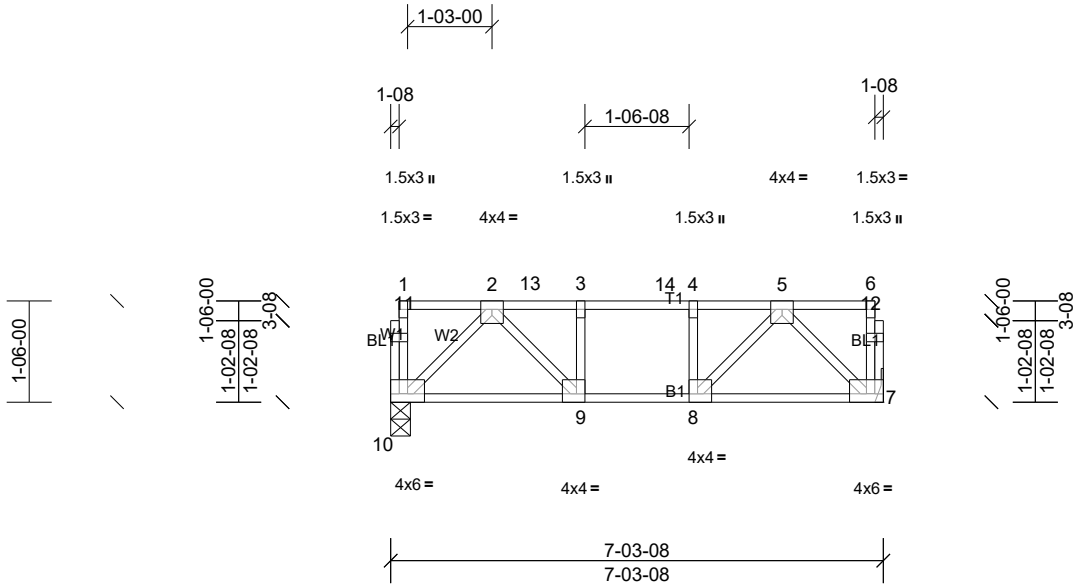


Job	Truss	Truss Type	Qty	Ply	
21071052BF	F200	Floor	4	1	Job Reference (optional)

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:35 Page: 1  
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Scale = 1:34.2

Loading	(psf)	Spacing	1-07-03	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	0.90	TC	0.85	Vert(LL)	-0.06	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	0.90	BC	0.61	Vert(TL)	-0.09	7-8	>973	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.22	Horiz(TL)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 33 lb	FT = 20%F, 11%E

**LUMBER**

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

**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) 7= Mechanical, (min. 1-08),  
10=3-08, (min. 1-08)  
Max Uplift 10=-4 (LC 4)  
Max Grav 7=1033 (LC 5), 10=1207 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 10-11=-384/77, 1-11=-383/77, 2-13=-1399/0, 3-13=-1399/0, 3-14=-1399/0, 4-14=-1399/0, 4-5=-1399/0

BOT CHORD 9-10=0/891, 8-9=0/1399, 7-8=0/970  
WEBS 5-7=-1368/0, 2-10=-1247/0, 5-8=0/763, 2-9=0/788, 3-9=-497/0, 4-8=-509/0

**NOTES**

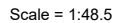
- 1) Unbalanced floor live loads have been considered for this design.
- 2) This truss is not designed to be used as a floor truss.
- 3) Bearings are assumed to be: Joint 10 SPF No.2 crushing capacity of 425 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 10.
- 6) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 367 lb down at 4-0-12, 367 lb down at 6-0-12, 391 lb down and 82 lb up at 0-2-4, and 203 lb down and 40 lb up at 4-0-12, and 203 lb down and 40 lb up at 6-0-12 on top chord. The design/selection of such connection device (s) is the responsibility of others.
- 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 + Roof Live (balanced): Lumber Increase=0.90, Plate Increase=0.90  
Uniform Loads (lb/ft)  
Vert: 7-10=-8, 1-6=-16  
Concentrated Loads (lb)  
Vert: 1=-391, 5=-283 (F=-100), 13=-283, 14=-283 (F=-100)

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:36 Page: 1  
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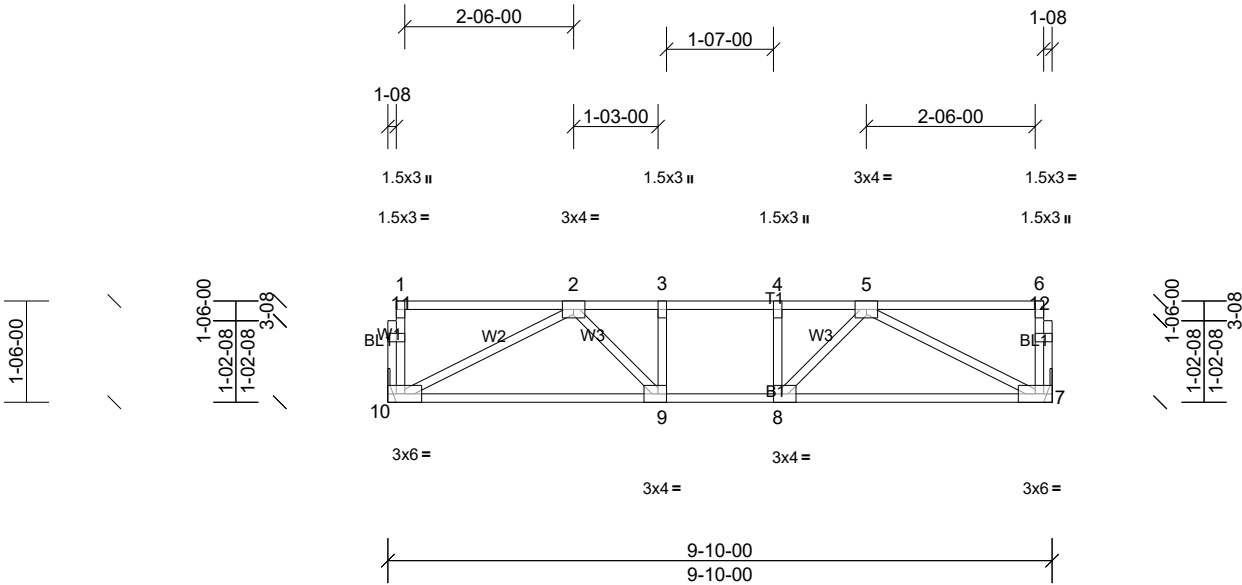


<b>LUMBER</b>	
TOP CHORD	2x4 SPF No.2(flat)
BOT CHORD	2x4 SPF 2100F 1.8E(flat)
WEBS	2x4 SPF No.2(flat)
OTHERS	2x4 SPF No.2(flat)
<b>BRACING</b>	
TOP CHORD	Structural wood sheathing directly applied or 5-8-1 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
<b>REACTIONS</b>	
(size)	13=3-08, (min. 1-08), 24=3-08, (min. 1-08)
Max Grav	13=951 (LC 1), 24=951 (LC 1)
<b>FORCES</b>	
	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1586/0, 3-4=-2706/0, 4-5=-3418/0, 5-6=-3731/0, 6-7=-3744/0, 7-8=-3420/0, 8-9=-2705/0, 9-10=-2705/0, 10-11=-1586/0
BOT CHORD	23-24=0/913, 22-23=0/2241, 21-22=0/3148, 20-21=0/3148, 19-20=0/3731, 18-19=0/3731, 17-18=0/3731, 16-17=0/3671, 15-16=0/3154, 14-15=0/2239, 13-14=0/913
WEBS	5-19=-115/258, 6-18=-405/226, 2-24=-1289/0, 2-23=0/1001, 3-23=-973/0, 3-22=0/691, 4-22=-657/0, 4-20=0/479, 5-20=-644/0, 11-13=-1290/0, 11-14=0/1001, 10-14=-970/0, 10-15=0/693, 8-15=-667/0, 8-16=0/397, 7-16=-372/0, 7-17=-84/326, 6-17=-411/395

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All bearings are assumed to be SPF 2100F 1.8E crushing capacity of 525 psi.
- 4) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
21071052BF	F202	Floor	4	1	



Scale = 1:34.3

Loading		(psf)	Spacing		1-07-03	CSI		DEFL		in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL		40.0	Plate Grip DOL		1.00	TC		Vert(LL)		-0.04	9-10	>999	480	MT20	197/144
TCDL		10.0	Lumber DOL		1.00	BC		Vert(TL)		-0.07	9-10	>999	360		
BCLL		0.0	Rep Stress Incr		YES	WB		Horiz(TL)		0.01	7	n/a	n/a		
BCDL		5.0	Code		IRC2012/TPI2007	Matrix-SH								Weight: 41 lb	FT = 20%F, 11%E

LUMBER

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

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)	7= Mechanical, (min. 1-08), 10= Mechanical, (min. 1-08)
	Max Grav	7=416 (LC 1), 10=416 (LC 1)

FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
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TOP CHORD	2-3=-723/0, 3-4=-723/0, 4-5=-723/0
BOT CHORD	9-10=0/610, 8-9=0/723, 7-8=0/610
WEBS	5-7=-685/0, 2-10=-685/0, 5-8=0/261, 2-9=0/261

NOTES

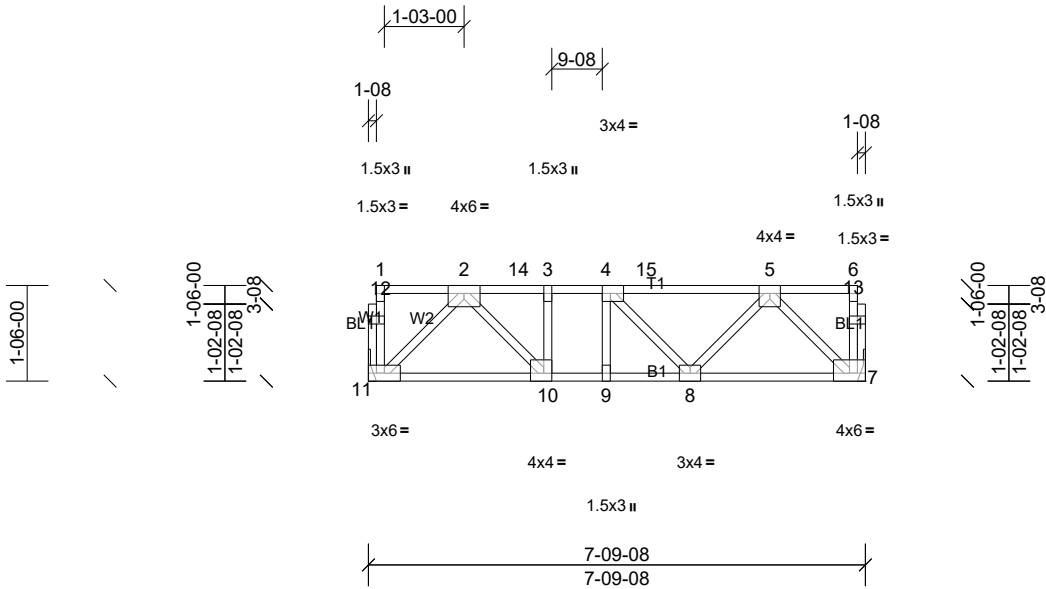
- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
21071052BF	F203	Floor	4	1	Job Reference (optional)

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Loading	(psf)	Spacing	1-07-03	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	0.90	TC	0.87	Vert(LL)	-0.05	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	0.90	BC	1.00	Vert(TL)	-0.09	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.27	Horiz(TL)	0.02	7	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 36 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SPF 2100F 1.8E(flat)  
BOT CHORD 2x4 SPF No.2(flat)  
WEBS 2x4 SPF No.2(flat)  
OTHERS 2x4 SPF No.2(flat)

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) 7= Mechanical, (min. 1-08), 11= Mechanical, (min. 1-08)

Max Grav 7=1087 (LC 7), 11=1398 (LC 5)  
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 11-12=-525/0, 1-12=-524/0, 2-14=-1567/0, 3-14=-1567/0, 3-4=-1567/0, 4-15=-1382/0, 5-15=-1382/0  
BOT CHORD 10-11=0/912, 9-10=0/1567, 8-9=0/1567, 7-8=0/1117  
WEBS 5-7=-1582/0, 2-11=-1256/0, 5-8=0/403, 2-10=0/963, 4-8=-348/0, 3-10=-511/0, 4-9=-303/26

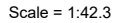
NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) This truss is not designed to be used as a floor truss.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 367 lb down at 2-4-4, 367 lb down at 4-4-4, 367 lb down at 6-4-4, 203 lb down and 40 lb up at 2-4-4, and 206 lb down and 48 lb up at 4-4-4, and 206 lb down and 48 lb up at 6-4-4 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 + Roof Live (balanced): Lumber Increase=0.90, Plate Increase=0.90  
Uniform Loads (lb/ft)  
Vert: 7-11=-8, 1-6=-16  
Concentrated Loads (lb)  
Vert: 1=-325, 5=-297 (F=-100), 14=-283 (F=-100), 15=-297 (F=-100)

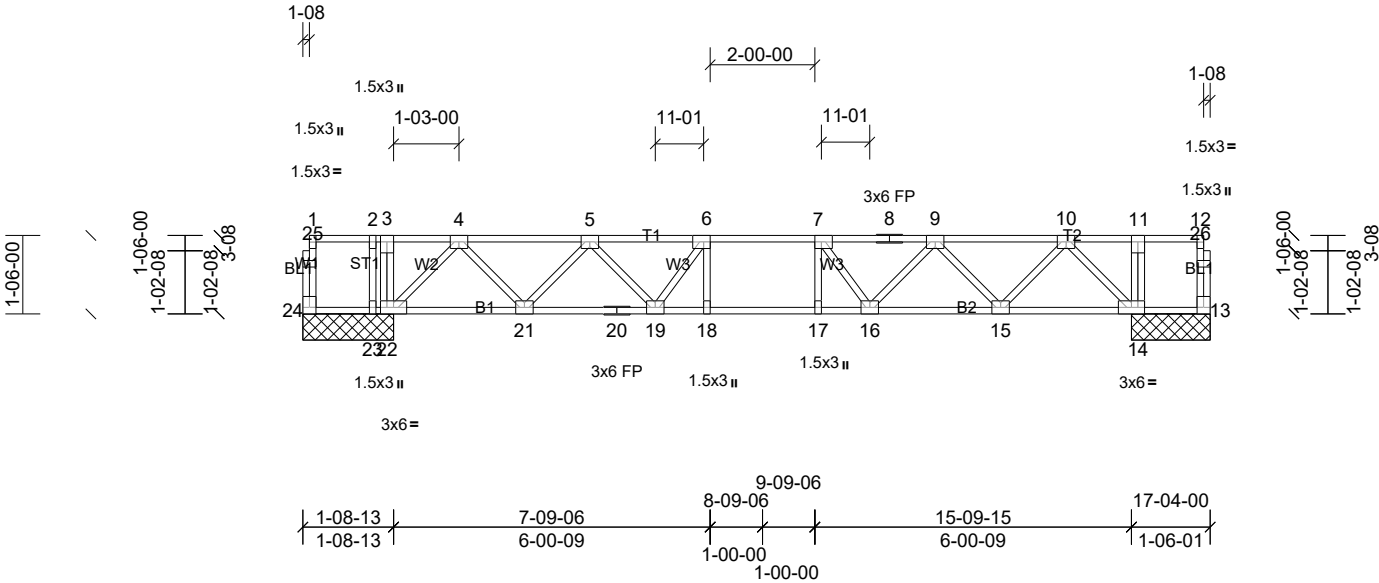
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LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
21071052BF	F205	Floor	1	1	Job Reference (optional)

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Page: 1



Scale = 1:44.2

Loading	(psf)	Spacing	1-07-03	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.30	Vert(LL)	-0.09	16-17	>999	480	MT20	197/144
TCDL	10.0	Lumber DOL	1.00	BC	0.61	Vert(TL)	-0.12	16-17	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.03	13	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 74 lb	FT = 20%F, 11%E

**LUMBER**

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

**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**

All bearings 1-08-13. except 13=1-06-01, 14=1-06-01  
(lb) - Max Uplift All uplift 100 (lb) or less at joint(s) except 23=-175 (LC 4)  
Max Grav All reactions 250 (lb) or less at joint (s) 13, 23, 24 except 14=722 (LC 1), 22=829 (LC 4)

**FORCES**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 4-5=-922/0, 5-6=-1463/0, 6-7=-1591/0, 7-8=-1464/0, 8-9=-1464/0, 9-10=-927/0  
BOT CHORD 21-22=0/553, 20-21=0/1284, 19-20=0/1284, 18-19=0/1591, 17-18=0/1591, 16-17=0/1591, 15-16=0/1287, 14-15=0/557  
WEBS 4-22=-780/0, 4-21=0/549, 5-21=-537/0, 5-19=0/313, 6-19=-351/0, 10-14=-786/0, 10-15=0/551, 9-15=-534/0, 9-16=0/311, 7-16=-350/0

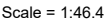
**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 174 lb uplift at joint 23.
- 7) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- 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

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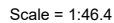
## LUMBER

## BRACING

## NOTES

- LOAD CASE(S) Standard

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**LUMBER**

## BRACING

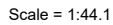
**FORCES** Max Grav 12=759 (LC 1), 20=759 (LC 1)  
(lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.

