-0-9, 23=23-0-9, 24=23-0-9, 25=23-0-9, 26=23-0-9, 27=23-0-9, 28=23-0-9, 29=23-0-9, 31=23-0-9, 32=23-0-9, 33=23-0-9, 34=23-0-9, 35=23-0-9, 36=23-0-9, 37=23-0-9, 38=23-0-9, 39=23-0-9, 40=23-0-9
Max Uplift 21=-5 (LC 1)
Max Grav 21=-5 (LC 1), 22=108 (LC 1), 23=152 (LC 1), 24=145 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=147 (LC 1), 31=147 (LC 1), 32=147 (LC 1), 33=147 (LC 1), 34=147 (LC 1), 35=147 (LC 1), 36=147 (LC 1), 37=147 (LC 1), 38=147 (LC 1), 39=146 (LC 1), 40=53 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-40=-49/0, 20-21=0/10, 1-2=-3/0, 2-3=-3/0, 3-4=-3/0, 4-5=-3/0, 5-6=-3/0, 6-7=-3/0, 7-8=-3/0, 8-10=-3/0, 10-11=-3/0, 11-12=-3/0, 12-13=-3/0, 13-14=-3/0, 14-15=-3/0, 15-16=-3/0, 16-17=-3/0, 17-18=-3/0, 18-19=-3/0, 19-20=-3/0
BOT CHORD 39-40=0/3, 38-39=0/3, 37-38=0/3, 36-37=0/3, 35-36=0/3, 34-35=0/3, 33-34=0/3, 32-33=0/3, 31-32=0/3, 29-31=0/3, 28-29=0/3, 27-28=0/3, 26-27=0/3, 25-26=0/3, 24-25=0/3, 23-24=0/3, 22-23=0/3, 21-22=0/3
WEBS 2-39=-132/0, 3-38=-134/0, 4-37=-133/0, 5-36=-133/0, 6-35=-133/0, 7-34=-133/0, 8-33=-133/0, 10-32=-133/0, 11-31=-133/0, 12-29=-133/0, 13-28=-133/0, 14-27=-133/0, 15-26=-133/0, 16-25=-134/0, 17-24=-132/0, 18-23=-138/0, 19-22=-104/0

NOTES
1) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 21.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

December 4,2025

MiTek®
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Roseville, CA 95661
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Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F03	Floor	4	1	R91546240
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

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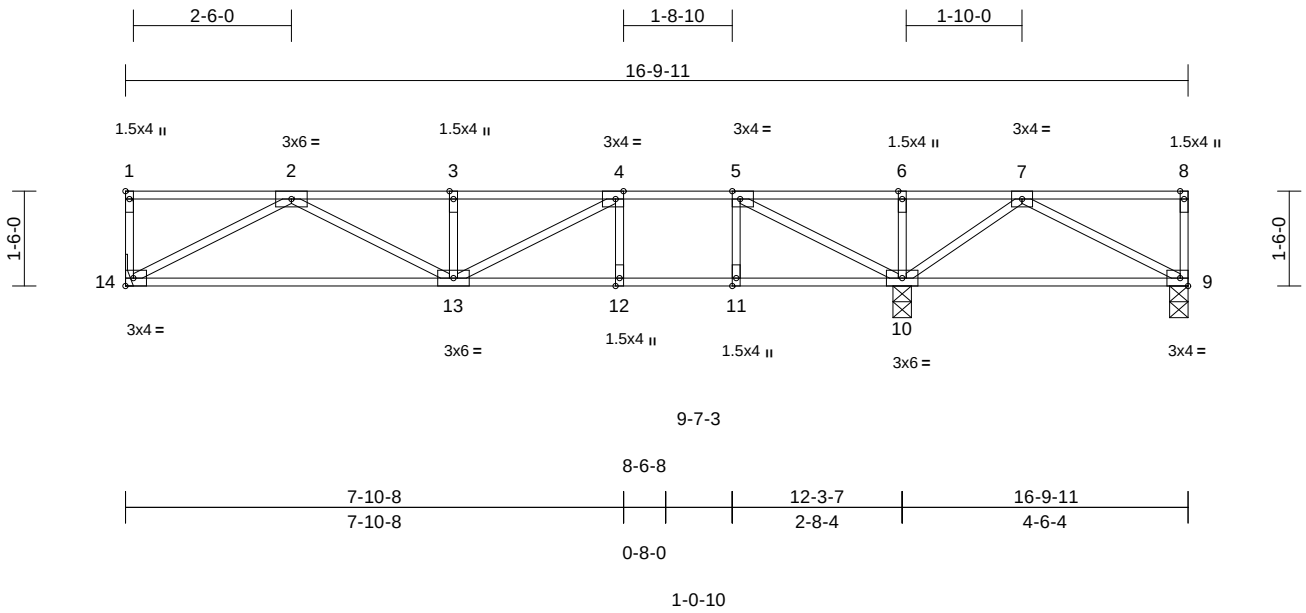

9-7-3

8-6-8

7-10-8	12-3-7	16-9-11
7-10-8	2-8-4	4-6-4

0-8-0

1-0-10

Scale = 1:36.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.78	Vert(LL)	-0.22	12-13	>669	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.77	Vert(CT)	-0.29	12-13	>502	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 70 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 DF 1800F 1.6E(flat)
WEBS 2x4 HF No.2(flat)

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

REACTIONS (size) 9=0-3-8, 10=0-3-8, 14= Mechanical
Max Grav 9=437 (LC 7), 10=753 (LC 8), 14=722 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-105/0, 8-9=-106/0, 1-2=0/0, 2-3=-1724/0, 3-4=-1724/0, 4-5=-1538/0, 5-6=-606/42, 6-7=-606/42, 7-8=0/0
BOT CHORD 13-14=0/1116, 12-13=0/1538, 11-12=0/1538, 10-11=0/1538, 9-10=0/582
WEBS 6-10=-197/0, 7-9=-661/0, 7-10=-274/190, 4-12=-180/0, 5-11=0/209, 2-14=-1266/0, 2-13=0/690, 3-13=-320/0, 4-13=-17/228, 5-10=-1232/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

December 4,2025

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Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F04	Floor	1	1	R91546241
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

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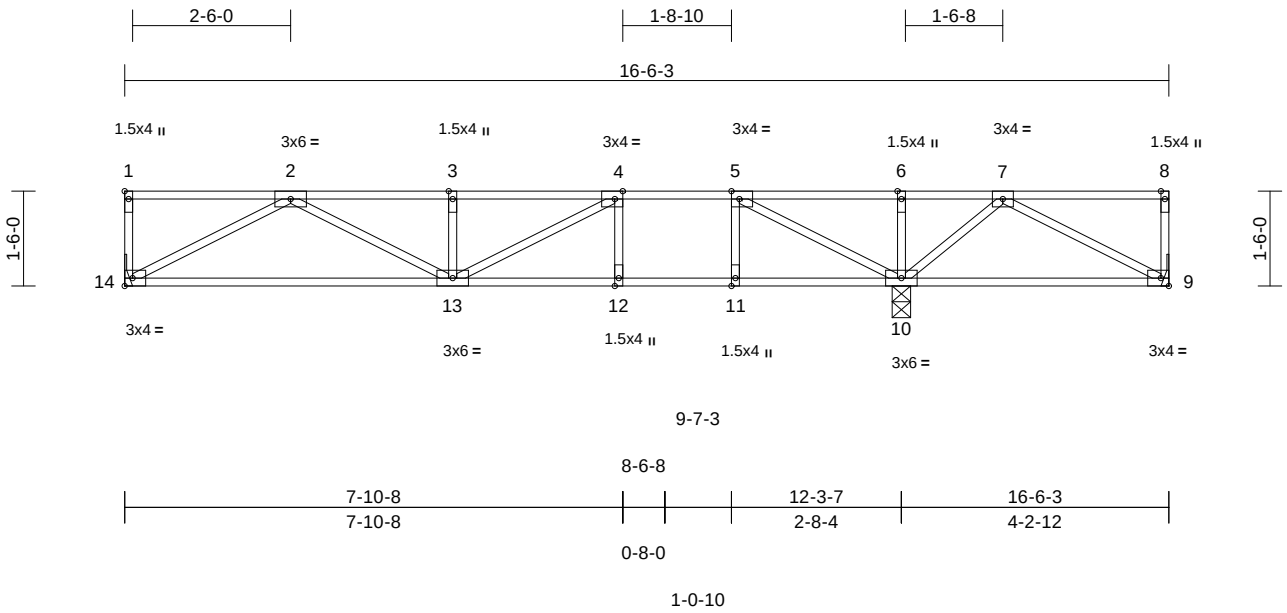

Scale = 1:36.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.91	Vert(LL)	-0.22	12-13	>672	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.29	12-13	>504	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 69 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 DF 1800F 1.6E(flat)
WEBS 2x4 HF No.2(flat)

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

REACTIONS (size) 9= Mechanical, 10=0-3-8, 14= Mechanical
Max Grav 9=435 (LC 11), 10=740 (LC 12), 14=722 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-105/0, 8-9=-106/0, 1-2=0/0, 2-3=-1725/0, 3-4=-1725/0, 4-5=-1540/0, 5-6=-599/48, 6-7=-599/48, 7-8=0/0
BOT CHORD 13-14=0/1116, 12-13=0/1540, 11-12=0/1540, 10-11=0/1540, 9-10=0/577
WEBS 4-12=-179/0, 5-11=0/210, 6-10=-177/6, 2-14=-1267/0, 2-13=0/691, 3-13=-319/0, 4-13=-17/227, 5-10=-1238/0, 7-9=-654/0, 7-10=-256/186

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Load case(s) 1, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 9-14=-10, 1-8=-100
3) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Plt. metal=0.90
Uniform Loads (lb/ft)
Vert: 9-14=-10, 1-8=-20

December 4,2025

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Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F05	Floor	1	1	R91546242
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

