

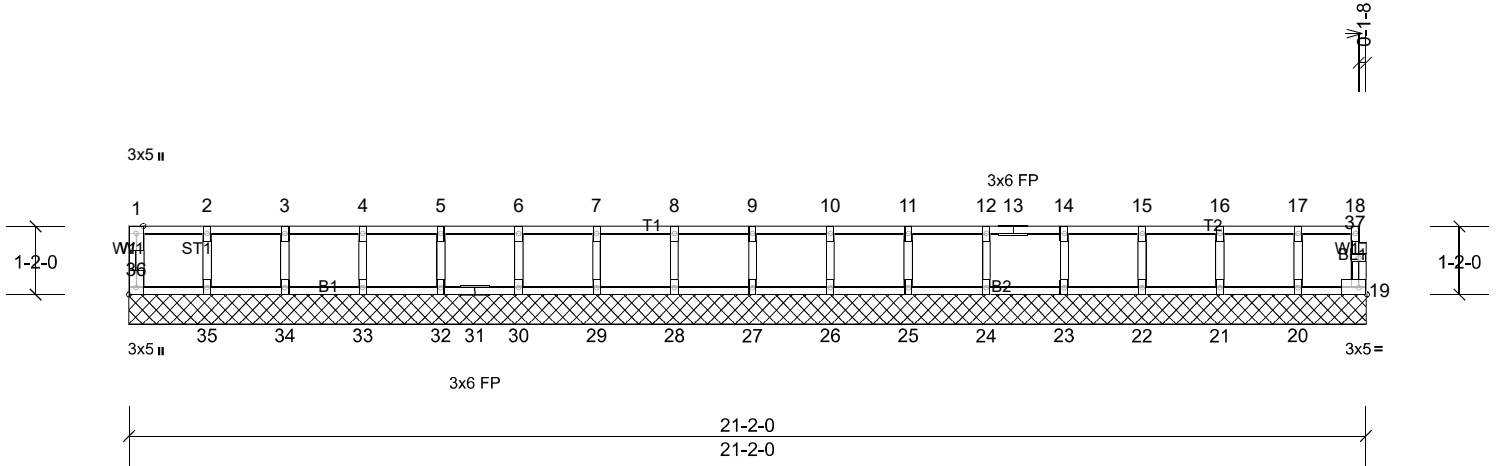
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
23090033 - Elev B	F201	Floor Supported Gable	1	1	

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Scale = 1:39.4

Plate Offsets (X, Y): [36: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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
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	0.03	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 88 lb	FT = 20%F, 11%E

**LUMBER**

- TOP CHORD 2x4 SP No.2(flat)
- BOT CHORD 2x4 SP No.2(flat)
- WEBS 2x4 SP No.3(flat)
- OTHERS 2x4 SP No.3(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 21-2-0.

- (lb) - Max Grav All reactions 250 (lb) or less at joint
- (s) 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36

**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.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

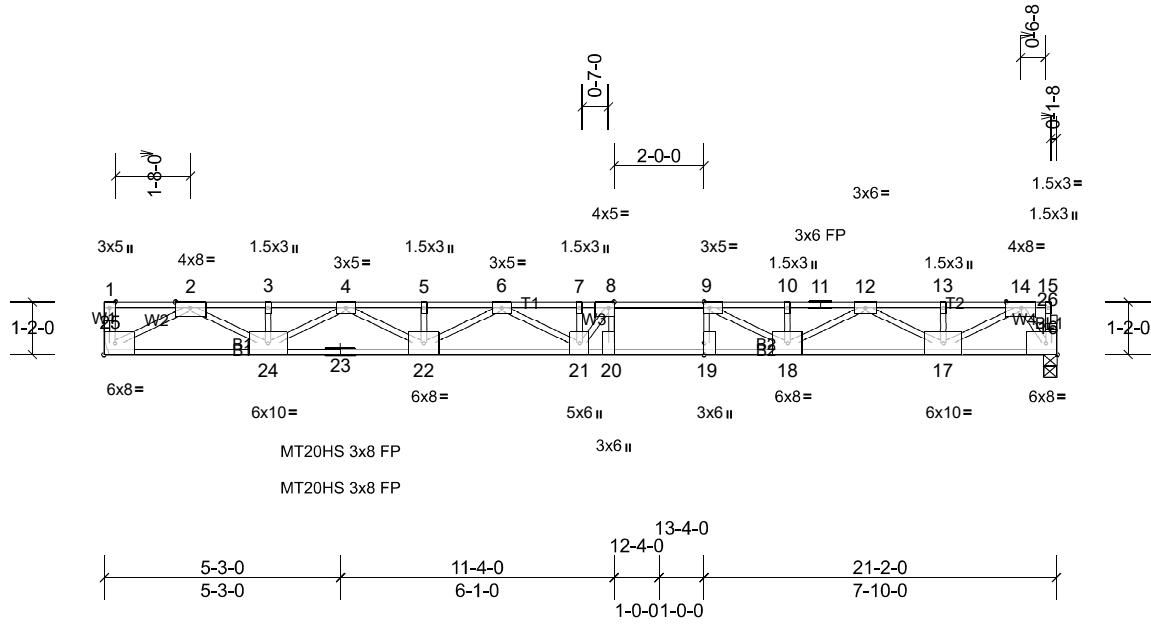
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
23090033 - Elev B	F202	Floor	9	1	

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Scale = 1:51.2

Plate Offsets (X, Y): [8:0-1-8,Edge], [9:0-1-8,Edge], [19:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.70	Vert(LL)	-0.45	21	>557	360	MT20 244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.96	Vert(CT)	-0.62	21	>405	240	MT20HS 187/143
BCLL	0.0	Rep Stress Incr	NO	WB	0.90	Horz(CT)	0.05	16	n/a	n/a	
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 137 lb FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP 2400F 2.0E(flat) \*Except\* T2:2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat) \*Except\* B2:2x4 SP No.1 (flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(flat)