WEBS 6-15=-280/4, 2-20=-1017/0, 2-19=0/743,  
3-19=-715/0, 3-18=0/429, 4-18=-393/0,  
4-16=-65/416, 10-12=-1017/0, 10-13=0/745,  
9-13=-712/0, 9-14=0/420, 7-14=-406/0,  
7-15=-59/465

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 4) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10'-0" on center 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

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:37 Page: 1  
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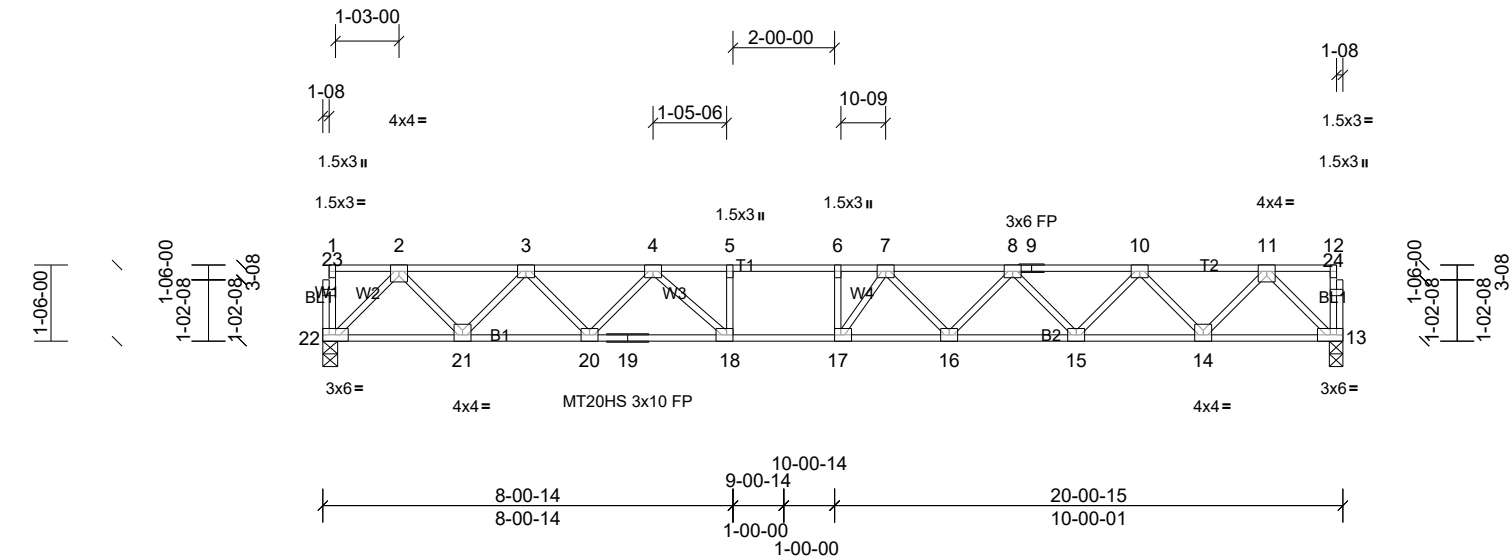
## BRACING

## NOTES

- LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	
21071052BF	F209	Floor	1	1	Job Reference (optional)

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Scale = 1:45.5

Loading	(psf)	Spacing	1-07-03	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.79	Vert(LL)	-0.25	16-17	>952	480	MT20HS	148/108
TCDL	10.0	Lumber DOL	1.00	BC	0.61	Vert(TL)	-0.39	16-17	>610	360	MT20	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horiz(TL)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 82 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SPF No.2(flat)  
BOT CHORD 2x4 SPF 2100F 1.8E(flat)  
WEBS 2x4 SPF No.2(flat)  
OTHERS 2x4 SPF No.2(flat)

**BRACING**

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

**REACTIONS** (size) 13=3-03, (min. 1-08), 22=3-08, (min. 1-08)  
Max Grav 13=867 (LC 1), 22=867 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1429/0, 3-4=-2378/0, 4-5=-3083/0, 5-6=-3083/0, 6-7=-3083/0, 7-8=-2960/0, 8-9=-2389/0, 9-10=-2389/0, 10-11=-1426/0  
BOT CHORD 21-22=0/829, 20-21=0/2003, 19-20=0/2755, 18-19=0/2755, 17-18=0/3083, 16-17=0/3110, 15-16=0/2766, 14-15=0/2001, 13-14=0/829  
WEBS 5-18=-284/0, 2-22=-1170/0, 2-21=0/892, 3-21=-854/0, 3-20=0/557, 4-20=-561/0, 4-18=0/640, 11-13=-1171/0, 11-14=0/887, 10-14=-854/0, 10-15=0/577, 8-15=-561/0, 8-16=0/292, 7-16=-300/0, 7-17=-293/329

**NOTES**

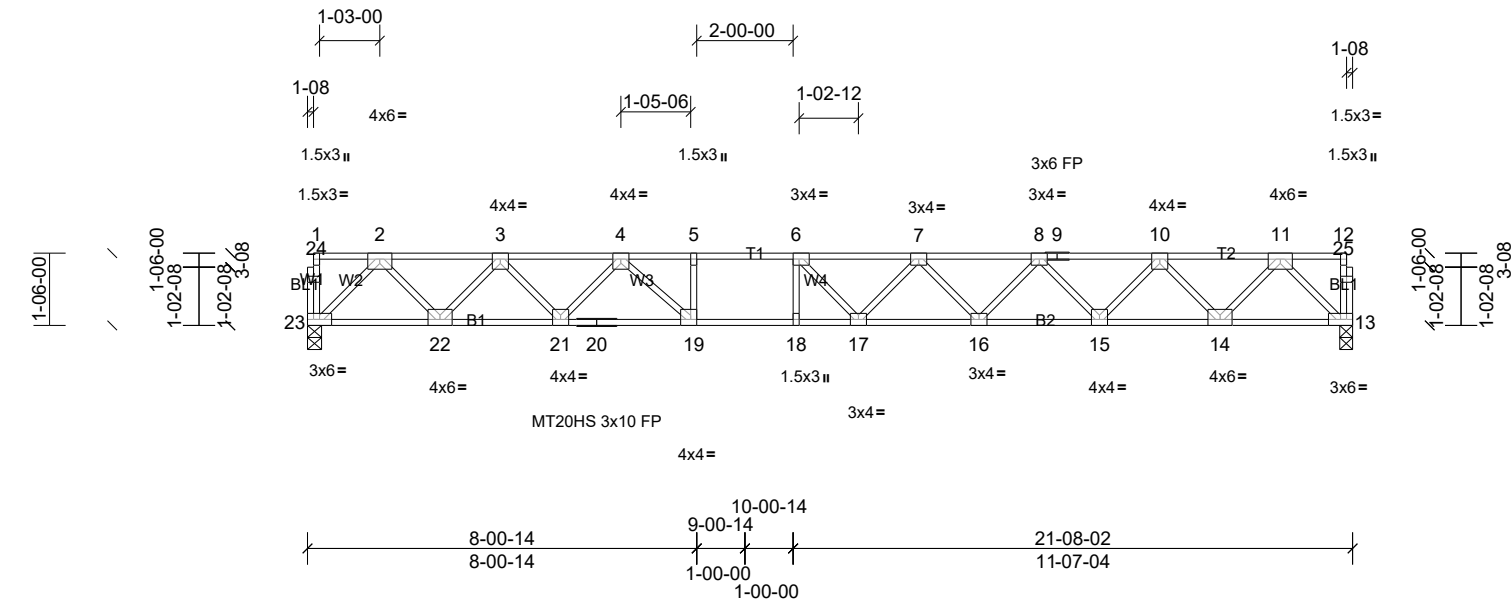
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x4 MT20 unless otherwise indicated.
- 4) All bearings are assumed to be SPF 2100F 1.8E crushing capacity of 525 psi.
- 5) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	
21071052BF	F210	Floor	1	1	Job Reference (optional)

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Page: 1



Scale = 1:48

Loading	(psf)	Spacing	1-07-03	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	1.00	Vert(LL)	-0.37	17-18	>702	480	MT20HS	148/108
TCDL	10.0	Lumber DOL	1.00	BC	0.91	Vert(TL)	-0.57	17-18	>451	360	MT20	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horiz(TL)	0.08	13	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 88 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SPF No.2(flat)  
BOT CHORD 2x4 SPF 2100F 1.8E(flat)  
WEBS 2x4 SPF No.2(flat)  
OTHERS 2x4 SPF No.2(flat)

**BRACING**

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
2-2-0 oc bracing: 18-19.