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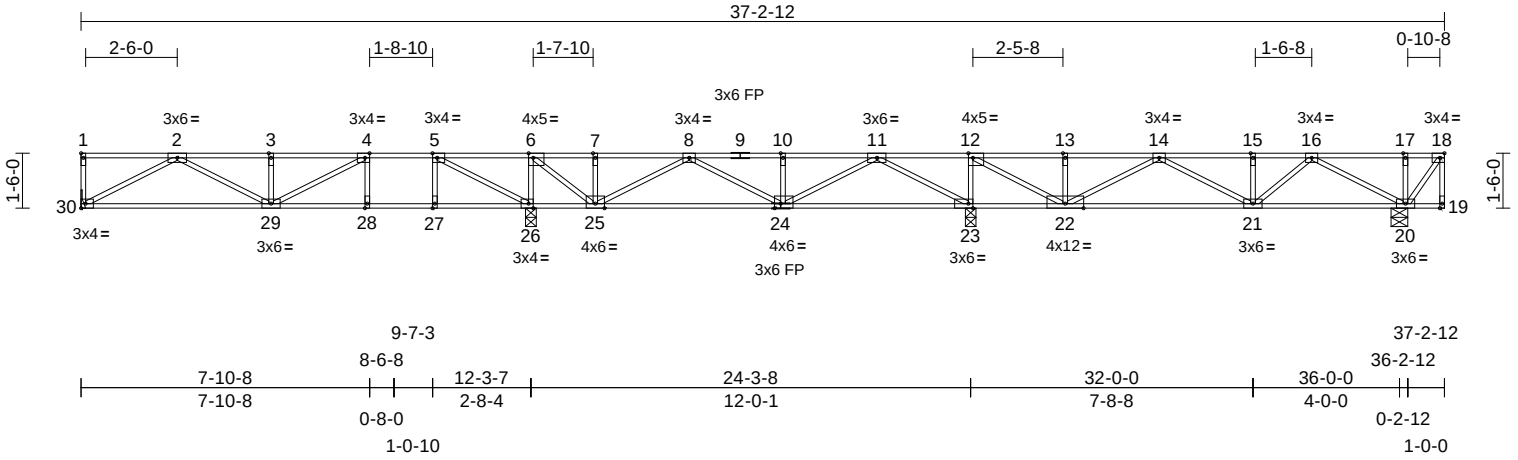
Page: 1



Scale = 1:62.9

Plate Offsets (X, Y): [1:Edge,0-0-12], [4:0-1-8,Edge], [5:0-1-8,Edge], [6:0-1-8,Edge], [12:0-1-8,Edge], [18:0-1-8,Edge], [23:0-1-8,Edge], [24:0-2-0,Edge], [26:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.99	Vert(LL)	-0.24	28-29	>618	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.32	28-29	>465	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.32	Horz(CT)	0.03	20	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 153 lb	FT = 0%F, 10%E

LUMBER

TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat) *Except* 24-30:2x4 DF 1800F 1.6E(flat)
WEBS 2x4 HF No.2(flat)

BRACING

TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 20=0-5-8, 23=0-3-8, 26=0-3-8, 30=Mechanical
Max Grav 20=1028 (LC 7), 23=1599 (LC 20), 26=1240 (LC 5), 30=712 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-30=-105/0, 18-19=-7/0, 1-2=0/0, 2-3=-1687/0, 3-4=-1687/0, 4-5=-1476/0, 5-6=-338/331, 6-7=-809/0, 7-8=-809/0, 8-10=-1047/0, 10-11=-1059/0, 11-12=0/1171, 12-13=-365/364, 13-14=-365/364, 14-15=-884/51, 15-16=-884/51, 16-17=0/301, 17-18=0/301
BOT CHORD 29-30=0/1097, 28-29=0/1476, 27-28=0/1476, 26-27=0/1476, 25-26=-331/338, 23-25=-317/1110, 22-23=-1171/0, 21-22=-153/870, 20-21=-115/615, 19-20=0/0
WEBS 6-26=-684/0, 12-23=-885/0, 15-21=-199/0, 17-20=-237/0, 18-20=-512/0, 4-28=-214/0, 5-27=0/257, 2-30=-1245/0, 2-29=0/669, 3-29=-329/0, 4-29=0/351, 5-26=-1389/0, 11-23=-1421/0, 11-24=0/906, 10-24=-255/0, 8-24=-237/12, 8-25=-568/111, 7-25=-254/0, 6-25=0/892, 14-21=-13/139, 14-22=-707/0, 13-22=-264/0, 12-22=0/1312, 16-20=-940/0, 16-21=0/370

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) Load case(s) 1, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 19-30=-10, 1-18=-100
Concentrated Loads (lb)
Vert: 18=-320
3) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Plt. metal=0.90
Uniform Loads (lb/ft)
Vert: 19-30=-10, 1-18=-20
Concentrated Loads (lb)
Vert: 18=-420

December 4,2025

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Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F06	Floor	1	1	R91546243
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:40 Page: 1
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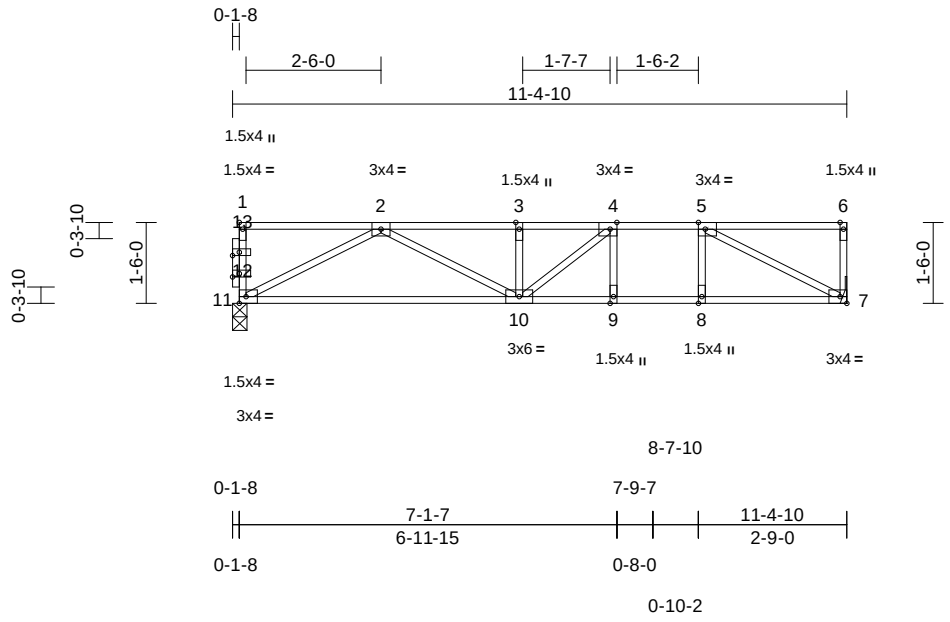


Scale = 1:42.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.70	Vert(LL)	-0.16	9-10	>844	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.86	Vert(CT)	-0.20	9-10	>661	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 47 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

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

REACTIONS (size) 7= Mechanical, 11=0-3-3
Max Grav 7=612 (LC 1), 11=612 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-11=-103/0, 6-7=-105/15, 1-2=0/0, 2-3=-1296/0, 3-4=-1296/0, 4-5=-1043/0, 5-6=0/0
BOT CHORD 10-11=0/913, 9-10=0/1043, 8-9=0/1043, 7-8=0/1043
WEBS 4-9=-205/0, 5-8=0/190, 2-11=-1037/0, 2-10=0/435, 3-10=-304/0, 4-10=-32/407, 5-7=-1178/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.

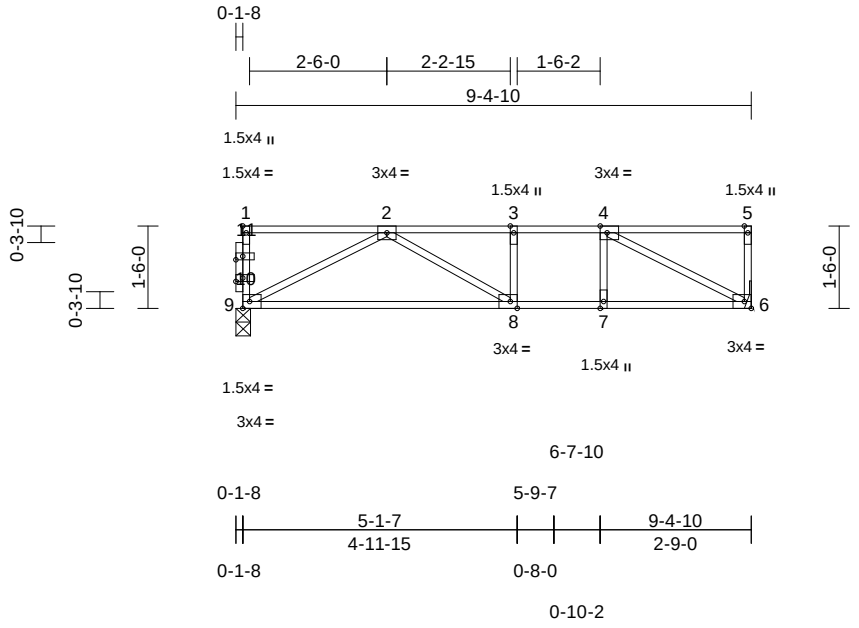
LOAD CASE(S) Standard

December 4,2025

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

Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F07	Floor	1	1	R91546244
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:41 Page: 1
ID:2C6F9vU4HVHlyhXzzosokmyCyGf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:42

Plate Offsets (X, Y): [1:Edge,0-0-12], [4:0-1-8,Edge], [8:0-1-8,Edge], [10:0-1-8,0-0-12], [11:0-1-8,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.57	Vert(LL)	-0.14	8-9	>775	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.56	Vert(CT)	-0.23	8-9	>476	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 38 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

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

REACTIONS (size) 6= Mechanical, 9=0-3-3
Max Grav 6=502 (LC 1), 9=502 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-9=-97/0, 5-6=-108/9, 1-2=0/0, 2-3=-794/0, 3-4=-794/0, 4-5=0/0
BOT CHORD 8-9=0/706, 7-8=0/794, 6-7=0/794
WEBS 3-8=-67/0, 4-7=0/108, 2-9=-802/0, 2-8=0/233, 4-6=-897/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

December 4,2025

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Roseville, CA 95661
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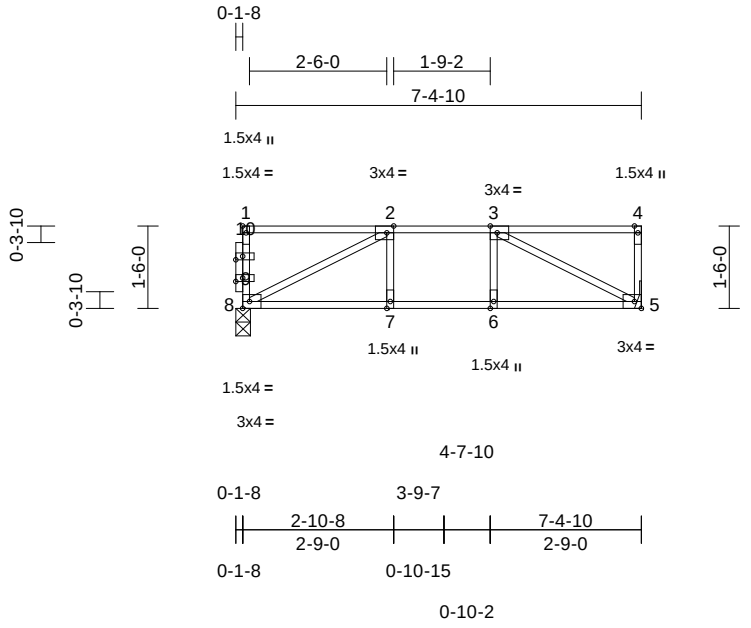
Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F08	Floor	1	1	R91546245
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:41 Page: 1
ID:xnx2ij8aKODy28EYirMiTMyCyFo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:42