**BRACING**

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

**REACTIONS** (lb/size) 16=1147/0-3-8, (min. 0-1-8), 25=1147/ Mechanical, (min. 0-1-8)

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

TOP CHORD 2-3=-3418/0, 3-4=-3418/0, 4-5=-5400/0, 5-6=-5400/0, 6-7=-6062/0, 7-8=-6062/0, 8-9=-5819/0, 9-10=-4824/0, 10-11=-4824/0, 11-12=-4824/0, 12-13=-2428/0, 13-14=-2428/0  
 BOT CHORD 24-25=0/1923, 23-24=0/4576, 22-23=0/4576, 21-22=0/5905, 20-21=0/5819, 19-20=0/5819, 18-19=0/5819, 17-18=0/3801, 16-17=0/781  
 WEBS 8-20=-644/109, 9-19=-36/408, 2-25=-2191/0, 2-24=0/1719, 4-24=-1331/0, 4-22=0/947, 6-22=-580/0, 6-21=-28/405, 8-21=-366/802, 9-18=-1365/0, 12-18=0/1176, 12-17=-1578/0, 14-17=0/1894, 14-16=-1349/0

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

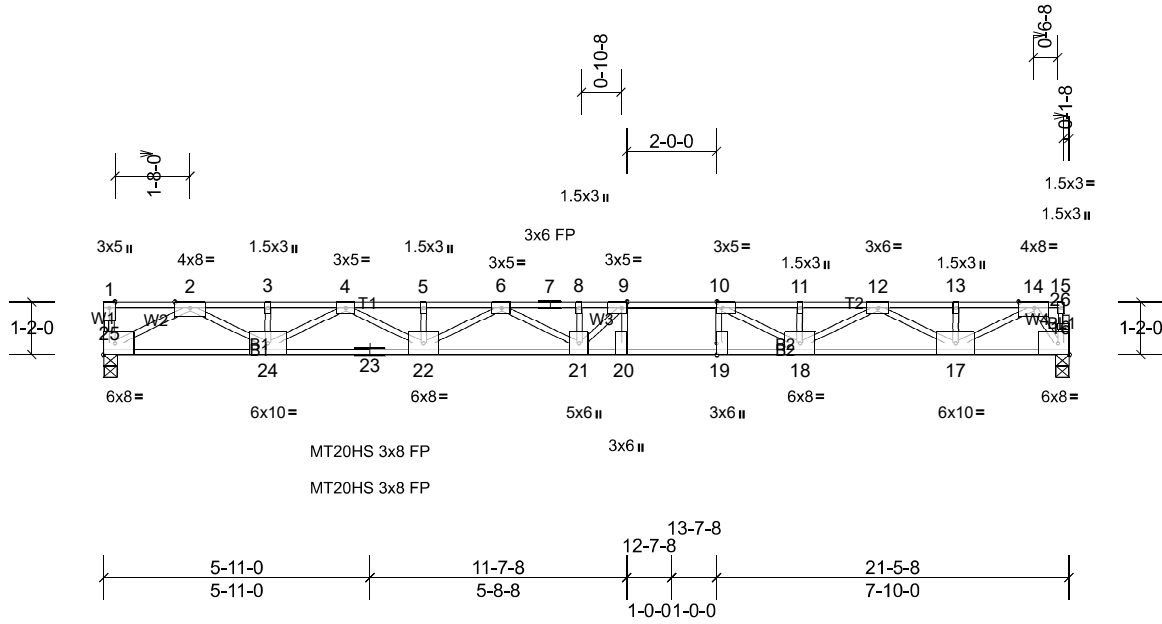
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
23090033 - Elev B	F203	Floor	1	1	

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Scale = 1:51.2

Plate Offsets (X, Y): [9:0-1-8,Edge], [10:0-1-8,Edge], [19:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP		
TCLL	40.0	Plate Grip DOL	1.00	TC	0.69	Vert(LL)	-0.42	20-21	>609	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.59	Vert(CT)	-0.57	20-21	>443	240	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	NO	WB	0.23	Horz(CT)	0.04	16	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH								
										Weight: 139 lb	FT = 20%F, 11%E	

**LUMBER**

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP 2400F 2.0E(flat)  
 OTHERS 2x4 SP No.3(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** (lb/size) 16=1163/0-3-8, (min. 0-1-8),  
 25=1163/0-3-8, (min. 0-1-8)

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

TOP CHORD 2-3=-3467/0, 3-4=-3467/0, 4-5=-5504/0,  
 5-6=-5504/0, 6-7=-6230/0, 7-8=-6230/0,  
 8-9=-6230/0, 9-10=-5963/0, 10-11=-4907/0,  
 11-12=-4907/0, 12-13=-2473/0,  
 13-14=-2473/0

BOT CHORD 24-25=0/1951, 23-24=0/4658, 22-23=0/4658,  
 21-22=0/6045, 20-21=0/5963, 19-20=0/5963,  
 18-19=0/5963, 17-18=0/3864, 16-17=0/793

WEBS 9-20=-571/93, 10-19=-30/452, 2-25=-2223/0,  
 2-24=0/1743, 4-24=-1369/0, 4-22=0/972,  
 6-22=-621/0, 6-21=0/401, 9-21=-367/739,  
 10-18=-1433/0, 12-18=0/1198,  
 12-17=-1599/0, 14-17=0/1933,  
 14-16=-1371/0

**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) 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.
- 5) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

