PRRNSF20230918

FLOOR FRAMING

TSE Engineering

City of Puyallup Building ACCEPTED
JMontgomery
07/19/2023
9:12:55 AM

Tri-State Engineering, Inc.
12810 NE 178th Street
Suite 218
Woodinville, WA 98072
425.481.6601

Re: J1086674F
HC Homes Inc

The truss drawing(s) referenced below have been prepared by Tri-State Engineering under my direct supervision based on the parameters provided by The Truss Company (Sumner).

Pages or sheets covered by this seal: I14706680 thru I14706690

My license renewal date for the state of Washington is August 20, 2024.

REPORT REQUIRED TO BE PROVIDED BY THE PERMITTEE ON SITE FOR ALL INSPECTIONS

April 17,2023

Terry Powell

The seal on these drawings indicate acceptance of professional engineering responsibility solely for the truss components shown. The suitability and use of this component for any particular building is the responsibility of the building designer, per ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	HC Homes Inc
J1086674F	F01	GABLE	2	1	I14706680
					Job Reference (optional)

The Truss Company (Sumner), Sumner, WA - 98390, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:50:29 2023 Page 1

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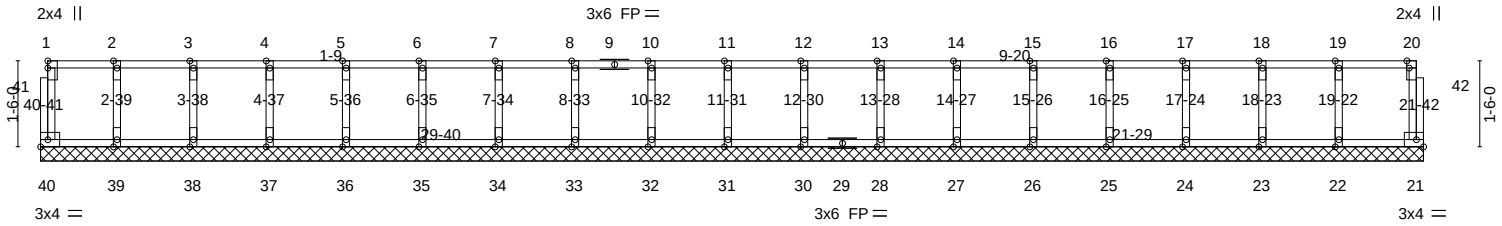

1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-4-0	14-8-0	16-0-0	17-4-0	18-8-0	20-0-0	21-4-0	22-8-0	24-1-12
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-5-12

Plate Offsets (X,Y)-- [20:0-1-8,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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.00	21	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 91 lb	FT = 20%F, 9%E

LUMBER-
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 DF Stud(flat)
OTHERS 2x4 DF Stud(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 24-1-12.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 40, 21, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 28, 27, 26, 25, 24, 23, 22

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

NOTES- (8)
1) All plates are 1.5x4 MT20 unless otherwise indicated.
2) Attach ribbon block to truss with 3-10d nails applied to flat face.
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 10-0-0 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.
8) All dimensions given in feet-inches-sixteenths (FFIISS) format.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 21-40=-20, 1-20=-143

April 17,2023

Job	Truss	Truss Type	Qty	Ply	HC Homes Inc
J1086674F	F02	FLOOR	6	1	I14706681
					Job Reference (optional)

The Truss Company (Sumner), Sumner, WA - 98390, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:50:30 2023 Page 1