Plate Offsets (X, Y): [1:Edge,0-0-12], [2:0-1-8,Edge], [3:0-1-8,Edge], [9:0-1-8,0-0-12], [10:0-1-8,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.40	Vert(LL)	-0.05	5-6	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.29	Vert(CT)	-0.05	5-6	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	5	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 30 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

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

REACTIONS (size) 5= Mechanical, 8=0-3-3
Max Grav 5=392 (LC 1), 8=392 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-119/0, 4-5=-119/0, 1-2=0/0, 2-3=-516/0, 3-4=0/0
BOT CHORD 7-8=0/516, 6-7=0/516, 5-6=0/516
WEBS 2-7=-20/69, 3-6=-20/69, 2-8=-582/0, 3-5=-582/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

December 4,2025

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Roseville, CA 95661
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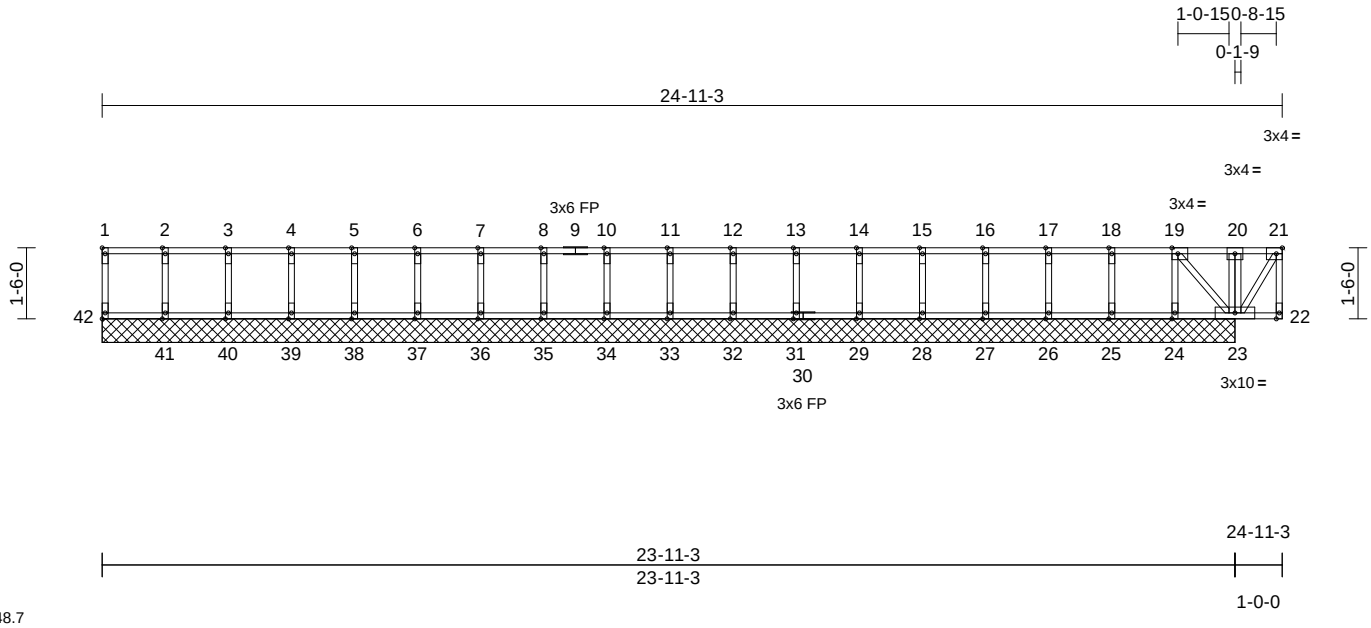
Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F09	Floor Supported Gable	1	1	R91546246
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:41 Page: 1
ID:rXzFn1SNL4HsSULFOTHUjeyCyCp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:48.7

Plate Offsets (X, Y): [1:Edge,0-0-12], [19:0-1-8,Edge], [21:0-1-8,Edge], [42:Edge,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horiz(TL)	0.00	23	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 92 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

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

REACTIONS (size) 23=23-11-3, 24=23-11-3, 25=23-11-3, 26=23-11-3, 27=23-11-3, 28=23-11-3, 29=23-11-3, 31=23-11-3, 32=23-11-3, 33=23-11-3, 34=23-11-3, 35=23-11-3, 36=23-11-3, 37=23-11-3, 38=23-11-3, 39=23-11-3, 40=23-11-3, 41=23-11-3, 42=23-11-3
Max Uplift 24=-43 (LC 10)
Max Grav 23=384 (LC 4), 24=104 (LC 5), 25=148 (LC 1), 26=147 (LC 5), 27=147 (LC 1), 28=147 (LC 5), 29=147 (LC 1), 31=147 (LC 5), 32=147 (LC 1), 33=147 (LC 5), 34=147 (LC 1), 35=147 (LC 5), 36=147 (LC 1), 37=147 (LC 1), 38=146 (LC 1), 39=148 (LC 1), 40=143 (LC 1), 41=161 (LC 1), 42=55 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-42=-50/0, 21-22=0/2, 1-2=0/0, 2-3=0/0, 3-4=0/0, 4-5=0/0, 5-6=0/0, 6-7=0/0, 7-8=0/0, 8-10=0/0, 10-11=0/0, 11-12=0/0, 12-13=0/0, 13-14=0/0, 14-15=0/0, 15-16=0/0, 16-17=0/0, 17-18=0/0, 18-19=0/0, 19-20=0/68, 20-21=0/68
BOT CHORD 41-42=0/0, 40-41=0/0, 39-40=0/0, 38-39=0/0, 37-38=0/0, 36-37=0/0, 35-36=0/0, 34-35=0/0, 33-34=0/0, 32-33=0/0, 31-32=0/0, 29-31=0/0, 28-29=0/0, 27-28=0/0, 26-27=0/0, 25-26=0/0, 24-25=0/0, 23-24=0/0, 22-23=0/0
WEBS 20-23=-207/0, 2-41=-146/0, 3-40=-130/0, 4-39=-134/0, 5-38=-133/0, 6-37=-133/0, 7-36=-133/0, 8-35=-133/0, 10-34=-133/0, 11-33=-133/0, 12-32=-133/0, 13-31=-133/0, 14-29=-133/0, 15-28=-133/0, 16-27=-133/0, 17-26=-133/0, 18-25=-134/0, 19-24=-91/55, 21-23=-127/0, 19-23=-97/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 24.
6) n/a
7) Load case(s) 1, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
8) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
9) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 22-42=-10, 1-20=-100, 20-21=-260
3) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Plt. metal=0.90
Uniform Loads (lb/ft)
Vert: 22-42=-10, 1-20=-20, 20-21=-230

December 4,2025

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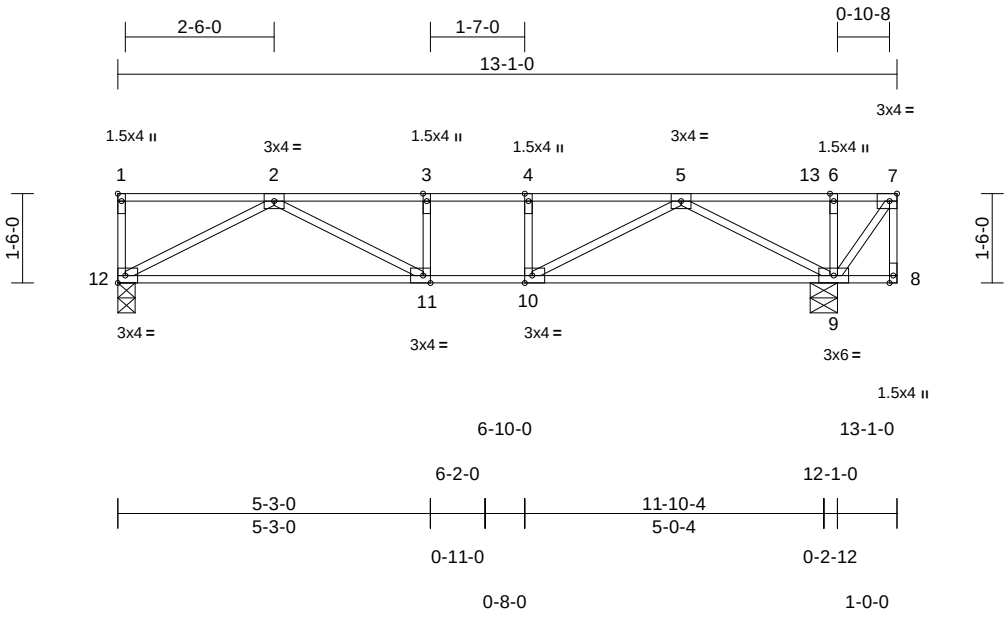
Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F10	Floor	5	1	R91546247
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:41 Page: 1
ID:Fr7yrFIbenWrnLGZZX1C8hyCyD1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:38.7

Plate Offsets (X, Y): [1:Edge,0-0-12], [7:0-1-8,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.58	Vert(LL)	-0.13	11-12	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.57	Vert(CT)	-0.24	11-12	>608	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.24	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 53 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)

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

REACTIONS (size) 9=0-5-8, 12=0-3-8
Max Grav 9=1119 (LC 1), 12=629 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-12=-99/0, 7-8=-29/0, 1-2=0/0, 2-3=-1312/0, 3-4=-1312/0, 4-5=-1312/0, 5-6=0/299, 6-7=0/299
BOT CHORD 11-12=0/944, 10-11=0/1312, 9-10=0/798, 8-9=0/0
WEBS 6-9=-223/0, 7-9=-508/0, 4-10=-238/0, 2-12=-1072/0, 2-11=0/488, 3-11=-167/0, 5-9=-1138/0, 5-10=0/663

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Load case(s) 1, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 8-12=-10, 1-7=-100
Concentrated Loads (lb)
Vert: 7=-320
3) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Plt. metal=0.90
Uniform Loads (lb/ft)
Vert: 8-12=-10, 1-7=-20
Concentrated Loads (lb)
Vert: 7=-420