**REACTIONS** (size) 13=3-03, (min. 1-08), 23=3-08, (min. 1-08)  
Max Grav 13=937 (LC 1), 23=937 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1565/0, 3-4=-2628/0, 4-5=-3543/0, 5-6=-3543/0, 6-7=-3630/0, 7-8=-3345/0, 8-9=-2651/0, 9-10=-2651/0, 10-11=-1560/0  
BOT CHORD 22-23=0/899, 21-22=0/2198, 20-21=0/3086, 19-20=0/3086, 18-19=0/3543, 17-18=0/3543, 16-17=0/3600, 15-16=0/3082, 14-15=0/2201, 13-14=0/899  
WEBS 5-19=-307/0, 6-18=-293/60, 2-23=-1270/0, 2-22=0/990, 3-22=-941/0, 3-21=0/639, 4-21=-681/0, 4-19=0/796, 11-13=-1269/0, 11-14=0/983, 10-14=-953/0, 10-15=0/670, 8-15=-641/0, 8-16=0/390, 7-16=-379/0, 6-17=-270/360

**NOTES**

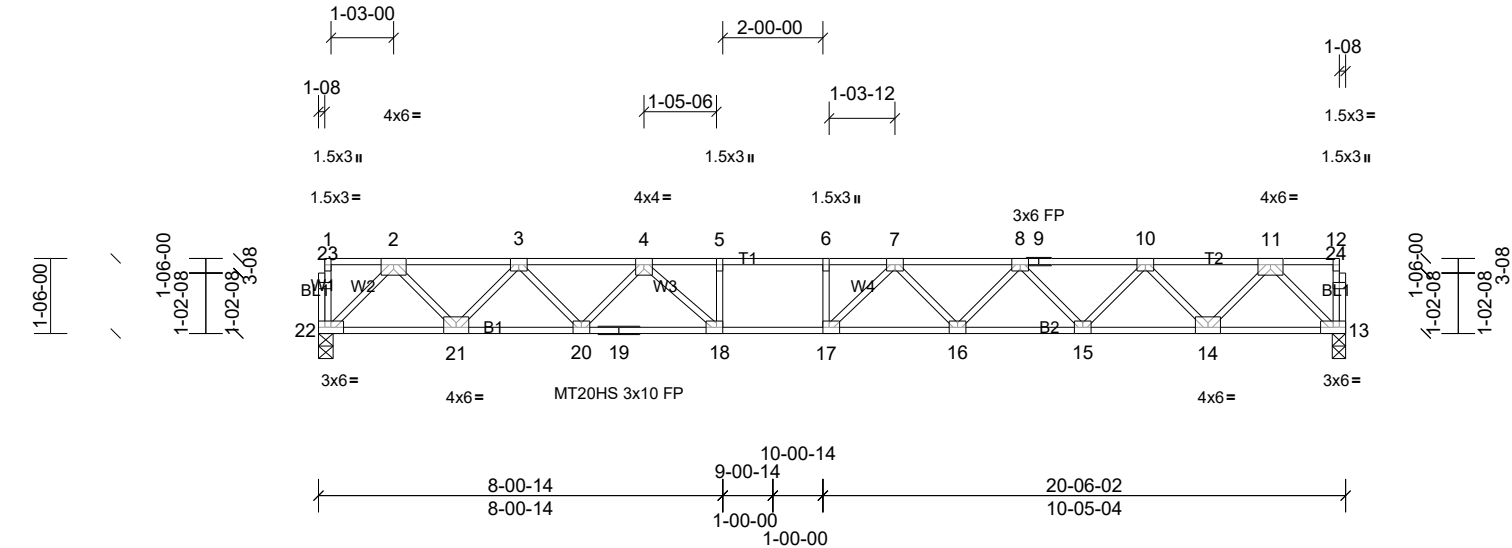
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All bearings are assumed to be SPF 2100F 1.8E crushing capacity of 525 psi.
- 4) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
21071052BF	F211	Floor	1	1	

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:37  
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Page: 1



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Loading	(psf)	Spacing	1-07-03	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.83	Vert(LL)	-0.28	16-17	>856	480	MT20HS	148/108
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(TL)	-0.45	16-17	>546	360	MT20	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.26	Horiz(TL)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 83 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SPF No.2(flat)  
BOT CHORD 2x4 SPF 2100F 1.8E(flat)  
WEBS 2x4 SPF No.2(flat)  
OTHERS 2x4 SPF No.2(flat)

#### BRACING

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

**REACTIONS** (size) 13=3-03, (min. 1-08), 22=3-08, (min. 1-08)

Max Grav 13=886 (LC 1), 22=886 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1466/0, 3-4=-2446/0, 4-5=-3210/0, 5-6=-3210/0, 6-7=-3210/0, 7-8=-3070/0, 8-9=-2459/0, 9-10=-2459/0, 10-11=-1463/0  
BOT CHORD 21-22=0/848, 20-21=0/2056, 19-20=0/2844, 18-19=0/2844, 17-18=0/3210, 16-17=0/3237, 15-16=0/2855, 14-15=0/2054, 13-14=0/848  
WEBS 5-18=-302/0, 2-22=-1197/0, 2-21=0/919, 3-21=-878/0, 3-20=0/579, 4-20=-593/0, 4-18=0/689, 11-13=-1198/0, 11-14=0/913, 10-14=-879/0, 10-15=0/602, 8-15=-589/0, 8-16=0/320, 7-16=-292/0, 7-17=-279/332

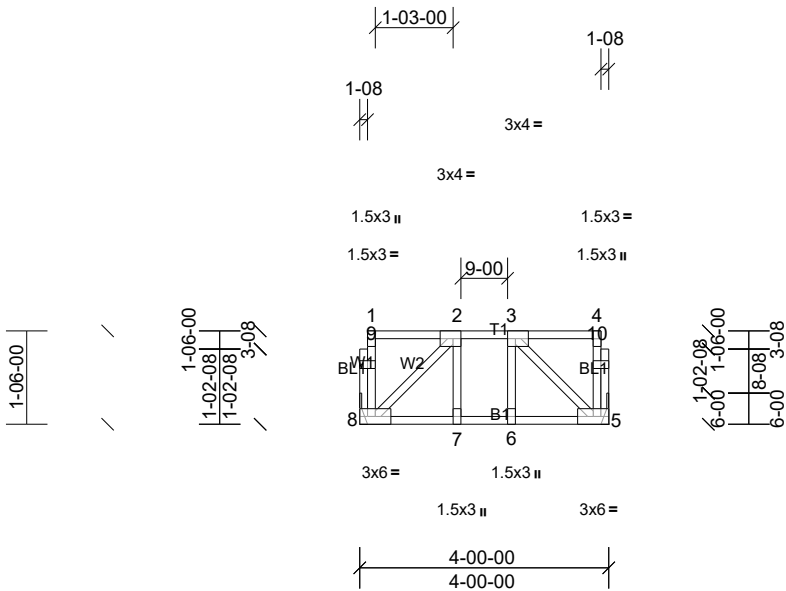
#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x4 MT20 unless otherwise indicated.
- 4) All bearings are assumed to be SPF 2100F 1.8E crushing capacity of 525 psi.
- 5) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
21071052BF	F212	Floor	10	1	

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Scale = 1:37.2

Loading	(psf)	Spacing	1-07-03	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	0.00	7-8	>999	480	MT20	197/144
TCDL	10.0	Lumber DOL	1.00	BC	0.06	Vert(TL)	0.00	7-8	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 21 lb	FT = 20%F, 11%E

LUMBER

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

BRACING

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

REACTIONS (size) 5= Mechanical, (min. 1-08), 8=  
Mechanical, (min. 1-08)  
Max Grav 5=160 (LC 1), 8=160 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.

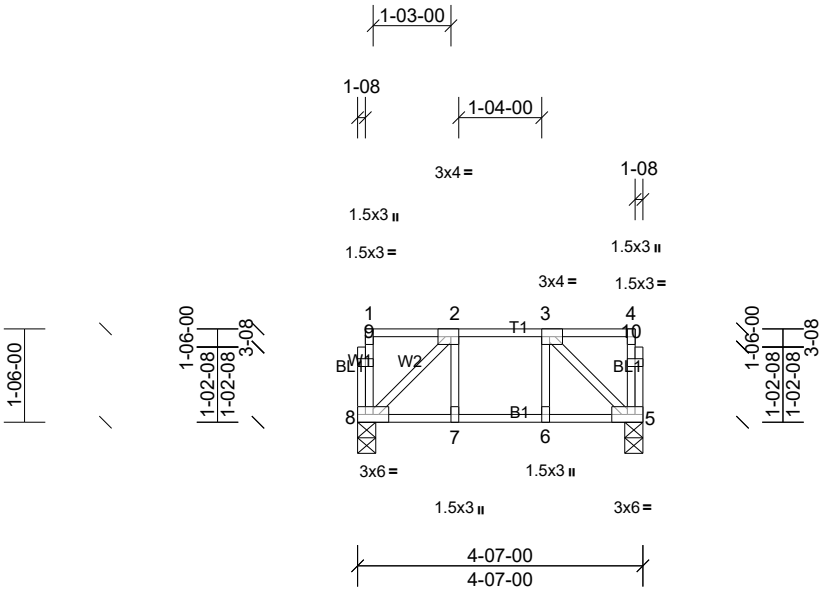
NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
21071052BF	F214	Floor	4	1	

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:38  
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Loading	(psf)	Spacing	1-07-03	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	0.00	7-8	>999	480	MT20	197/144
TCDL	10.0	Lumber DOL	1.00	BC	0.08	-0.01	7-8	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-SH						Weight: 22 lb	FT = 20%F, 11%E

LUMBER

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

BRACING

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

REACTIONS (size) 5=3-08, (min. 1-08), 8=3-08, (min.  
1-08)

Max Grav 5=186 (LC 1), 8=186 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.