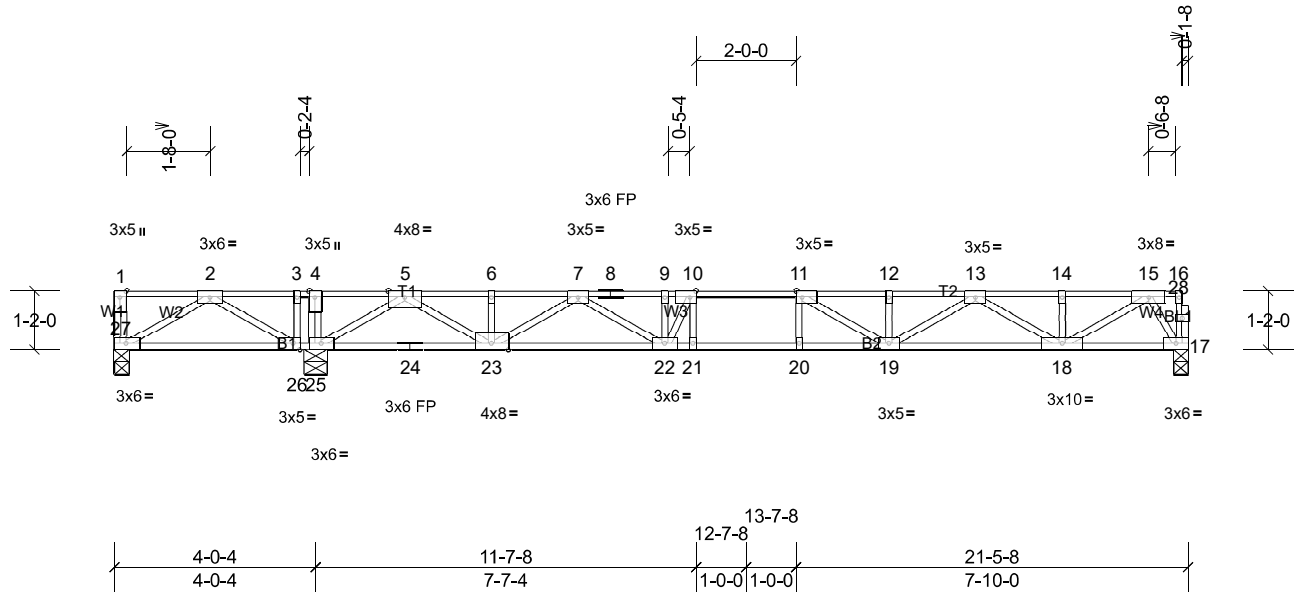
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
23090033 - Elev B	F204	Floor	1	1	

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Scale = 1:46.1

Plate Offsets (X, Y): [10:0-1-8,Edge], [11:0-1-8,Edge], [26:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP		
TCLL	40.0	Plate Grip DOL	1.00	TC	0.94	Vert(LL)	-0.22	19-20	>927	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.69	Vert(CT)	-0.31	19-20	>675	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.73	Horz(CT)	0.03	17	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH								
										Weight: 112 lb	FT = 20%F, 11%E	

**LUMBER**  
TOP CHORD 2x4 SP No.1(flat) \*Except\* T2:2x4 SP No.2 (flat)  
BOT CHORD 2x4 SP No.2(flat) \*Except\* B2:2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.3(flat)  
OTHERS 2x4 SP No.3(flat)

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 5-9-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (lb/size)  
17=815/0-3-8, (min. 0-1-8),  
25=1879/0-5-8, (min. 0-1-8),  
27=-368/0-3-8, (min. 0-1-8)  
Max Uplift 27=-531 (LC 4)  
Max Grav 17=815 (LC 1), 25=1879 (LC 1),  
27=64 (LC 3)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=0/2044, 3-4=0/2044, 4-5=0/2044,  
5-6=-847/0, 6-7=-847/0, 7-8=-2508/0,  
8-9=-2508/0, 9-10=-2508/0, 10-11=-2838/0,  
11-12=-2842/0, 12-13=-2842/0,  
13-14=-1605/0, 14-15=-1605/0  
BOT CHORD 26-27=-956/0, 25-26=-2044/0, 24-25=-495/0,  
23-24=-495/0, 22-23=0/1833, 21-22=0/2838,  
20-21=0/2838, 19-20=0/2838, 18-19=0/2362,  
17-18=0/517  
WEBS 4-25=-719/0, 10-21=-47/390, 2-27=0/1106,  
2-26=-1414/0, 3-26=0/504, 5-25=-1792/0,  
5-23=0/1541, 7-23=-1154/0, 7-22=0/788,  
9-22=-87/252, 10-22=-965/0,  
11-19=-369/236, 13-19=0/561, 13-18=-884/0,  
15-18=0/1270, 15-17=-959/0

**NOTES**  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are 1.5x3 MT20 unless otherwise indicated.  
3) One RT8A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 27. This connection is for uplift only and does not consider lateral forces.

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

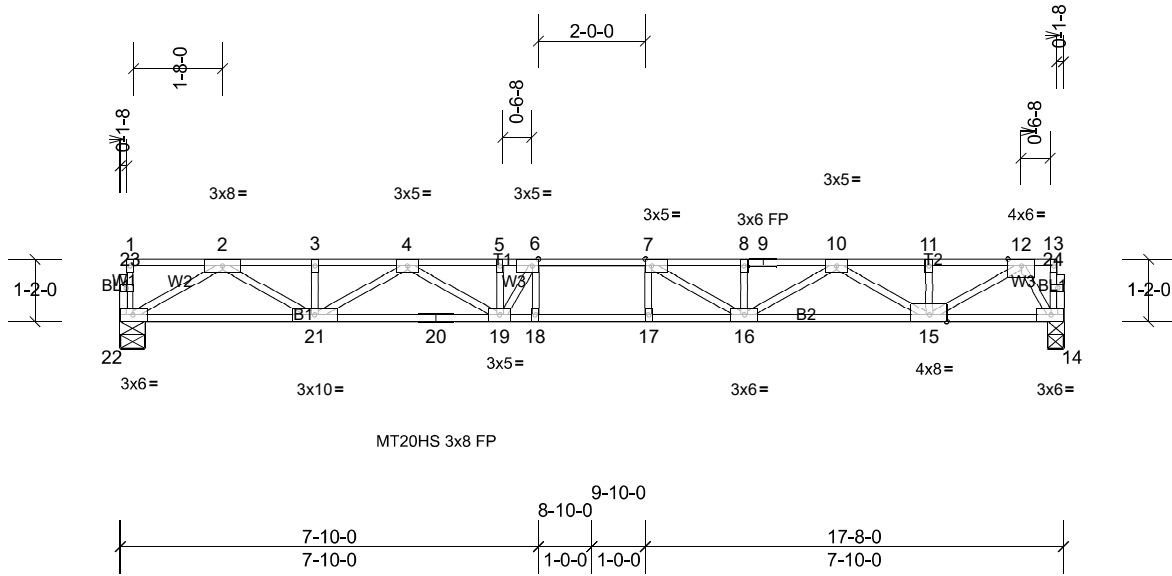
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
23090033 - Elev B	F205	Floor	4	1	

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Scale = 1:43.2

Plate Offsets (X, Y): [6:0-1-8,Edge], [7:0-1-8,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	Vert(LL)	-0.28	17-18	>760	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.38	17-18	>551	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							
										Weight: 91 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.1(flat) \*Except\* B2:2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(flat)