December 4,2025

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Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F11	Floor	3	1	R91546248
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:42 Page: 1
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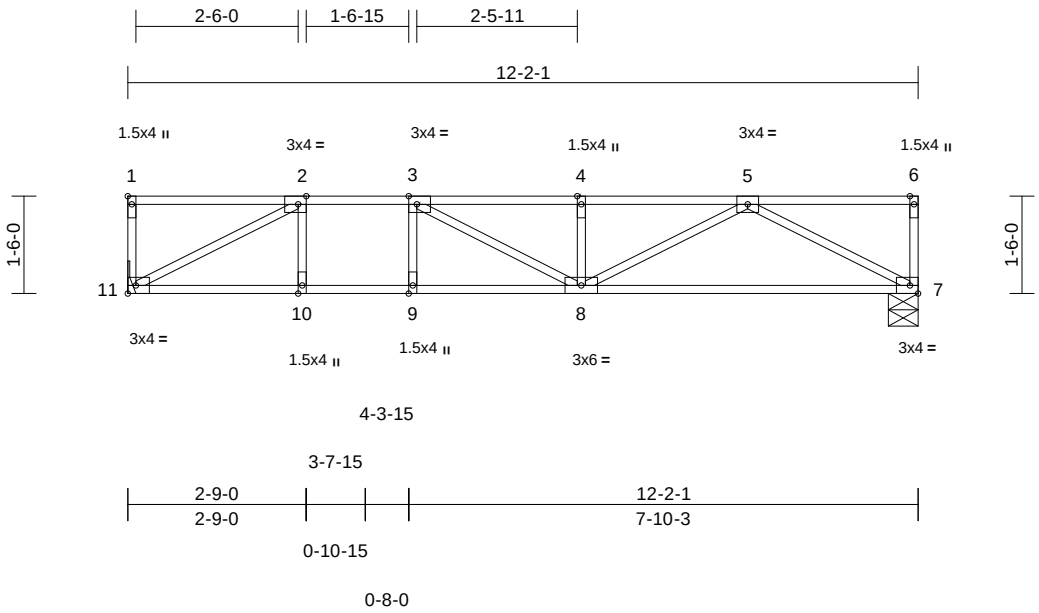

Scale = 1:35.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.83	Vert(LL)	-0.23	8-9	>626	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.30	8-9	>483	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 51 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 DF 1800F 1.6E(flat)
WEBS 2x4 HF No.2(flat)

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

REACTIONS (size) 7=0-5-8, 11= Mechanical
Max Grav 7=663 (LC 1), 11=663 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-11=-101/24, 6-7=-105/0, 1-2=0/0, 2-3=-1190/0, 3-4=-1507/0, 4-5=-1507/0, 5-6=0/0
BOT CHORD 10-11=0/1190, 9-10=0/1190, 8-9=0/1190, 7-8=0/1006
WEBS 2-10=0/255, 3-9=-233/0, 5-7=-1142/0, 5-8=0/569, 4-8=-332/0, 3-8=-44/444, 2-11=-1344/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

December 4,2025

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Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F12	Floor	4	1	R91546249
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:42
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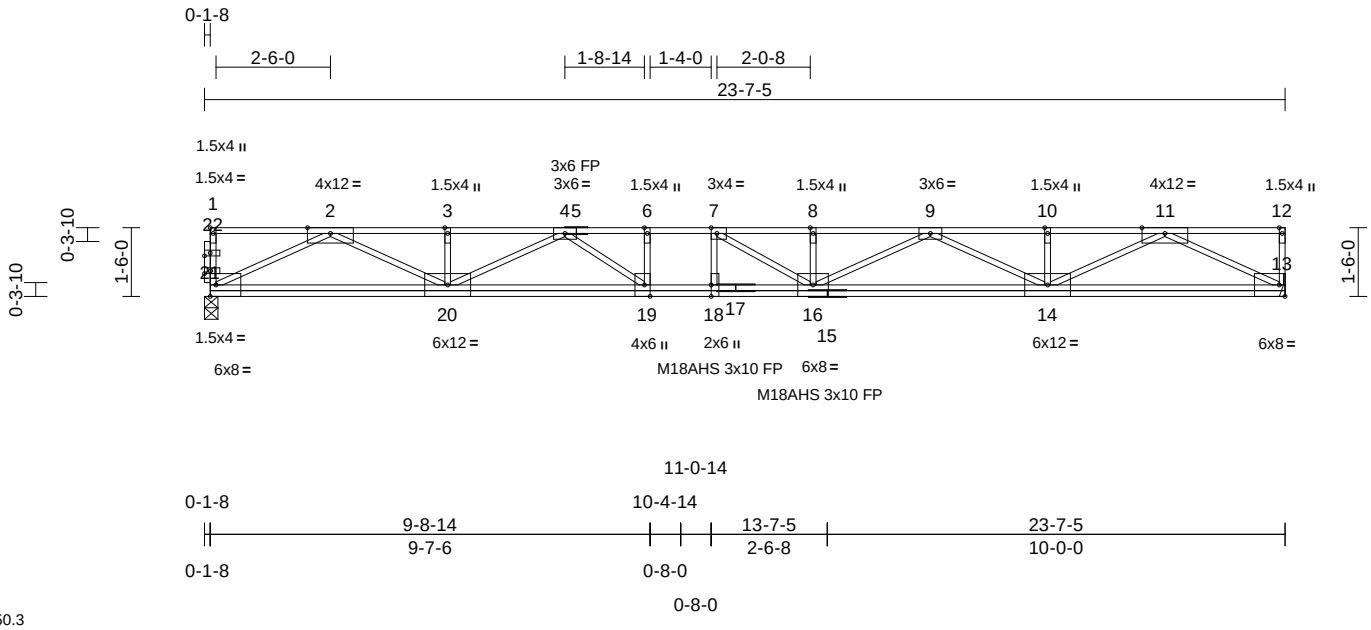

Scale = 1:50.3

Plate Offsets (X, Y): [1:Edge,0-0-12], [7:0-1-8,Edge], [18:0-3-0,Edge], [19:0-3-0,Edge], [21:0-1-8,0-0-10], [22:0-1-8,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.97	Vert(LL)	-0.56	16-18	>499	480	M18AHS	145/140
TCDL	10.0	Lumber DOL	1.00	BC	0.89	Vert(CT)	-0.77	16-18	>364	360	MT20	185/148
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.08	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 120 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

BRACING
TOP CHORD Sheathed, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13= Mechanical, 21=0-3-8
Max Grav 13=1288 (LC 1), 21=1282 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-102/0, 12-13=-102/0, 1-2=-5/0, 2-3=-3974/0, 3-4=-3974/0, 4-6=-5612/0, 6-7=-5612/0, 7-8=-5670/0, 8-9=-5670/0, 9-10=-3952/0, 10-11=-3952/0, 11-12=0/0
BOT CHORD 20-21=0/2324, 19-20=0/5112, 18-19=0/5612, 16-18=0/5612, 14-16=0/5073, 13-14=0/2263
WEBS 6-19=-184/0, 7-18=-354/134, 2-21=-2582/0, 2-20=0/1854, 3-20=-250/0, 4-20=-1279/0, 4-19=0/856, 11-13=-2543/0, 11-14=0/1897, 10-14=-241/0, 9-14=-1260/0, 9-16=0/670, 8-16=-268/0, 7-16=-516/506

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

December 4,2025

MiTek®
400 Sunrise Ave., Suite 270
Roseville, CA 95661
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Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F13	Floor	1	1	R91546250
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

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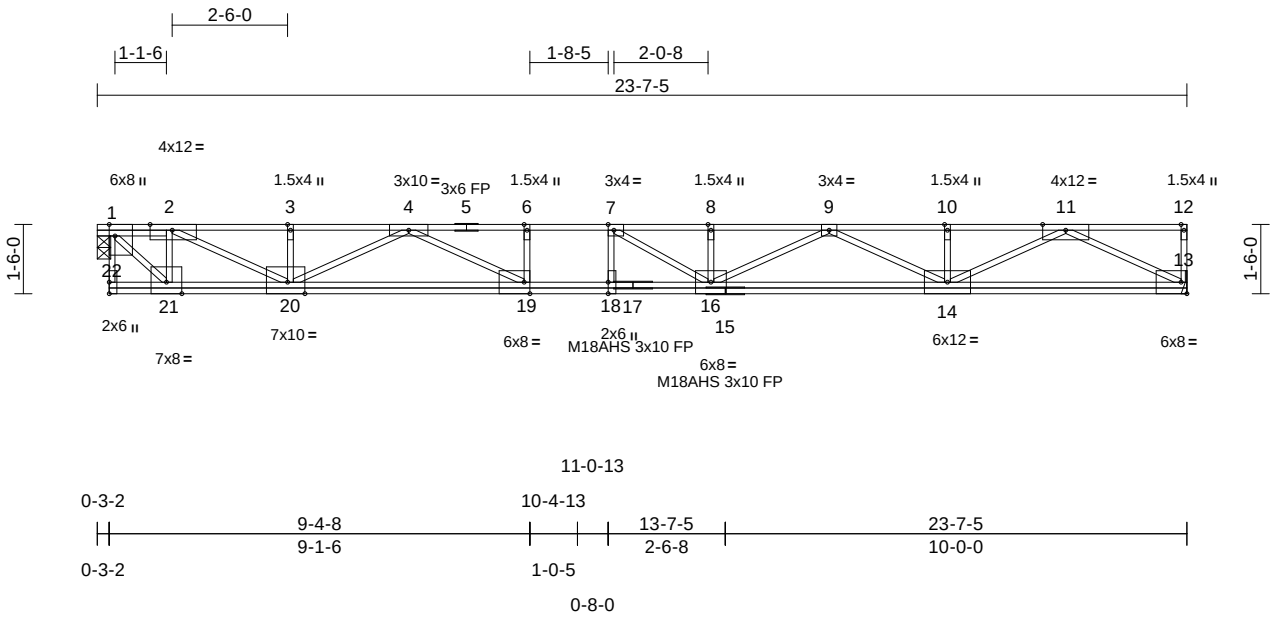
ID:DByeCvv3CPDfGnjUim?YrLyCmC1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:49.9

Plate Offsets (X, Y): [1:0-3-0,Edge], [2:0-5-12,Edge], [7:0-1-8,Edge], [18:0-3-0,Edge], [19:0-1-8,Edge], [20:0-4-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.86	Vert(LL)	-0.51	16-18	>542	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.98	Vert(CT)	-0.70	16-18	>396	360	M18AHS	145/140
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	-0.02	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 124 lb	FT = 0%F, 10%E

LUMBER

TOP CHORD 2x4 HF No.2(flat) *Except* 5-12:2x4 DF No.2 (flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)

BRACING

TOP CHORD Sheathed or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 16-18.

REACTIONS (size) 1=0-3-8, 13= Mechanical
Max Grav 1=1277 (LC 1), 13=1277 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-20/0, 12-13=-102/0, 1-2=-1210/0, 2-3=-3130/0, 3-4=-3130/0, 4-6=-5474/0, 6-7=-5474/0, 7-8=-5599/0, 8-9=-5599/0, 9-10=-3912/0, 10-11=-3912/0, 11-12=0/0

BOT CHORD 21-22=0/0, 20-21=0/1208, 19-20=0/4543, 18-19=0/5474, 16-18=0/5474, 14-16=0/5013, 13-14=0/2242

WEBS 2-20=0/2149, 3-20=-256/0, 4-20=-1588/0, 4-19=0/1227, 6-19=-274/0, 11-13=-2519/0, 11-14=0/1876, 10-14=-243/0, 9-14=-1237/0, 9-16=0/658, 8-16=-283/0, 7-16=-511/579, 2-21=-1144/0, 1-21=0/1716, 7-18=-385/124

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
6) CAUTION, Do not erect truss backwards.