NOTES

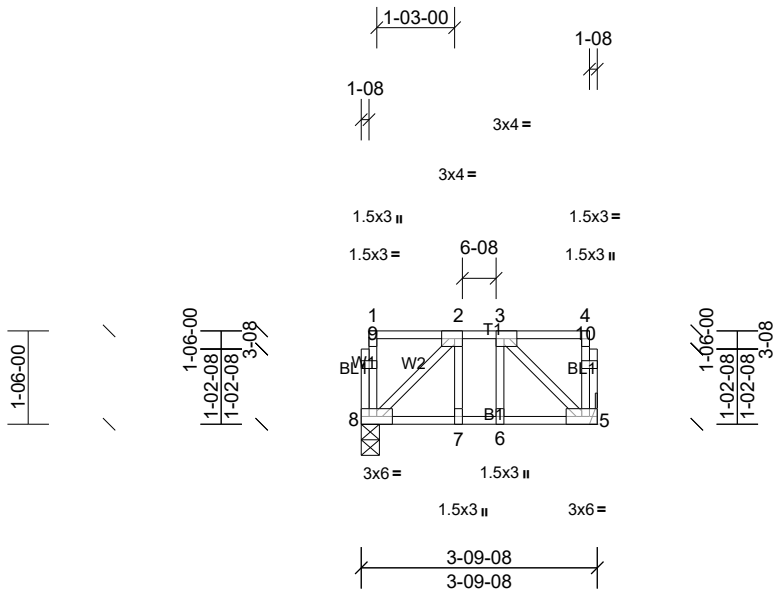
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 3) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
21071052BF	F215	Floor	1	1	

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Page: 1



Scale = 1:37.2

Loading		(psf)	Spacing		1-07-03	CSI		DEFL		in	(loc)	l/defl	L/d	PLATES		GRIP
TCLL		40.0	Plate Grip DOL		1.00	TC		Vert(LL)		0.00	7-8	>999	480	MT20		197/144
TCDL		10.0	Lumber DOL		1.00	BC		Vert(TL)		0.00	7-8	>999	360			
BCLL		0.0	Rep Stress Incr		YES	WB		Horiz(TL)		0.00	5	n/a	n/a			
BCDL		5.0	Code		IRC2012/TPI2007	Matrix-SH								Weight: 21 lb		FT = 20%F, 11%E

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or  
3-9-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 5= Mechanical, (min. 1-08),  
8=3-08, (min. 1-08)  
Max Grav 5=151 (LC 1), 8=151 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.

NOTES

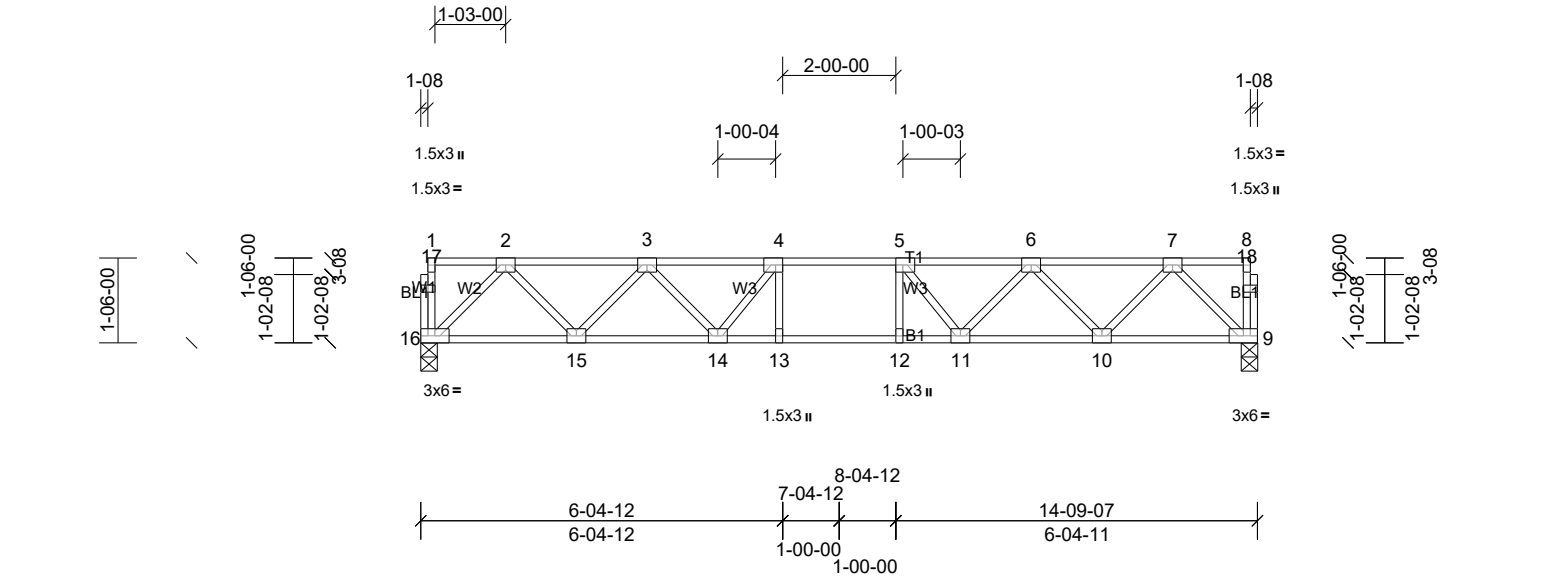
- 1) Unbalanced floor live loads have been considered for this design.
- 2) Bearings are assumed to be: Joint 8 SPF No.2 crushing capacity of 425 psi.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
21071052BF	F216	Floor	2	1	

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Page: 1



Scale = 1:40.9

Loading	(psf)	Spacing	1-07-03	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.31	Vert(LL)	-0.09	13-14	>999	480	MT20	197/144
TCDL	10.0	Lumber DOL	1.00	BC	0.64	Vert(TL)	-0.13	13-14	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 61 lb	FT = 20%F, 11%E

**LUMBER**

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

**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) 9=3-08, (min. 1-08), 16=3-08, (min. 1-08)  
Max Grav 9=634 (LC 1), 16=634 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

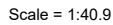
TOP CHORD 2-3=-983/0, 3-4=-1527/0, 4-5=-1672/0, 5-6=-1527/0, 6-7=-983/0  
BOT CHORD 15-16=0/598, 14-15=0/1346, 13-14=0/1672, 12-13=0/1672, 11-12=0/1672, 10-11=0/1346, 9-10=0/598  
WEBS 2-16=-843/0, 2-15=0/572, 3-15=-541/0, 3-14=0/318, 4-14=-368/0, 7-9=-843/0, 7-10=0/572, 6-10=-540/0, 6-11=0/318, 5-11=-369/0

**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 4) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:38 Page: 1  
ID:yax?3N9ZsMyEFoIF3ApykQzQX0I-K4FqrlDTbk0xrpv4MGyVDX6?0KMzGnxTcyq5Y6ytG9i



**LUMBER**

## BRACING

**REACTIONS** (size) 9= Mechanical, (min. 1-08),  
16=3-08, (min. 1-08)  
Max Grav 9=622 (LC 1), 16=622 (LC 1)

BOT CHORD 15-16=0/585, 14-15=0/1312, 13-14=0/1605,  
12-13=0/1605, 11-12=0/1605, 10-11=0/1306,  
9-10=0/587

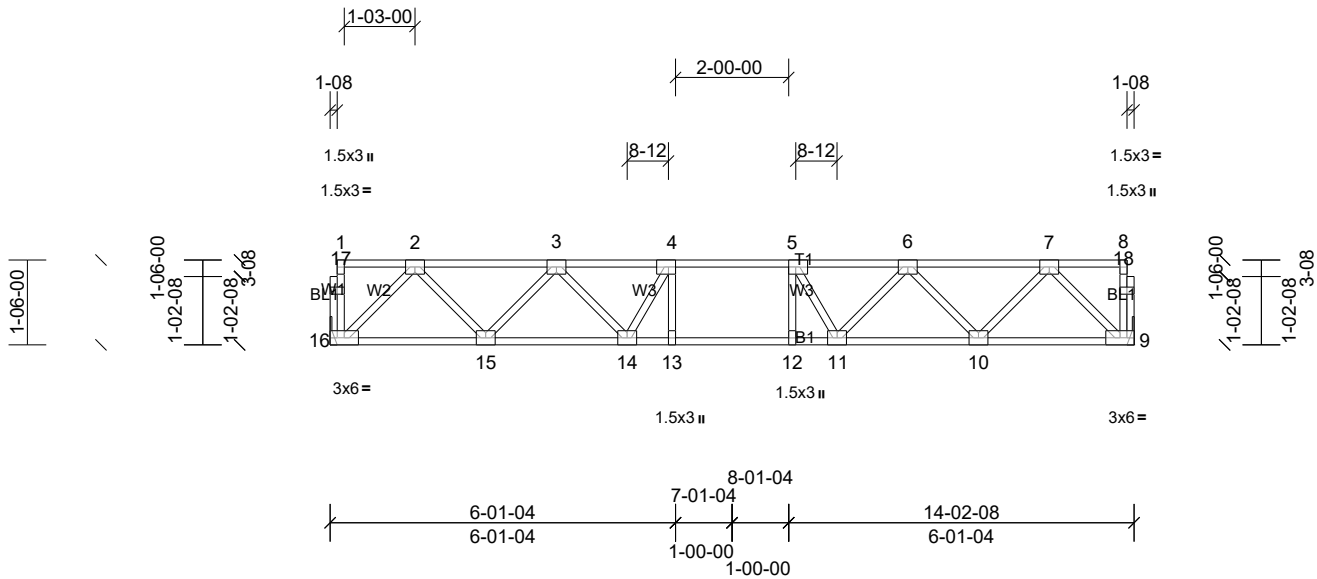
## NOTES

- LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
21071052BF	F218	Floor	2	1	Job Reference (optional)