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-7-14 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 14=952/0-3-8, (min. 0-1-8),  
 22=952/0-5-8, (min. 0-1-8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2602/0, 3-4=-2602/0, 4-5=-3840/0, 5-6=-3840/0, 6-7=-3959/0, 7-8=-3580/0, 8-9=-3580/0, 9-10=-3580/0, 10-11=-1920/0, 11-12=-1920/0  
 BOT CHORD 21-22=0/1492, 20-21=0/3379, 19-20=0/3379, 18-19=0/3959, 17-18=0/3959, 16-17=0/3959, 15-16=0/2900, 14-15=0/606  
 WEBS 2-22=-1721/0, 2-21=0/1295, 4-21=-907/0, 4-19=0/556, 6-19=-675/257, 7-16=-751/0, 10-16=0/794, 10-15=-1144/0, 12-15=0/1534, 12-14=-1125/0

**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 1.5x3 MT20 unless otherwise indicated.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

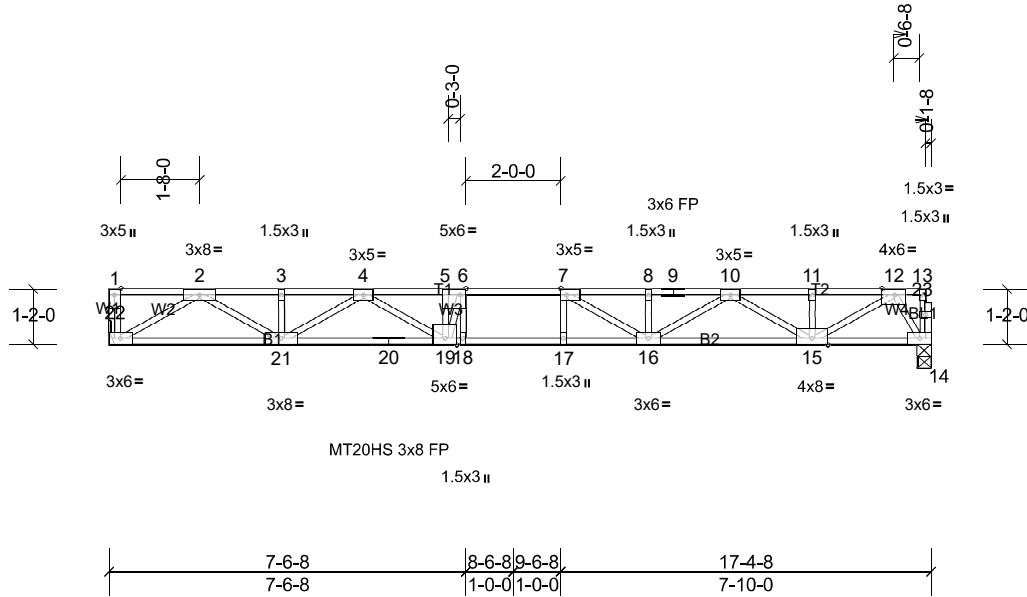
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
23090033 - Elev B	F206	Floor	4	1	

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Scale = 1:48.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.91	Vert(LL)	-0.28	17-18	>734	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.99	Vert(CT)	-0.38	17-18	>534	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH								
											Weight: 90 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.1(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(flat)

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-6-9 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 14=936/0-3-8, (min. 0-1-8),  
 22=942/ Mechanical, (min. 0-1-8)

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

TOP CHORD 2-3=-2547/0, 3-4=-2547/0, 4-5=-3739/0,  
 5-6=-3739/0, 6-7=-3828/0, 7-8=-3497/0,  
 8-9=-3497/0, 9-10=-3497/0, 10-11=-1884/0,  
 11-12=-1884/0

BOT CHORD 21-22=0/1466, 20-21=0/3298, 19-20=0/3298,  
 18-19=0/3828, 17-18=0/3828, 16-17=0/3828,  
 15-16=0/2836, 14-15=0/595

WEBS 6-18=-282/322, 2-22=-1696/0, 2-21=0/1262,  
 4-21=-877/0, 4-19=0/572, 5-19=-238/296,  
 6-19=-859/373, 7-16=-701/23, 10-16=0/771,  
 10-15=-1111/0, 12-15=0/1505, 12-14=-1104/0

**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

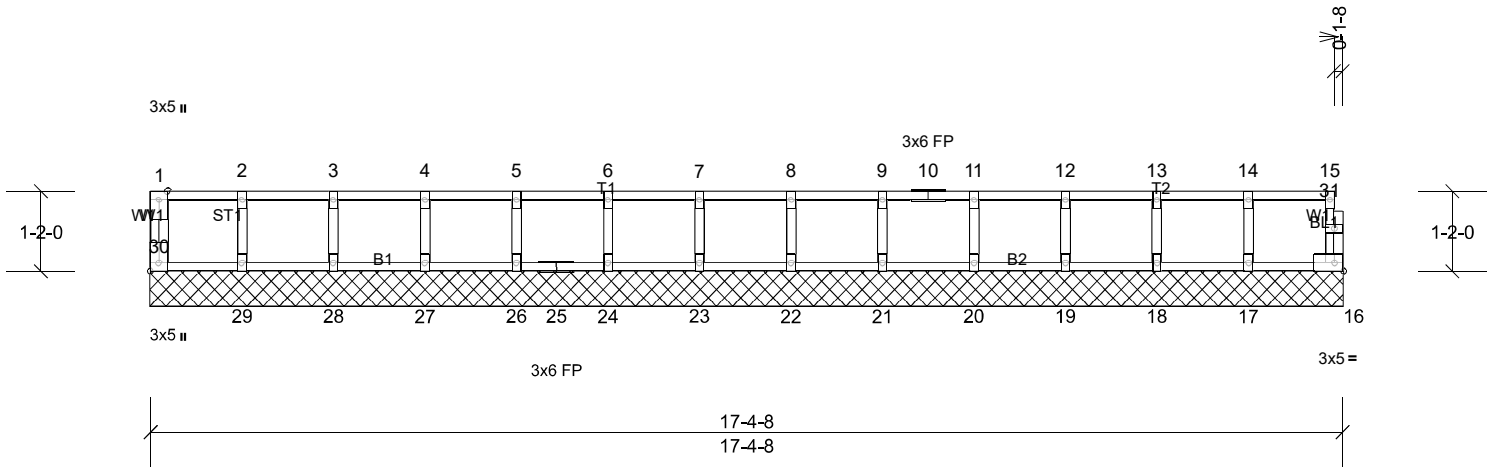
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
23090033 - Elev B	F207	Floor Supported Gable	1	1	

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Scale = 1:33.6

Plate Offsets (X, Y): [30:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
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	0.03	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 73 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(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 17-4-8.