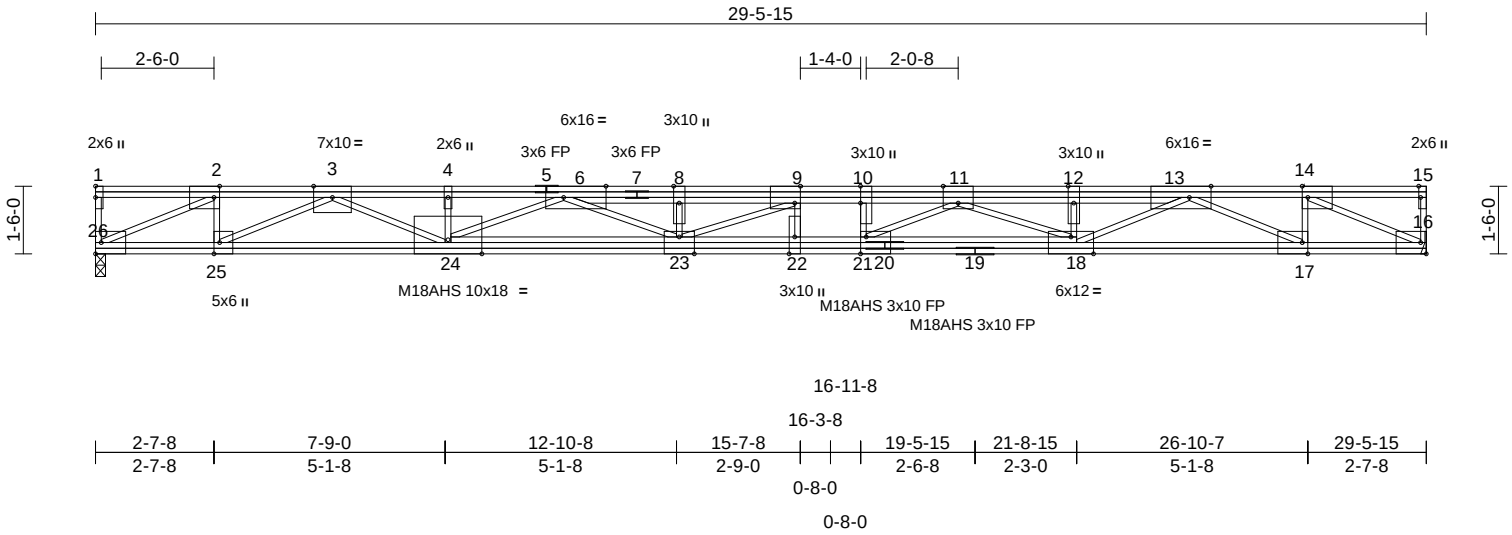
LOAD CASE(S) Standard

December 4,2025

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

Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F14	Floor	6	1	R91546251
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:43 Page: 1
ID:O2h8FpVOY0atETlknSp73GyCyAA-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:51.1

Plate Offsets (X, Y): [2:0-1-8,Edge], [6:0-11-4,Edge], [9:0-1-8,Edge], [10:0-4-8,Edge], [11:0-4-0,Edge], [13:0-5-12,Edge], [14:0-1-8,Edge], [15:0-3-0,Edge], [17:0-1-8,Edge], [18:0-6-0,Edge], [21:0-1-8,Edge], [23:0-4-0,Edge], [25:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.40	Vert(LL)	-0.71	22-23	>497	480	MT20	220/195
TCDL	10.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.98	22-23	>361	360	M18AHS	169/162
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.13	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 247 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 DF 1800F 1.6E(flat)
BOT CHORD 2x4 DF 1800F 1.6E(flat)
WEBS 2x4 DF 1800F 1.6E(flat) *Except* 18-12:2x4 DF No.2(flat)

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

REACTIONS (size) 16= Mechanical, 26=0-2-10
Max Grav 16=1615 (LC 1), 26=1615 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-26=-113/0, 15-16=-101/0, 1-2=0/0, 2-3=-3130/0, 3-4=-7738/0, 4-6=-7730/0, 6-8=-10212/0, 8-9=-10207/0, 9-10=-10175/0, 10-11=-10175/0, 11-12=-8067/0, 12-13=-8054/0, 13-14=-3158/0, 14-15=0/0
BOT CHORD 25-26=0/3130, 24-25=0/5640, 23-24=0/9435, 22-23=0/10175, 21-22=0/10175, 18-21=0/9411, 17-18=0/6203, 16-17=0/3155
WEBS 3-25=-2792/0, 3-24=0/2304, 6-24=-1831/0, 6-23=0/871, 13-17=-3295/0, 13-18=0/2084, 14-16=-3495/0, 2-26=-3467/0, 9-23=-778/707, 11-18=-1464/0, 11-21=-51/1301, 2-25=0/1205, 4-24=-172/8, 8-23=-389/0, 9-22=-197/114, 10-21=-404/0, 12-18=-249/0, 14-17=0/1225

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 6x8 (=) MT20 unless otherwise indicated.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 26.
6) Required 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

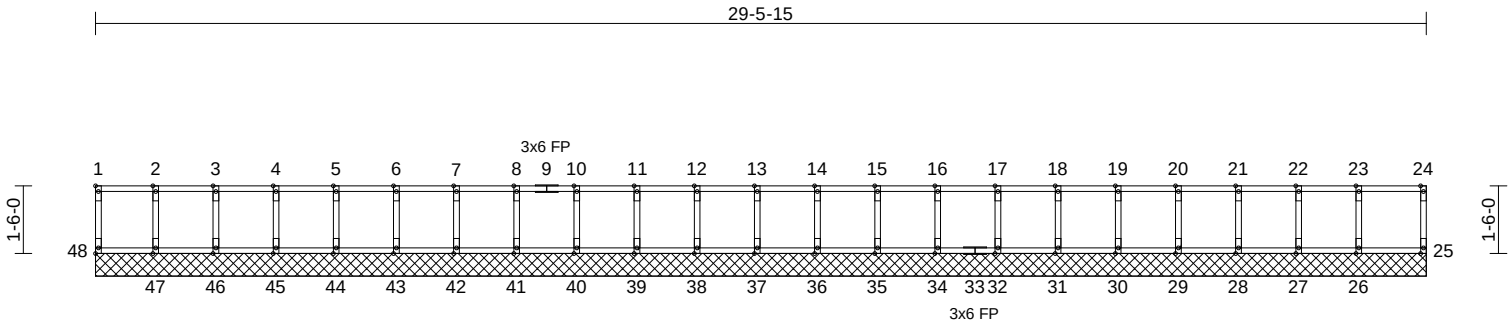
LOAD CASE(S) Standard

December 4,2025

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

Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F15	Floor Supported Gable	1	1	R91546252
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:43 Page: 1
ID:0iEM8aGNHJn?Al7zdD?GETyCm9_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:51.1

Plate Offsets (X, Y): [1:Edge,0-0-12], [48:Edge,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	25	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 102 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

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

REACTIONS (size) 25=29-5-15, 26=29-5-15, 27=29-5-15, 28=29-5-15, 29=29-5-15, 30=29-5-15, 31=29-5-15, 32=29-5-15, 34=29-5-15, 35=29-5-15, 36=29-5-15, 37=29-5-15, 38=29-5-15, 39=29-5-15, 40=29-5-15, 41=29-5-15, 42=29-5-15, 43=29-5-15, 44=29-5-15, 45=29-5-15, 46=29-5-15, 47=29-5-15, 48=29-5-15
Max Grav 25=72 (LC 1), 26=162 (LC 1), 27=142 (LC 1), 28=148 (LC 1), 29=146 (LC 1), 30=147 (LC 1), 31=147 (LC 1), 32=147 (LC 1), 34=147 (LC 1), 35=147 (LC 1), 36=147 (LC 1), 37=147 (LC 1), 38=147 (LC 1), 39=147 (LC 1), 40=147 (LC 1), 41=147 (LC 1), 42=147 (LC 1), 43=147 (LC 1), 44=147 (LC 1), 45=147 (LC 1), 46=146 (LC 1), 47=148 (LC 1), 48=65 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-48=-57/0, 24-25=-65/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-6=-7/0, 6-7=-7/0, 7-8=-7/0, 8-10=-7/0, 10-11=-7/0, 11-12=-7/0, 12-13=-7/0, 13-14=-7/0, 14-15=-7/0, 15-16=-7/0, 16-17=-7/0, 17-18=-7/0, 18-19=-7/0, 19-20=-7/0, 20-21=-7/0, 21-22=-7/0, 22-23=-7/0, 23-24=-7/0
BOT CHORD 47-48=0/7, 46-47=0/7, 45-46=0/7, 44-45=0/7, 43-44=0/7, 42-43=0/7, 41-42=0/7, 40-41=0/7, 39-40=0/7, 38-39=0/7, 37-38=0/7, 36-37=0/7, 35-36=0/7, 34-35=0/7, 32-34=0/7, 31-32=0/7, 30-31=0/7, 29-30=0/7, 28-29=0/7, 27-28=0/7, 26-27=0/7, 25-26=0/7
WEBS 2-47=-137/0, 3-46=-132/0, 4-45=-134/0, 5-44=-133/0, 6-43=-133/0, 7-42=-133/0, 8-41=-133/0, 10-40=-133/0, 11-39=-133/0, 12-38=-133/0, 13-37=-133/0, 14-36=-133/0, 15-35=-133/0, 16-34=-133/0, 17-32=-133/0, 18-31=-133/0, 19-30=-133/0, 20-29=-133/0, 21-28=-134/0, 22-27=-129/0, 23-26=-149/0