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Page: 1



Scale = 1:40.9

Loading	(psf)	Spacing	1-07-03	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.29	Vert(LL)	-0.08	13-14	>999	480	MT20	197/144
TCDL	10.0	Lumber DOL	1.00	BC	0.60	Vert(TL)	-0.11	11-12	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 60 lb	FT = 20%F, 11%E

LUMBER

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

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) 9= Mechanical, (min. 1-08), 16=  
Mechanical, (min. 1-08)  
Max Grav 9=609 (LC 1), 16=609 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.

TOP CHORD 2-3=-933/0, 3-4=-1439/0, 4-5=-1538/0,  
5-6=-1439/0, 6-7=-933/0  
BOT CHORD 15-16=0/573, 14-15=0/1271, 13-14=0/1538,  
12-13=0/1538, 11-12=0/1538, 10-11=0/1271,  
9-10=0/573  
WEBS 2-16=-809/0, 2-15=0/535, 3-15=-503/0,  
3-14=0/310, 4-14=-344/7, 7-9=-809/0,  
7-10=0/535, 6-10=-503/0, 6-11=0/310,  
5-11=-344/7

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:39 Page: 1  
ID: YGnl?AKLZjfXyxpux63EINzQX0X-oHoC2eE5L28oTzUGwzTklke5Lkiv?DedrcZe4ZytG9h



**LUMBER**

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 596 lb down at 5-3-2, and 596 lb down at 6-10-5 on top chord. The design/selection of such connection device (s) is the responsibility of others.

10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00,  
Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 8-14=-8, 1-7=-80  
Concentrated Loads (lb)  
Vert: 4=-875 (F), 3=-875 (F), 2=-875 (F), 6=-875 (F),  
17=-545 (B), 18=-545 (B)

(size) 8=3-08, (min. 1-08), 11=3-08, (min. 2-03), 14=6-00, (min. 1-08)  
Max Grav 8=1227 (LC 7), 11=3240 (LC 8), 14=1145 (LC 10)

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1154/0, 5-6=-1028/0  
BOT CHORD 13-14=0/1154, 12-13=0/1154, 11-12=0/1154,  
10-11=0/1028, 9-10=0/1028, 8-9=0/1028  
WEBS 4-11=-1306/0, 3-11=-1436/0, 2-14=-1595/0,  
5-11=-1342/0, 6-8=-1410/0, 5-10=0/284,  
6-9=-263/0

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 4) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 7) Use USP MS422 (With 10d nails into Girder & 6-10d nails into Truss) or equivalent spaced at 1-7-3 oc max. starting at 1-6-8 from the left end to 6-4-1 to connect truss(es) to front face of top chord.
- 8) Fill all nail holes where hanger is in contact with lumber.

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:39 Page: 1  
ID: Y?FtQM7hZRafOL0gO1GF6nzQX0o-K4FqrlDTbk0xrpv4MGyVDX6tlKKGGI2Tcyq5Y6ytG9i



**LUMBER**

## BRACING

**REACTIONS** (size) 13= Mechanical, (min. 1-08),  
23=3-08, (min. 1-08)  
Max Grav 13=939 (LC 1), 23=939 (LC 1)

TOP CHORD 2-3=-1562/0, 3-4=-2658/0, 4-5=-3349/0,  
5-6=-3642/0, 6-7=-3642/0, 7-8=-3356/0,  
8-9=-2656/0, 9-10=-2656/0, 10-11=-1562/0

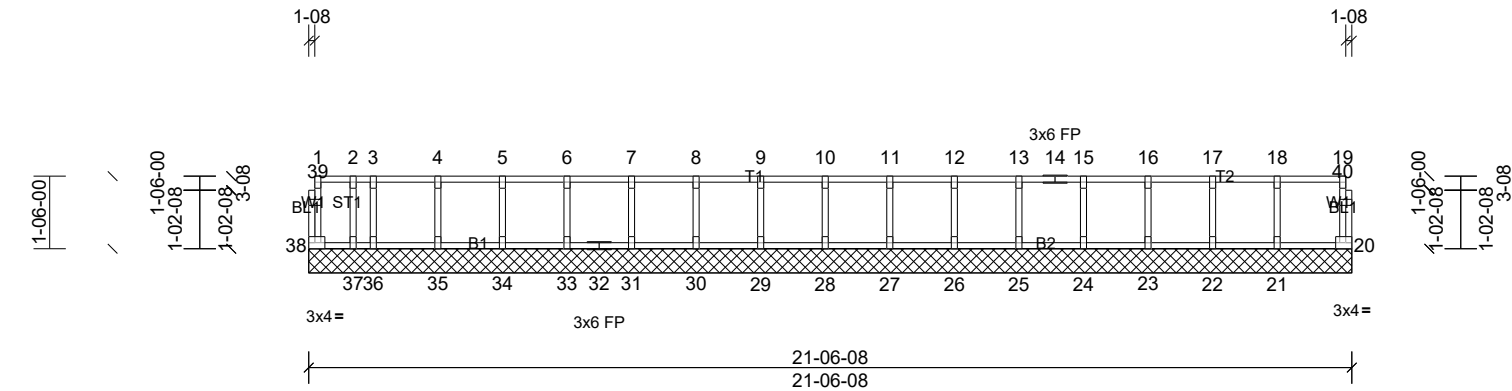
WEBS 2-23=-1271/0, 2-22=0/984, 3-22=-955/0,  
3-21=0/673, 4-21=-641/0, 4-19=0/472,  
5-19=-632/0, 11-13=-1272/0, 11-14=0/984,  
10-14=-951/0, 10-15=0/674, 8-15=-656/0,  
8-16=0/384, 7-16=-356/0, 7-17=-210/430

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.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
21071052BF	K100	Floor Supported Gable	1	1	

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:39  
ID:0kt6nJYeJB\_h5jBOXuOS1AzQX0F-oHoC2eE5L28oTzUGwzTklikeDdksJ?GldrcZe4ZytG9h



Scale = 1:47.8

Loading	(psf)	Spacing	2-00-00	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	197/144
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	20	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-R							Weight: 77 lb	FT = 20%F, 11%E

LUMBER

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

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 All bearings 21-06-08.

(lb) - Max Grav All reactions 250 (lb) or less at joint  
(s) 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38

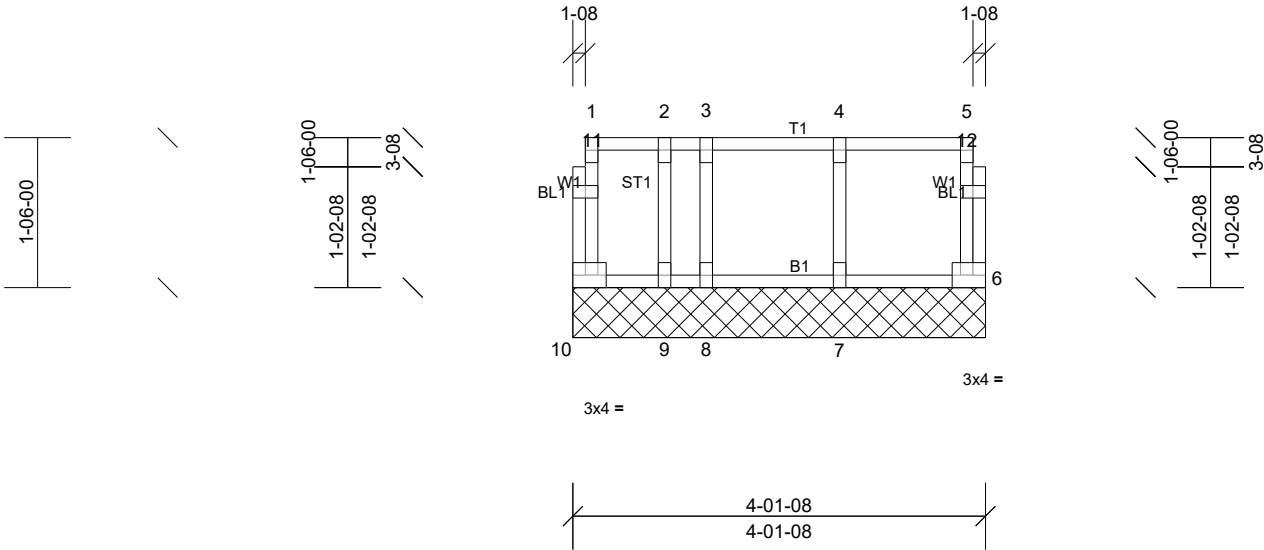
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES

- 1) All plates are 1.5x3 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
21071052BF	K101	Floor Supported Gable	1	1	Job Reference (optional)



Scale = 1:23.1

Loading	(psf)	Spacing	2-00-00	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	197/144
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	6	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-R							Weight: 19 lb	FT = 20%F, 11%E

LUMBER

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

BRACING

- TOP CHORD Structural wood sheathing directly applied or 4-1-8 oc purlins, except end verticals.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** All bearings 4-01-08.