(lb) - Max Grav All reactions 250 (lb) or less at joint  
 (s) 16, 17, 18, 19, 20, 21, 22, 23,  
 24, 26, 27, 28, 29, 30

**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.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

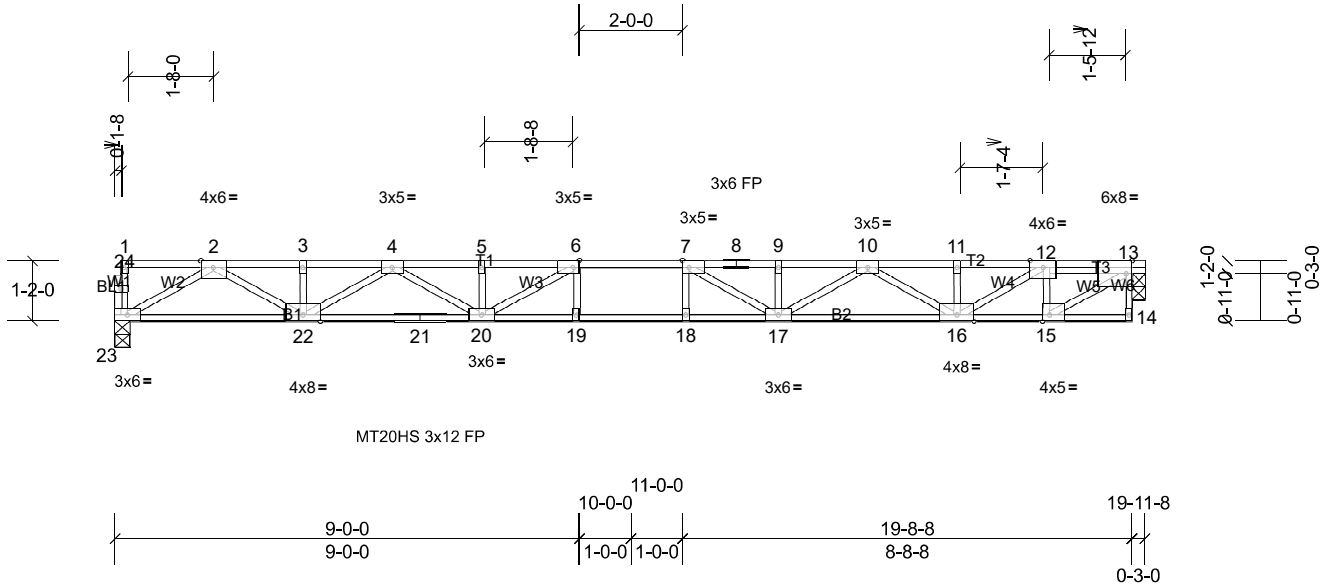
Job 23090033 - Elev B	Truss F208	Truss Type Floor	Qty 5	Ply 1	Job Reference (optional)
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Carter Components, Sanford, NC, user

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Scale = 1:44.7

Plate Offsets (X, Y): [6:0-1-8,Edge], [7:0-1-8,Edge], [13:0-1-8,Edge], [15:0-1-8,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	0.85	Vert(LL)	-0.43	18-19	>551	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.58	18-19	>401	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	-0.02	13	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH								
											Weight: 103 lb	FT = 20%F, 11%E

**LUMBER**

- TOP CHORD 2x4 SP No.2(flat)
- BOT CHORD 2x4 SP No.1(flat) \*Except\* B2:2x4 SP 2400F 2.0E(flat)
- WEBS 2x4 SP No.3(flat)
- OTHERS 2x4 SP No.3(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** (lb/size) 13=1074/0-3-0, (min. 0-1-8),  
23=1067/0-3-8, (min. 0-1-8)

- FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
- TOP CHORD 2-3=-2992/0, 3-4=-2992/0, 4-5=-4624/0, 5-6=-4624/0, 6-7=-4982/0, 7-8=-4563/0, 8-9=-4563/0, 9-10=-4563/0, 10-11=-2860/0, 11-12=-2860/0, 12-13=-1543/0
  - BOT CHORD 22-23=0/1690, 21-22=0/3957, 20-21=0/3957, 19-20=0/4982, 18-19=0/4982, 17-18=0/4982, 16-17=0/3865, 15-16=0/1540
  - WEBS 2-23=-1950/0, 2-22=0/1519, 4-22=-1127/0, 4-20=0/779, 6-20=-826/112, 7-17=-876/65, 10-17=0/815, 10-16=-1173/0, 12-15=-922/0, 12-16=0/1542, 13-15=0/1804

**NOTES**

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 1.5x3 MT20 unless otherwise indicated.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