NOTES
1) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

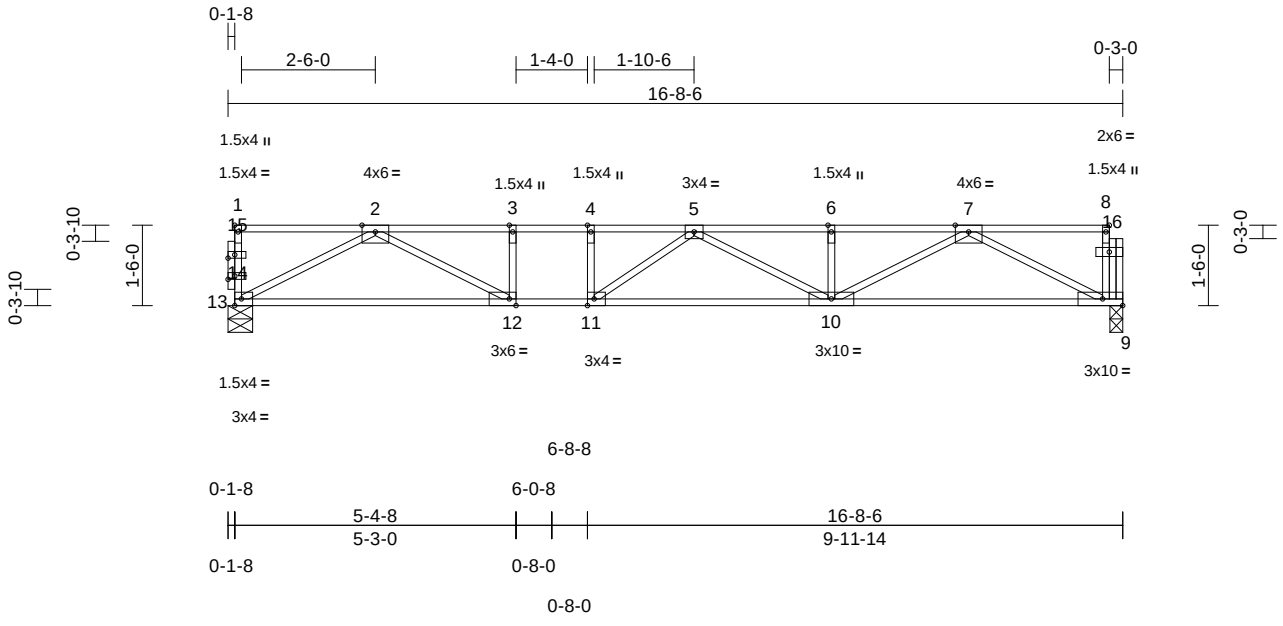
December 4,2025

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

Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F16	Floor	1	1	R91546253
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:43 Page: 1
ID:2D4vW8x0EDdeBjXR37S5i3yCm5X-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:43

Plate Offsets (X, Y): [1:Edge,0-0-12], [11:0-1-8,Edge], [12:0-1-8,Edge], [14:0-1-8,0-0-12], [15:0-1-8,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.85	Vert(LL)	-0.31	10-11	>626	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.77	Vert(CT)	-0.42	10-11	>464	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 71 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 DF 1800F 1.6E(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

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

REACTIONS (size) 9=0-2-14, 13=0-5-8
Max Grav 9=885 (LC 1), 13=898 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-13=-110/0, 8-9=-102/0, 1-2=0/0, 2-3=-2443/0, 3-4=-2443/0, 4-5=-2443/0, 5-6=-2381/0, 6-7=-2381/0, 7-8=-9/0
BOT CHORD 12-13=0/1449, 11-12=0/2443, 10-11=0/2674, 9-10=0/1503
WEBS 3-12=-384/0, 4-11=-80/122, 2-13=-1644/0, 2-12=0/1128, 7-9=-1678/0, 7-10=0/997, 6-10=-234/0, 5-10=-332/0, 5-11=-444/168

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

December 4,2025

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

Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F17	Floor	6	1	R91546254
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:43 Page: 1
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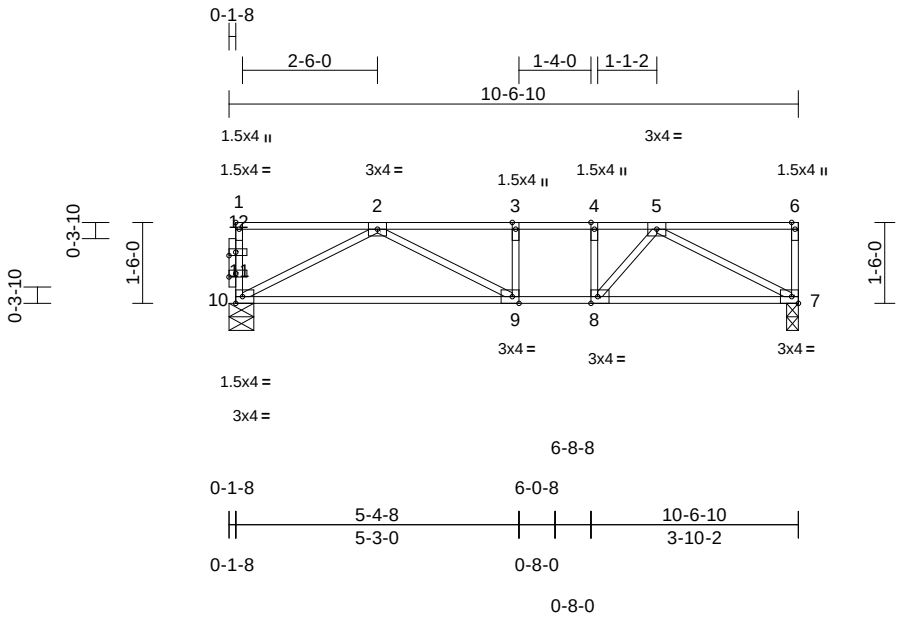


Scale = 1:42.7

Plate Offsets (X, Y): [1:Edge,0-0-12], [8:0-1-8,Edge], [9:0-1-8,Edge], [11:0-1-8,0-0-12], [12:0-1-8,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.50	Vert(LL)	-0.11	9-10	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.45	Vert(CT)	-0.20	9-10	>615	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 43 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

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

REACTIONS (size) 7=0-2-10, 10=0-5-8
Max Grav 7=567 (LC 1), 10=567 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-96/0, 6-7=-109/0, 1-2=0/0, 2-3=-1051/0, 3-4=-1051/0, 4-5=-1051/0, 5-6=0/0
BOT CHORD 9-10=0/828, 8-9=0/1051, 7-8=0/836
WEBS 2-10=-940/0, 2-9=0/344, 5-7=-948/0, 5-8=0/447, 3-9=-113/0, 4-8=-261/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

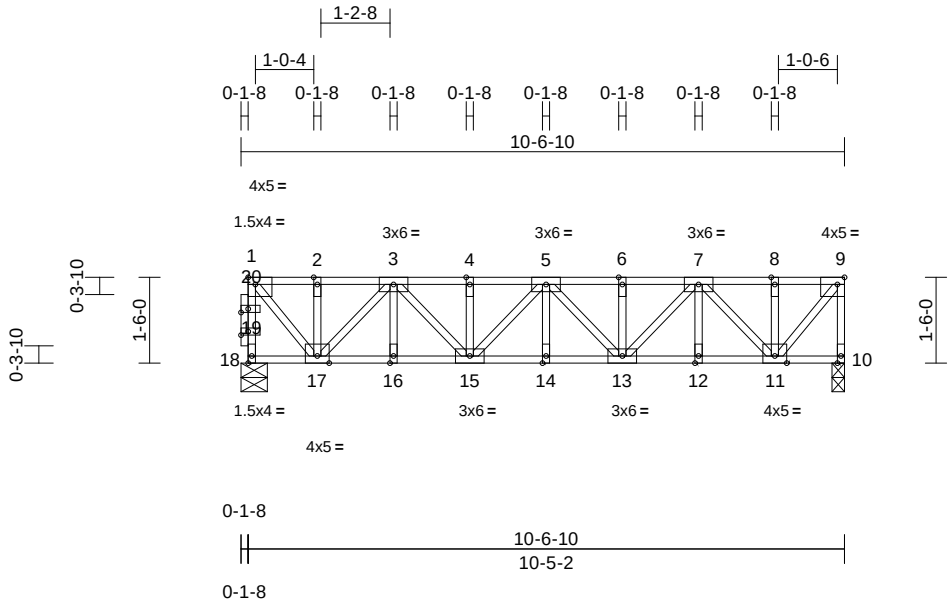
December 4,2025

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

Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F18	Floor Supported Gable	1	1	R91546255
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:44 ID:ALXNfTK89Y6JUOpXJn03sJyCm3k-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:40.3

Plate Offsets (X, Y): [1:Edge,0-1-8], [9:0-1-8,Edge], [18:Edge,0-0-12], [19:0-1-8,0-0-12], [20:0-1-8,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	-0.03	14	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.25	Vert(CT)	-0.04	14	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 54 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

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

REACTIONS (size) 10=0-2-10, 18=0-5-8
Max Grav 10=567 (LC 1), 18=567 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-18=-561/0, 9-10=-560/0, 1-2=-429/0, 2-3=-429/0, 3-4=-998/0, 4-5=-998/0, 5-6=-999/0, 6-7=-999/0, 7-8=-433/0, 8-9=-433/0
BOT CHORD 17-18=0/0, 16-17=0/785, 15-16=0/785, 14-15=0/1070, 13-14=0/1070, 12-13=0/788, 11-12=0/788, 10-11=0/0
WEBS 2-17=-136/0, 3-16=0/14, 4-15=-131/0, 5-14=0/13, 6-13=-131/0, 7-12=0/14, 8-11=-137/0, 1-17=0/671, 3-17=-511/0, 3-15=0/305, 5-15=-104/0, 5-13=-102/0, 7-13=0/303, 7-11=-510/0, 9-11=0/672

NOTES
1) All plates are 1.5x4 (||) MT20 unless otherwise indicated.
2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
3) Gable studs spaced at 1-4-0 oc.
4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 10.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

December 4,2025

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

Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F19	Floor Girder	1	1	R91546256
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:44 Page: 1
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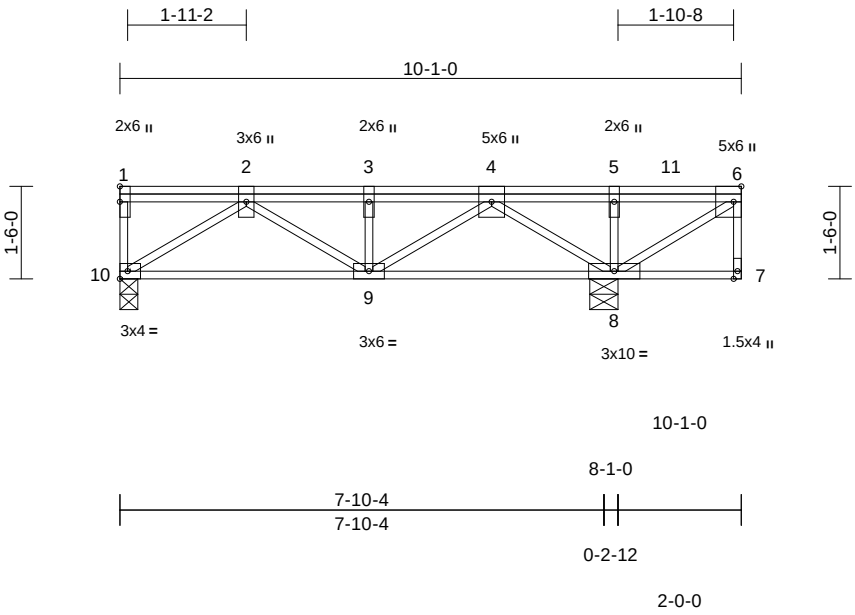

Scale = 1:37.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.53	Vert(LL)	-0.01	9	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.15	Vert(CT)	-0.03	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.30	Horz(CT)	-0.01	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 53 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)