(lb) - Max Grav All reactions 250 (lb) or less at joint (s) 6, 7, 8, 9, 10

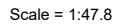
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES

- All plates are 1.5x3 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 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.

**LOAD CASE(S)** Standard

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:39 Page: 1  
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**LUMBER**

## BRACING

**REACTIONS** All bearings 21-06-08.

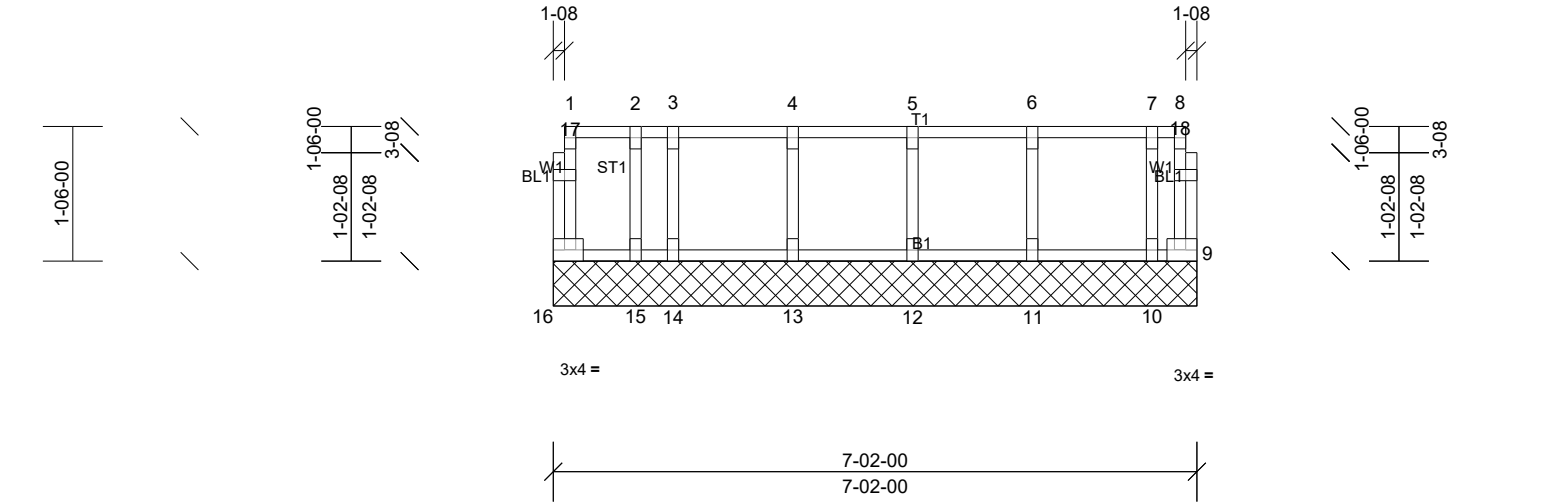
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

## NOTES

- LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
21071052BF	K103	Floor Supported Gable	1	1	

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:39 Page: 1  
ID:Qm6sjT?7u3viAja?HXilYTzMV3Z-K4FqrlDTbk0xrpv4MGyVDX62yKWFGp3Tcyq5Y6ytG9i



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Loading	(psf)	Spacing	2-00-00	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	197/144
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	9	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-R							Weight: 30 lb	FT = 20%F, 11%E

#### LUMBER

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

#### 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

All bearings 7'-02-00.  
(lb) - Max Uplift All uplift 100 (lb) or less at joint(s) 9  
Max Grav All reactions 250 (lb) or less at joint (s) 9, 10, 11, 12, 13, 14, 15, 16

#### FORCES

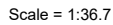
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

#### NOTES

- 1) All plates are 1.5x3 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.
- 7) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

LOAD CASE(S) Standard

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**LUMBER**

## BRACING

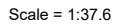
**REACTIONS** All bearings 14-04-00.

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

## NOTES

- LOAD CASE(S) Standard

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:40 Page: 1  
ID:0kt6nJYeJB\_h5jB0xoUS1AzQX0F-K4FqrIDTbk0xrpv4MGyVDX62uKW3Gp2Tcyq5Y6ytG9i



## LUMBER

## BRACING

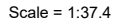
**REACTIONS** All bearings 14-10-08.

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

## NOTES

- LOAD CASE(S) Standard

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:40 Page: 1  
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## LUMBER

## BRACING

**REACTIONS** All bearings 14-09-07.

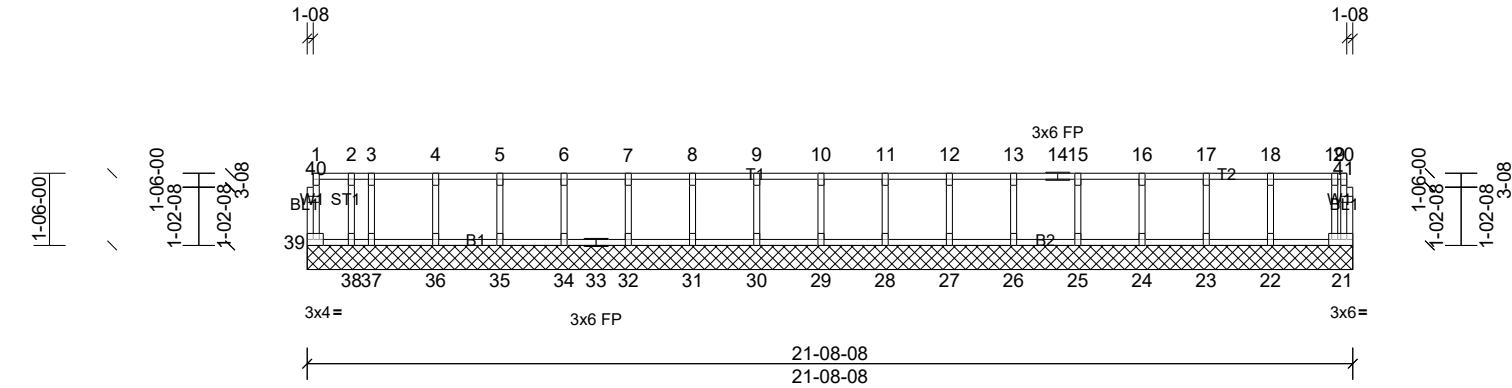
## NOTES

- LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
21071052BF	K200	Floor Supported Gable	1	1	

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ID:uz3mU3BpOzCyV6vdBasQprzQX0j-K4FqrlDTbk0xrpv4MGyVDX62tKWxGp2Tcyq5Y6ytG9i

Page: 1



Scale = 1:48

Loading	(psf)	Spacing	2-00-00	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	197/144
TCDL	10.0	Lumber DOL	1.00	BC	0.03	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	IRC2012/TPI2007	Matrix-R							
										Weight: 79 lb	FT = 20%F, 11%E

#### LUMBER

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

#### 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

All bearings 21-08-08.  
(lb) - Max Grav All reactions 250 (lb) or less at joint  
(s) 21, 22, 23, 24, 25, 26, 27, 28,  
29, 30, 31, 32, 34, 35, 36, 37, 38,  
39

#### FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.

#### NOTES

- 1) All plates are 1.5x3 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

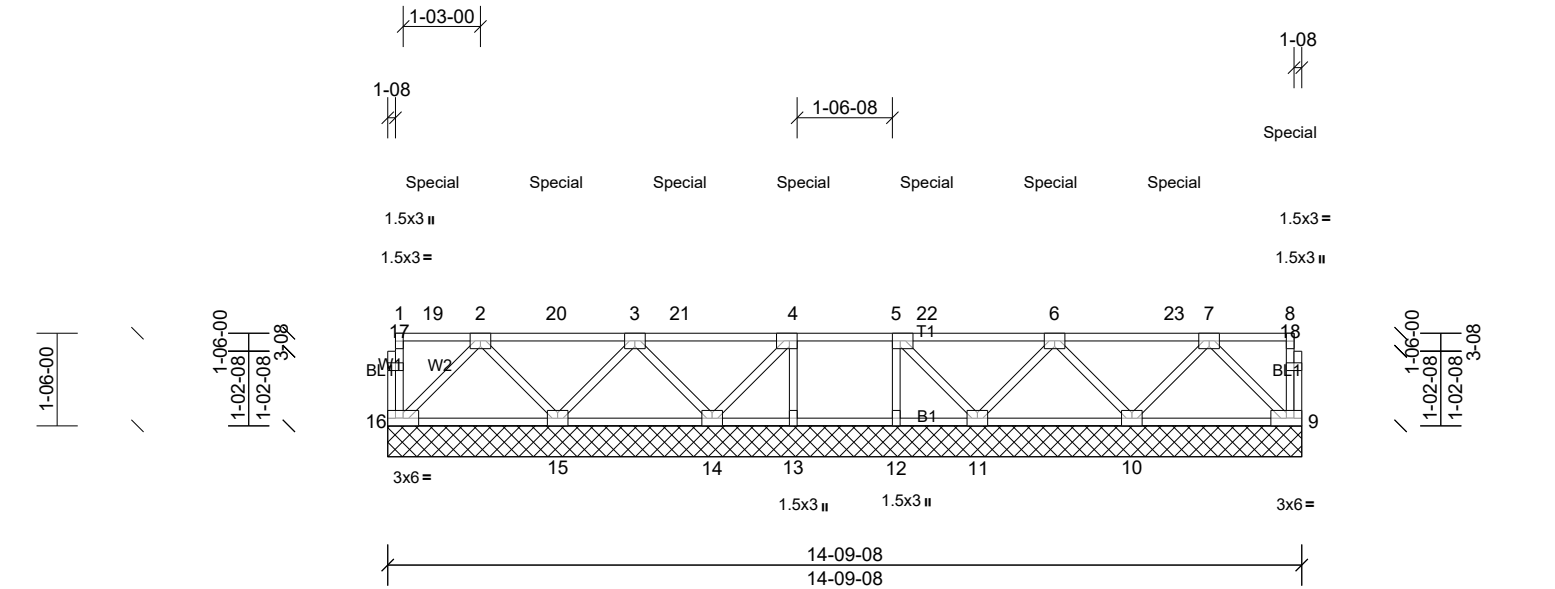
#### LOAD CASE(S)

Standard

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
21071052BF	K201	Floor Supported Gable	1	1	

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Page: 1



Scale = 1:37.4

Loading	(psf)	Spacing	2-00-00	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	0.90	TC	0.52	Vert(LL)	n/a	-	n/a	999	197/144
TCDL	10.0	Lumber DOL	0.90	BC	0.10	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	9	n/a	n/a	
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-SH							
										Weight: 62 lb	FT = 20%F, 11%E

# LUMBER

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

# 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

All bearings	14-09-08.
(lb) - Max Uplift	All uplift 100 (lb) or less at joint(s) 9, 11, 13, 14, 16
Max Grav	All reactions 250 (lb) or less at joint (s) 12, 16 except 9=321 (LC 2), 10=489 (LC 2), 11=339 (LC 2), 13=283 (LC 2), 14=344 (LC 2), 15=498 (LC 2)

# FORCES

(lb) - Max. Comp./Max. Ten. - All forces	250 (lb) or less except when shown.
WEBS	7-10=-299/8, 2-15=-318/11, 6-10=-320/12, 3-15=-315/11, 6-11=-317/12, 3-14=-315/12, 4-13=-269/12

# NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 9, 14, 13.
- 8) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) 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.

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 214 lb down and 33 lb up at 0-8-12, 209 lb down and 36 lb up at 2-8-12, 209 lb down and 36 lb up at 4-8-12, 209 lb down and 36 lb up at 6-8-12, 209 lb down and 36 lb up at 8-8-12, 209 lb down and 36 lb up at 10-8-12, and 209 lb down and 36 lb up at 12-8-12, and 220 lb down and 29 lb up at 14-7-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.

11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

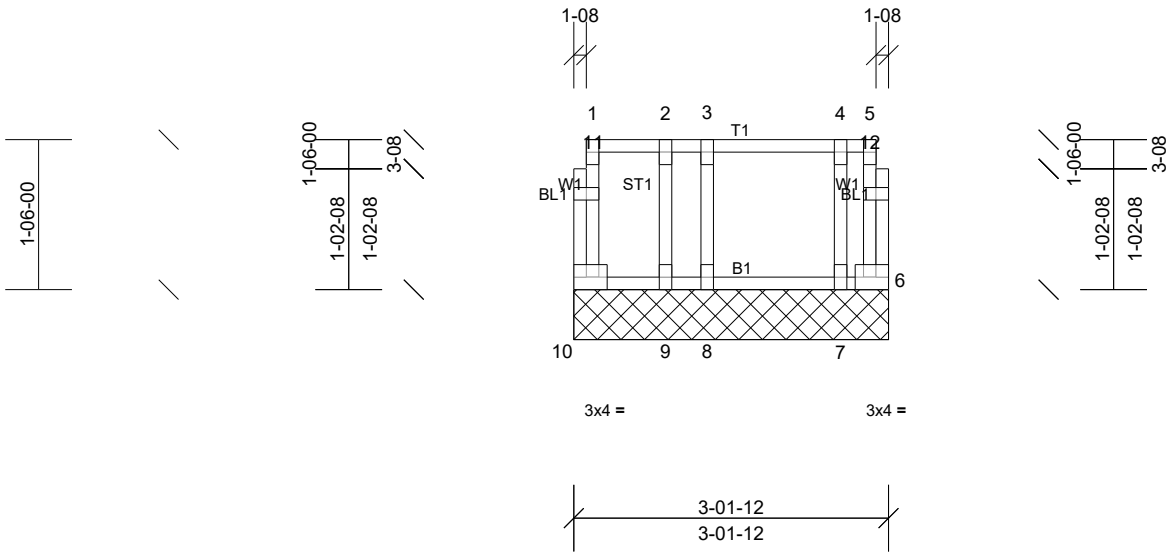
# LOAD CASE(S)

- 1) Dead + Roof Live (balanced): Lumber Increase=0.90, Plate Increase=0.90  
Uniform Loads (lb/ft)  
Vert: 9-16=-10, 1-8=-20  
Concentrated Loads (lb)  
Vert: 8=-220 (F), 6=-209 (F), 4=-209 (F), 19=-214 (F), 20=-209 (F), 21=-209 (F), 22=-209 (F), 23=-209 (F)

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
21071052BF	K202	Floor Supported Gable	1	1	

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:41  
ID:uz3mU3BpOzCyV6vdBasQprzQX0j-oHoC2eE5L28oTzUGwzTklikeExksT?GNdrcZe4ZytG9h

Page: 1



Scale = 1:23.1

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
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	6	n/a	n/a		
BCDL	5.0	Code	IRC2012/TPI2007	Matrix-R							Weight: 16 lb	FT = 20%F, 11%E

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-1-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

All bearings 3-01-12.  
(lb) - Max Uplift All uplift 100 (lb) or less at joint(s) 6  
Max Grav All reactions 250 (lb) or less at joint (s) 6, 7, 8, 9, 10

#### FORCES

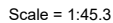
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

#### NOTES

- 1) All plates are 1.5x3 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.
- 7) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

LOAD CASE(S) Standard

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:41 Page: 1  
ID:0TLgCVLzKzr6Y6O7SpbTrazQX0W-K4FqrIDTbk0xrpv4MGyVDX6xQKWsGoETcyg5Y6ytG9i



LUMBER

TOP CHORD

2x4 SPF 2100F 1.8E(flat)

BOT CHORD

2x4 SPF No.2(flat)

WEBS

2x4 SPF No.2(flat)

OTHERS

2x4 SPF No.2(flat)

BRACING

TOP CHORD

Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.

BOT CHORD

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

REACTIONS

All bearings 3-09-08. except 8= Mechanical

(lb) - Max Uplift

All uplift 100 (lb) or less at joint(s)

5, 6, 7, 8

Max Grav

All reactions 250 (lb) or less at joint (s) 8 except 5=414 (LC 7), 6=348 (LC 7), 7=501 (LC 7)

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD

5-10=-330/57, 4-10=-330/57

WEBS

2-7=-487/82, 3-6=-335/43

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 582 lb down and 134 lb up at 1-2-12, and 586 lb down and 131 lb up at 3-2-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=0.90, Plate Increase=0.90

Uniform Loads (lb/ft)

Vert: 5-8=-10, 1-4=-20

Concentrated Loads (lb)

Vert: 11=-523 (B), 12=-528 (B)

- 1) Unbalanced floor live loads have been considered for this design.
- 2) This truss is not designed to be used as a floor truss.
- 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) Bearings are assumed to be: , Joint 6 SPF No.2 crushing capacity of 425 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 5, 7, 6.
- 8) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) 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.