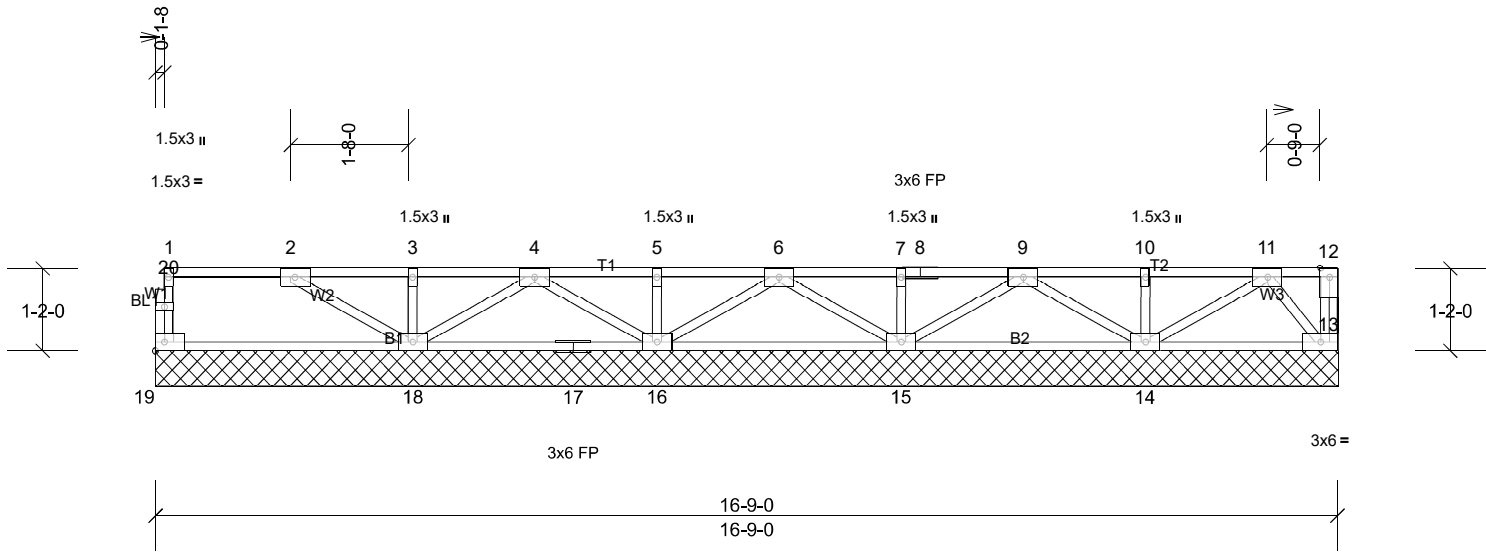
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
23090033 - Elev B	F209	Floor	1	1	

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Scale = 1:32.7

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	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 85 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(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, Except:  
 6'-0-0 oc bracing: 16-18.

**REACTIONS** All bearings 16-9-0.

(lb) - Max Grav All reactions 250 (lb) or less at joint  
 (s) 13, 19 except 14=354 (LC 1),  
 15=385 (LC 1), 16=319 (LC 1),  
 18=553 (LC 1)

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

TOP CHORD 2-3=0/305, 3-4=0/305  
 WEBS 2-18=-361/0, 4-18=-290/0

**NOTES**

- All plates are 3x5 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

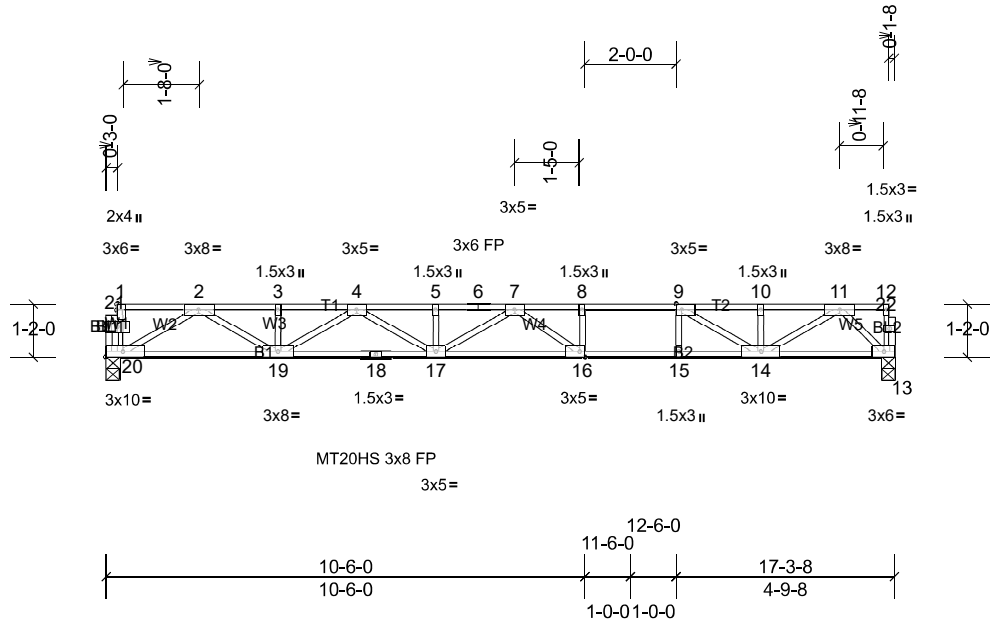
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
23090033 - Elev B	F210	Floor	5	1	

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Scale = 1:50.5

Plate Offsets (X, Y): [9:0-1-8,Edge], [16:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.39	16-17	>517	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.55	16-17	>373	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							
										Weight: 88 lb	FT = 20%F, 11%E

**LUMBER**  
 TOP CHORD 2x4 SP No.2(flat) \*Except\* T2:2x4 SP 2400F  
 2.0E(flat)  
 BOT CHORD 2x4 SP No.2(flat) \*Except\* B2:2x4 SP 2400F  
 2.0E(flat)  
 WEBS 2x4 SP No.3(flat) \*Except\* W1:2x4 SP No.2  
 (flat)  
 OTHERS 2x4 SP No.3(flat)  
 Vert: 13-20=-10, 1-12=-100  
 Concentrated Loads (lb)  
 Vert: 1=-1017

**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** (lb/size) 13=935/0-3-8, (min. 0-1-8),  
 20=1931/0-3-8, (min. 0-1-8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
 (lb) or less except when shown.  
 TOP CHORD 20-21=-1133/0, 1-21=-1018/0, 2-3=-2643/0,  
 3-4=-2643/0, 4-5=-3796/0, 5-6=-3796/0,  
 6-7=-3796/0, 7-8=-3392/0, 8-9=-3392/0,  
 9-10=-2068/0, 10-11=-2068/0  
 BOT CHORD 19-20=0/1598, 18-19=0/3374, 17-18=0/3374,  
 16-17=0/3845, 15-16=0/3392, 14-15=0/3392,  
 13-14=0/931  
 WEBS 9-15=0/301, 2-20=-1684/0, 2-19=0/1219,  
 4-19=-854/0, 4-17=0/493, 7-16=-701/80,  
 9-14=-1587/0, 11-14=0/1327, 11-13=-1290/0

- 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 1.5x3 MT20 unless otherwise indicated.
  - 4) The Fabrication Tolerance at joint 18 = 11%
  - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,  
 Plate Increase=1.00  
 Uniform Loads (lb/ft)