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

REACTIONS (size) 8=0-5-8, 10=0-3-8
Max Uplift 10=-159 (LC 10)
Max Grav 8=2182 (LC 4), 10=258 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-82/0, 6-7=0/3, 1-2=0/0, 2-3=-154/639, 3-4=-154/639, 4-5=0/1555, 5-6=0/1555
BOT CHORD 9-10=-287/244, 8-9=-1143/0, 7-8=0/0
WEBS 2-10=-292/344, 2-9=-422/0, 3-9=-209/0, 4-9=0/708, 4-8=-899/0, 6-8=-1860/0, 5-8=-680/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 159 lb uplift at joint 10.
3) Load case(s) 1, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 227 lb down at 8-11-4, and 680 lb down at 10-0-4 on top chord. The design/selection of such connection device (s) is the responsibility of others.
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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 7-10=-10, 1-5=-100, 5-6=-286 (F=-186)
Concentrated Loads (lb)
Vert: 6=-625 (B), 11=-221 (B)
3) Dead + Roof Live (balanced): Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (lb/ft)
Vert: 7-10=-10, 1-5=-20, 5-6=-294 (F=-274)
Concentrated Loads (lb)
Vert: 6=-592 (B), 11=-67 (B)

December 4,2025

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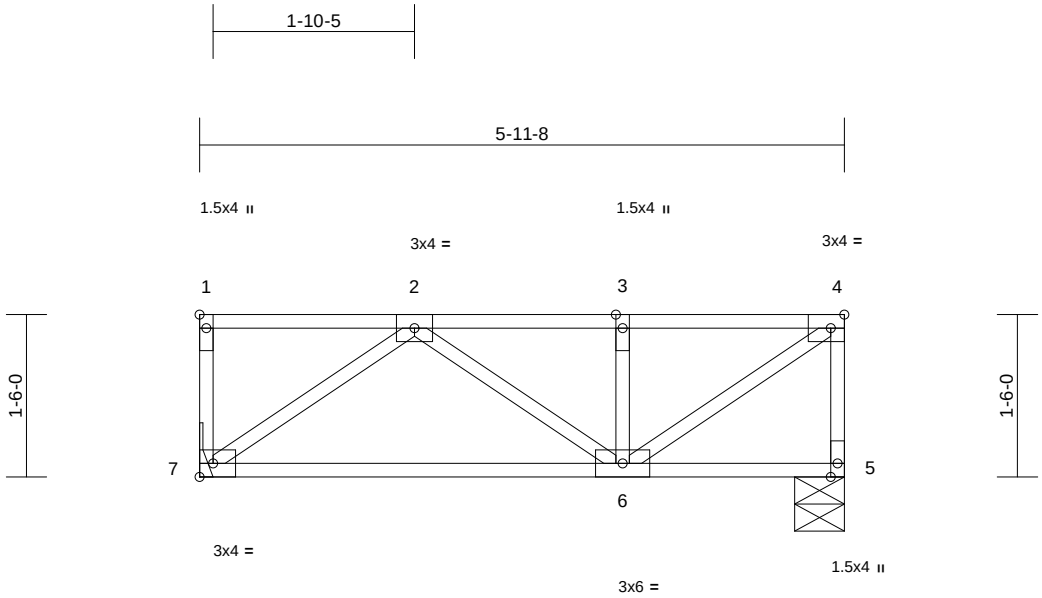
Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F20	Floor	1	1	R91546257
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:44 Page: 1
ID:bHre7ZOLQbCq1vYSTGbiQtyCm2M-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:21.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.18	Vert(LL)	-0.01	6-7	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.15	Vert(CT)	-0.03	6-7	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 26 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)

BRACING
TOP CHORD Sheathed or 5-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=0-5-8, 7= Mechanical
Max Grav 5=321 (LC 1), 7=321 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-7=-78/0, 4-5=-317/0, 1-2=0/0, 2-3=-341/0, 3-4=-341/0
BOT CHORD 6-7=0/318, 5-6=0/0
WEBS 2-7=-390/0, 2-6=0/29, 3-6=-215/0, 4-6=0/415

NOTES
1) Refer to girder(s) for truss to truss connections.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

December 4,2025

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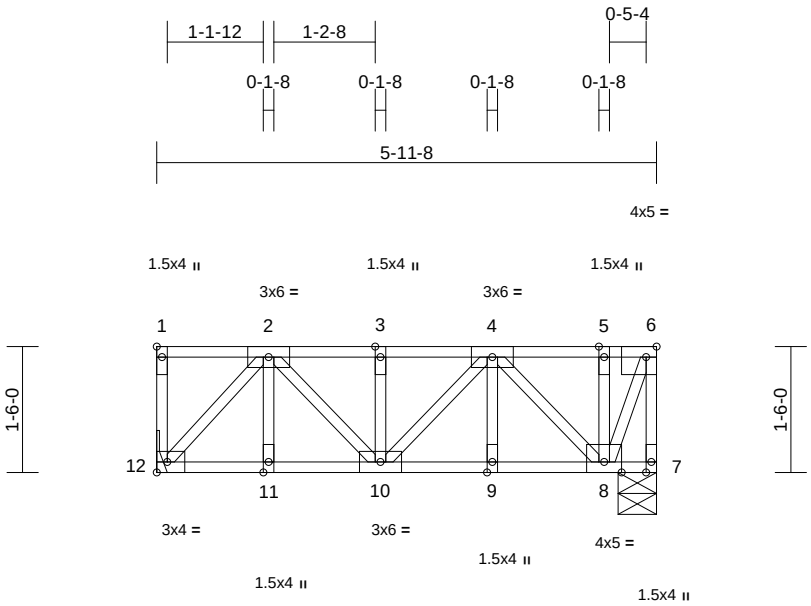
Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F21	Floor	1	1	R91546258
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:44 Page: 1
ID:Q9hUpoGR0CpODDCLJSv7UZyCm2X-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:27.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	0.00	10	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.17	Vert(CT)	-0.01	10	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 32 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

BRACING
TOP CHORD Sheathed or 5-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7=0-5-8, 8=0-5-8, 12= Mechanical
Max Uplift 7=-261 (LC 9)
Max Grav 7=-152 (LC 6), 8=1206 (LC 4), 12=723 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-12=-139/0, 6-7=0/248, 1-2=0/0, 2-3=-685/0, 3-4=-685/0, 4-5=0/104, 5-6=0/104
BOT CHORD 11-12=0/533, 10-11=0/533, 9-10=0/478, 8-9=0/478, 7-8=0/0
WEBS 2-11=0/13, 3-10=-354/0, 4-9=0/6, 5-8=-319/0, 2-12=-786/0, 2-10=0/218, 4-10=0/299, 4-8=-833/0, 6-8=-274/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
3) Gable studs spaced at 1-4-0 oc.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 7.
6) Load case(s) 1, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 7-12=-10, 1-6=-260 (F=-160)
3) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Plt. metal=0.90
Uniform Loads (lb/ft)
Vert: 7-12=-10, 1-6=-230 (F=-210)

December 4,2025

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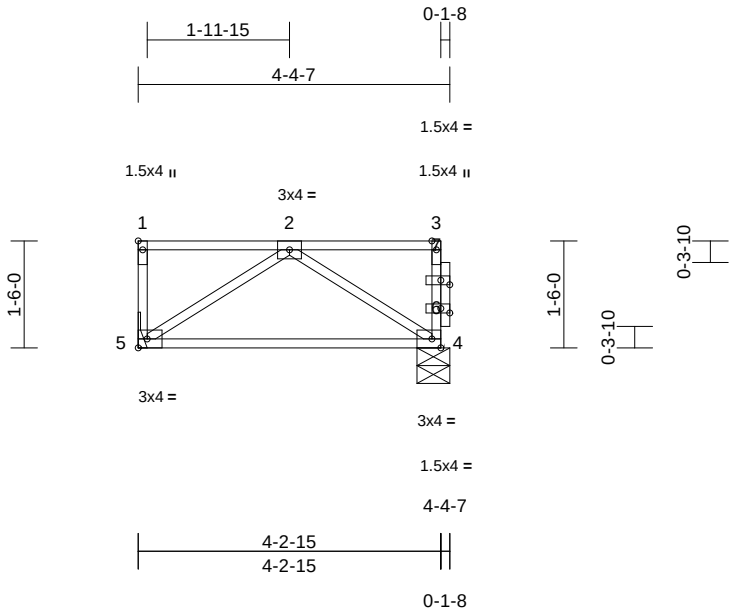
Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F22	Floor	1	1	R91546259
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:45 Page: 1
ID:Ua805YsAUG_RblSlhFHczuyCm1m-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:32.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.18	Vert(CT)	-0.05	4-5	>976	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 19 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

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

REACTIONS (size) 4=0-5-8, 5= Mechanical
Max Grav 4=227 (LC 1), 5=227 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-5=-78/0, 3-4=-78/0, 1-2=0/0, 2-3=0/0
BOT CHORD 4-5=0/192
WEBS 2-5=-231/0, 2-4=-231/0

NOTES
1) Refer to girder(s) for truss to truss connections.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
3) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

December 4,2025

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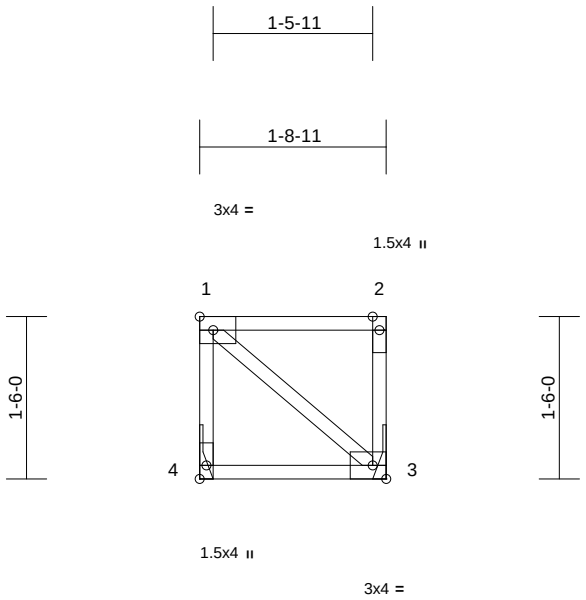
Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F23	Floor	5	1	R91546260
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:45 Page: 1
ID:u9q8jau3mBM0SCAKMNrJaWyCm1j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:21.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(CT)	0.00	3-4	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 9 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)

BRACING
TOP CHORD Sheathed or 1-8-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical
Max Grav 3=88 (LC 1), 4=88 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-80/0, 2-3=-80/0, 1-2=0/0
BOT CHORD 3-4=0/0
WEBS 1-3=0/0

NOTES
1) Refer to girder(s) for truss to truss connections.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