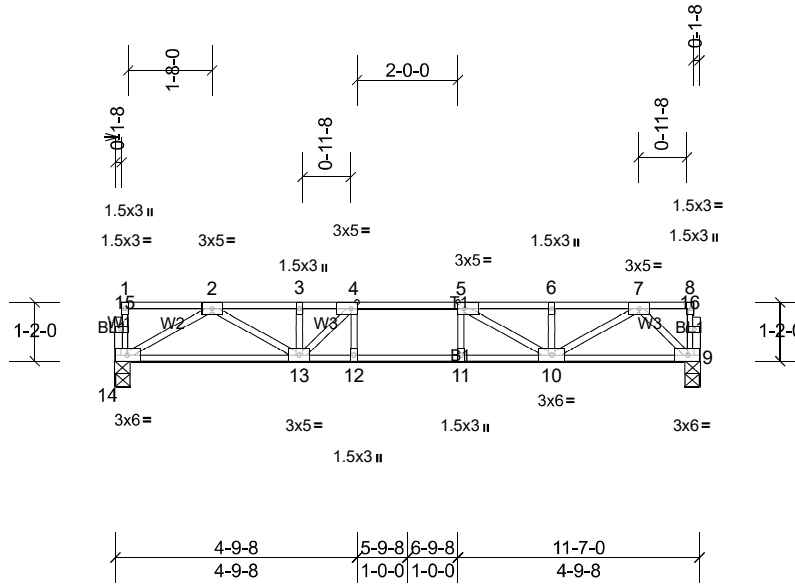
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
23090033 - Elev B	F211	Floor	1	1	

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Scale = 1:45.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP		
TCLL	40.0	Plate Grip DOL	1.00	TC	0.40	Vert(LL)	-0.08	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.10	10-11	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 60 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(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** (lb/size) 9=617/0-3-8, (min. 0-1-8),  
 14=617/0-3-8, (min. 0-1-8)

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

TOP CHORD 2-3=-1465/0, 3-4=-1465/0, 4-5=-1660/0,  
 5-6=-1288/0, 6-7=-1288/0

BOT CHORD 13-14=0/920, 12-13=0/1660, 11-12=0/1660,  
 10-11=0/1660, 9-10=0/598

WEBS 2-14=-1060/0, 2-13=0/636, 4-13=-461/0,  
 5-10=-559/0, 7-10=0/806, 7-9=-826/0

**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

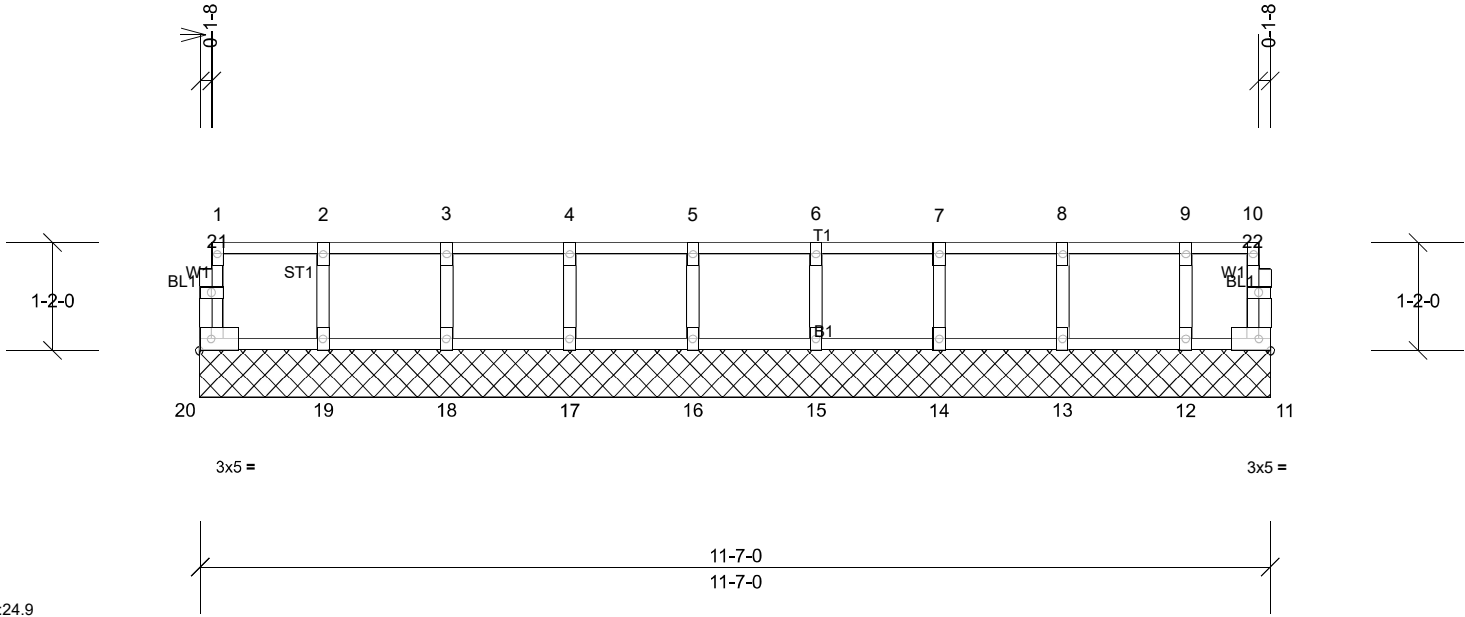
Job 23090033 - Elev B	Truss F212	Truss Type Floor Supported Gable	Qty 1	Ply 1	Job Reference (optional)
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Scale = 1:24.9

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	244/190
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	0.03	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 50 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(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 11-7-0.

(lb) - Max Grav All reactions 250 (lb) or less at joint  
 (s) 11, 12, 13, 14, 15, 16, 17, 18,  
 19, 20

**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 plates are 1.5x3 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) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) 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

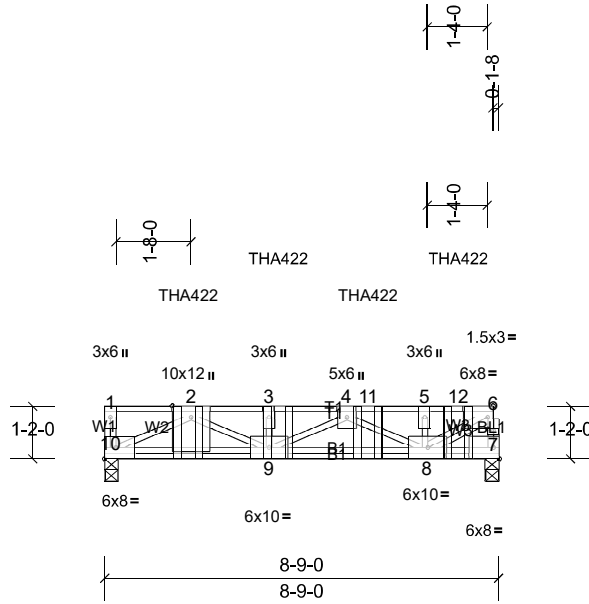
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
23090033 - Elev B	F213	Floor Girder	1	1	

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Scale = 1:51.2

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.60	Vert(LL)	-0.08	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.11	8-9	>919	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.98	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 73 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(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** (lb/size) 7=2337/0-3-8, (min. 0-1-8),  
 10=1977/0-3-8, (min. 0-1-8)

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

TOP CHORD 6-7=-2320/0, 2-3=-5134/0, 3-4=-5134/0,  
 4-11=-3185/0, 5-11=-3185/0, 5-12=-3118/0,  
 6-12=-3130/0

BOT CHORD 9-10=0/3608, 8-9=0/4912  
 WEBS 2-10=-4052/0, 2-9=0/1727, 3-9=-920/0,  
 4-9=0/251, 4-8=-1941/0, 5-8=-999/0,  
 6-8=0/3663

**NOTES**

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- CAUTION, Do not erect truss backwards.
- Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-10-4 from the left end to 7-10-4 to connect truss(es) F206 (1 ply 2x4 SP) to front face of top chord.
- Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (lb/ft)  
 Vert: 7-10=-10, 1-6=-100  
 Concentrated Loads (lb)  
 Vert: 2=-842, 3=-842, 11=-842, 12=-853

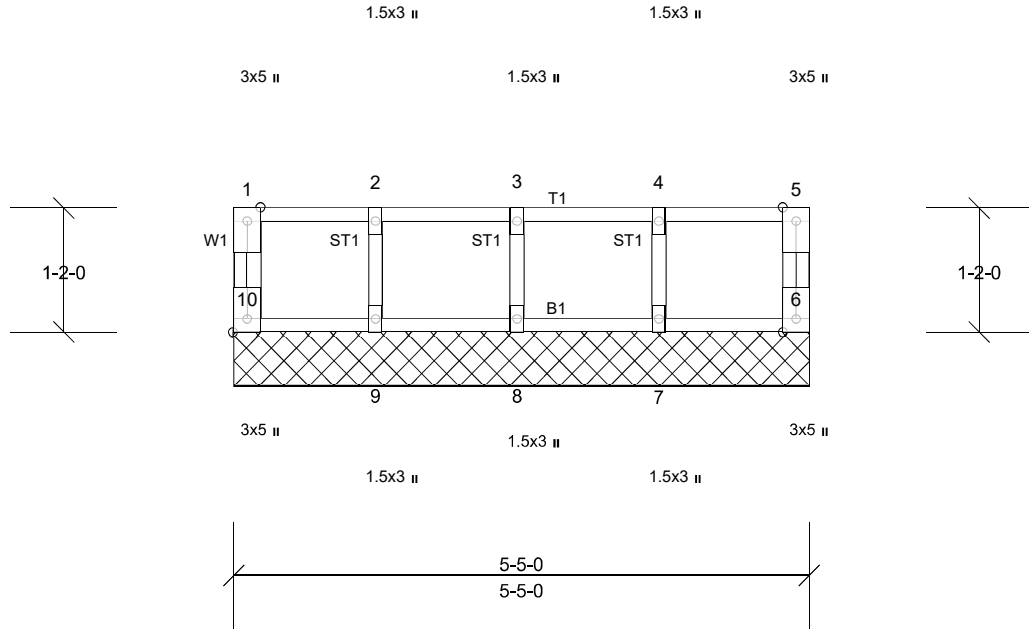
Job 23090033 - Elev B	Truss F214	Truss Type Floor Supported Gable	Qty 1	Ply 1	Job Reference (optional)
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Scale = 1:21.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
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	0.03	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 26 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(flat)

**BRACING**

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

**REACTIONS** All bearings 5-5-0.

(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**

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

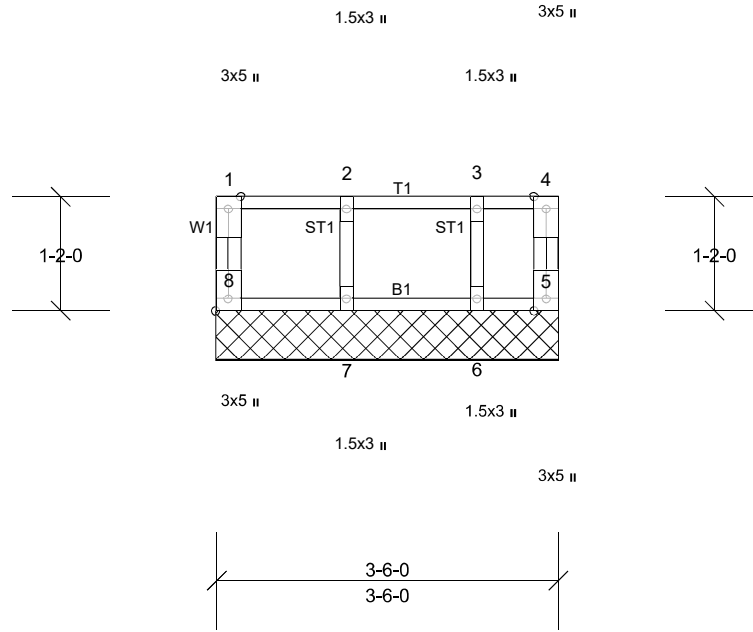
Job 23090033 - Elev B	Truss F215	Truss Type Floor Supported Gable	Qty 1	Ply 1	Job Reference (optional)
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Scale = 1:23.6

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
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	0.03	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 19 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(flat)

**BRACING**

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

**REACTIONS** All bearings 3-6-0.

(lb) - Max Grav All reactions 250 (lb) or less at joint (s) 5, 6, 7, 8

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

**NOTES**

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