December 4,2025

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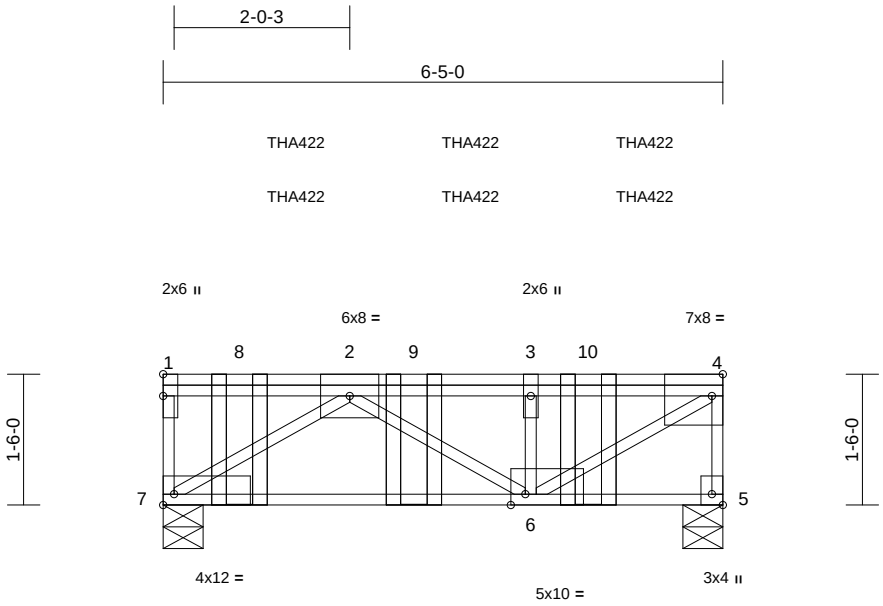
Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F24	Floor Girder	1	1	R91546261
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:45 Page: 1
ID:FO9TL59sbx8u5bsZf?ETU9yCm1N-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:26.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.93	Vert(LL)	-0.03	6-7	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.07	6-7	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.02	5	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 34 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)

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

REACTIONS (size) 5=0-5-8, 7=0-5-8
Max Grav 5=1573 (LC 1), 7=2033 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-7=-618/0, 4-5=-1565/0, 1-2=0/0, 2-3=-2138/0, 3-4=-2138/0
BOT CHORD 6-7=0/2208, 5-6=0/0
WEBS 2-7=-2612/0, 2-6=-83/0, 3-6=-1232/0, 4-6=0/2509

NOTES
1) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
2) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-10-8 from the left end to 4-10-8 to connect truss(es) to front face of top chord.
3) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-10-8 from the left end to 4-10-8 to connect truss(es) to back face of top chord.
4) Fill all nail holes where hanger is in contact with lumber.
5) 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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 5-7=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 8=-1094 (F=-572, B=-522), 9=-965 (F=-563, B=-402), 10=-855 (F=-563, B=-292)

December 4,2025

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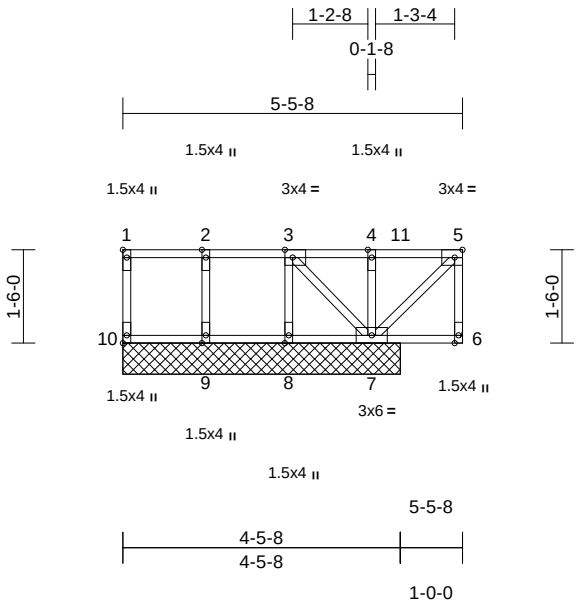
Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F25	Floor Supported Gable	1	1	R91546262 Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:45 Page: 1
ID:4?Kf19ALYCQe0SYJbpo3sJyCkxe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:37

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.04	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 24 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)
OTHERS 2x4 HF No.2(flat)

BRACING
TOP CHORD Sheathed or 5-5-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7=4-5-8, 8=4-5-8, 9=4-5-8, 10=4-5-8
Max Uplift 8=-164 (LC 10)
Max Grav 7=560 (LC 4), 8=25 (LC 5), 9=167 (LC 1), 10=54 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-50/0, 5-6=0/5, 1-2=0/0, 2-3=0/0, 3-4=0/163, 4-5=0/163
BOT CHORD 9-10=0/0, 8-9=0/0, 7-8=0/0, 6-7=0/0
WEBS 2-9=-151/0, 3-8=-14/174, 4-7=-232/0, 5-7=-228/0, 3-7=-234/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
3) Gable studs spaced at 1-4-0 oc.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 164 lb uplift at joint 8.
5) n/a
6) Load case(s) 1, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
8) CAUTION, Do not erect truss backwards.
9) 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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 6-10=-10, 1-11=-100, 5-11=-260 (F=-160)
3) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Plt. metal=0.90
Uniform Loads (lb/ft)
Vert: 6-10=-10, 1-11=-20, 5-11=-230 (F=-210)

December 4,2025

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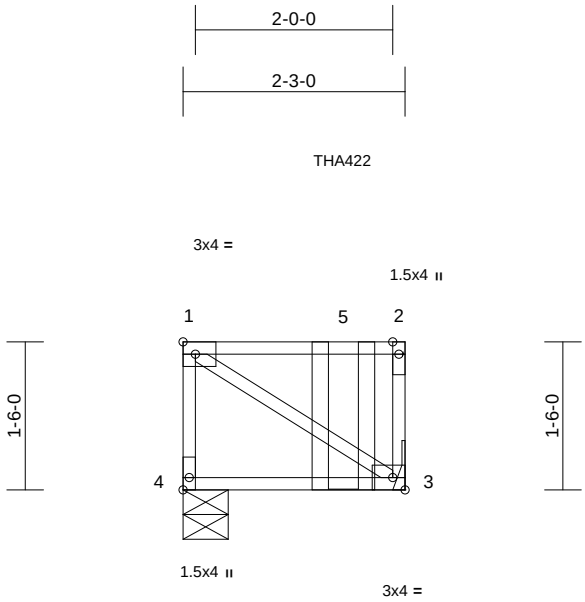
Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F26	Floor Girder	1	1	R91546263
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:45 ID:hk187GIf17ozVhB4?6wY4TyCjij-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:23.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.98	Vert(LL)	n/a	-	n/a	999	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.03	Vert(CT)	0.00	3-4	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 11 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 DF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)

BRACING
TOP CHORD Sheathed, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4=0-5-8
Max Grav 3=379 (LC 1), 4=211 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-201/0, 2-3=-369/0, 1-2=0/0
BOT CHORD 3-4=0/0
WEBS 1-3=0/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent at 1-7-8 from the left end to connect truss (es) to back face of top chord.
5) Fill all nail holes where hanger is in contact with lumber.
6) 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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 3-4=-10, 1-2=-100
Concentrated Loads (lb)
Vert: 5=-357 (B)

December 4,2025

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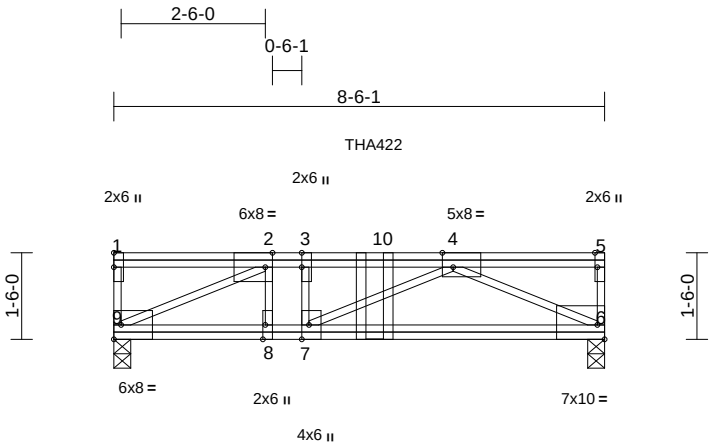
Roseville, CA 95661
916.755.3571 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
5134327 Bid	F27	Floor Girder	1	1	R91546264
					Job Reference (optional)

Builders FirstSource (Arlington, WA), Arlington, WA - 98223,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Wed Dec 03 13:42:46 Page: 1
ID:Wj26ly6RUoR7l4XuMsyBJ?yCjUl-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:39.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.83	Vert(LL)	-0.09	6-7	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.13	6-7	>795	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.02	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 57 lb	FT = 0%F, 10%E

LUMBER
TOP CHORD 2x4 DF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 HF No.2(flat)

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

REACTIONS (size) 6=0-3-8, 9=0-3-8
Max Grav 6=2396 (LC 6), 9=1102 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-9=-99/47, 5-6=-723/0, 1-2=0/0, 2-3=-2273/0, 3-4=-2273/0, 4-5=0/0
BOT CHORD 8-9=0/2273, 7-8=0/2273, 6-7=0/3347
WEBS 4-6=-3724/0, 2-9=-2517/0, 4-7=-1268/0, 2-8=0/489, 3-7=0/180

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
3) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 4-6-4 from the left end to connect truss(es) to front face of top chord.
4) Fill all nail holes where hanger is in contact with lumber.
5) 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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 6-9=-10, 1-10=-100, 5-10=-705 (F=-605)
Concentrated Loads (lb)
Vert: 10=-281 (F)

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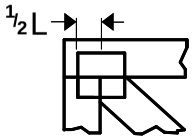
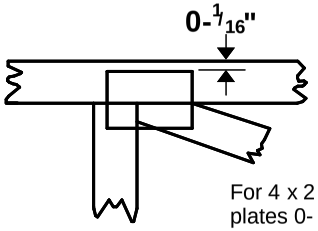
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

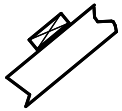
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

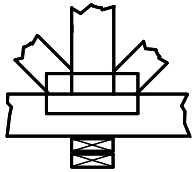
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

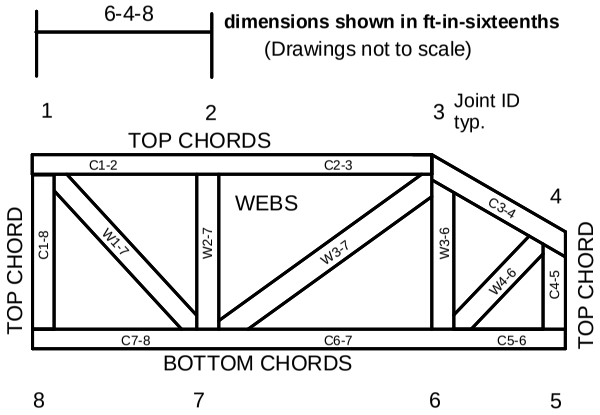


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.