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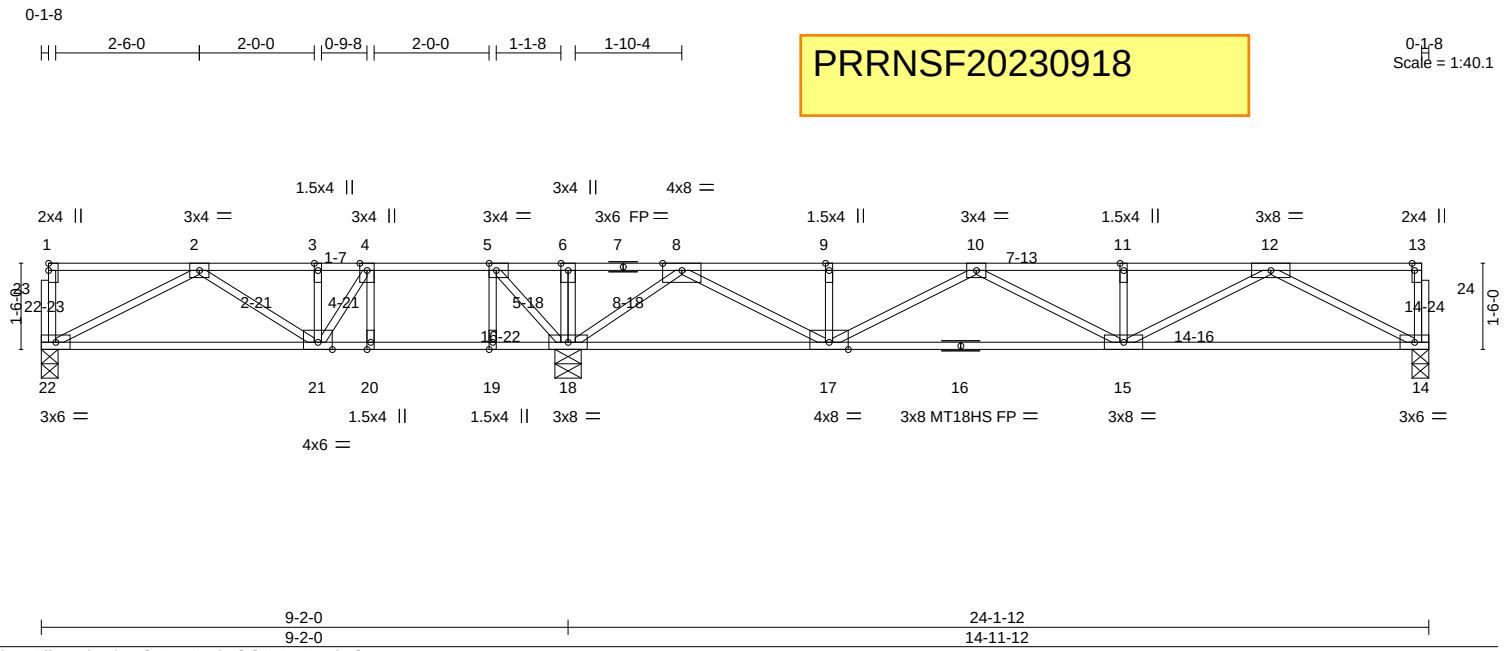

Plate Offsets (X,Y)-- [5:0-1-8,Edge], [13:0-1-8,Edge]

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)	-0.13	20-21	>848	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.21	14-15	>831	360	MT18HS	185/148
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.04	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 110 lb	FT = 20%F, 9%E

LUMBER-
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 DF No.1&Btr(flat) *Except*
14-16: 2x4 HF No.2(flat)
WEBS 2x4 DF Stud(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 6-0-0 oc bracing.

REACTIONS. (lb/size) 22=501/0-3-8 (min. 0-1-8), 18=1492/0-5-8 (min. 0-1-8), 14=862/0-3-8 (min. 0-1-8)
Max Grav 22=580(LC 3), 18=1492(LC 1), 14=866(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1095/0, 3-4=-1095/0, 4-5=-868/232, 5-6=-283/589, 6-7=-283/590, 7-8=-283/590, 8-9=-1961/0, 9-10=-1961/0, 10-11=-2185/0, 11-12=-2185/0
BOT CHORD 21-22=0/844, 20-21=-232/868, 19-20=-232/868, 18-19=-232/868, 17-18=0/950, 16-17=0/2315, 15-16=0/2315, 14-15=0/1381
WEBS 4-20=-409/0, 5-19=0/330, 2-22=-948/0, 2-21=-31/301, 3-21=-287/0, 4-21=0/640, 5-18=-1031/0, 12-14=-1554/0, 12-15=0/912, 10-17=-482/0, 9-17=-255/0, 8-17=0/1226, 8-18=-1448/0

NOTES- (7)
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Attach ribbon block to truss with 3-10d nails applied to flat face.
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 10-0-0 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.
6) CAUTION, Do not erect truss backwards.
7) All dimensions given in feet-inches-sixteenths (FFIISS) format.

LOAD CASE(S) Standard

April 17,2023

Job	Truss	Truss Type	Qty	Ply	HC Homes Inc
J1086674F	F03	FLOOR	6	1	I14706682
					Job Reference (optional)

The Truss Company (Sumner), Sumner, WA - 98390, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:50:31 2023 Page 1

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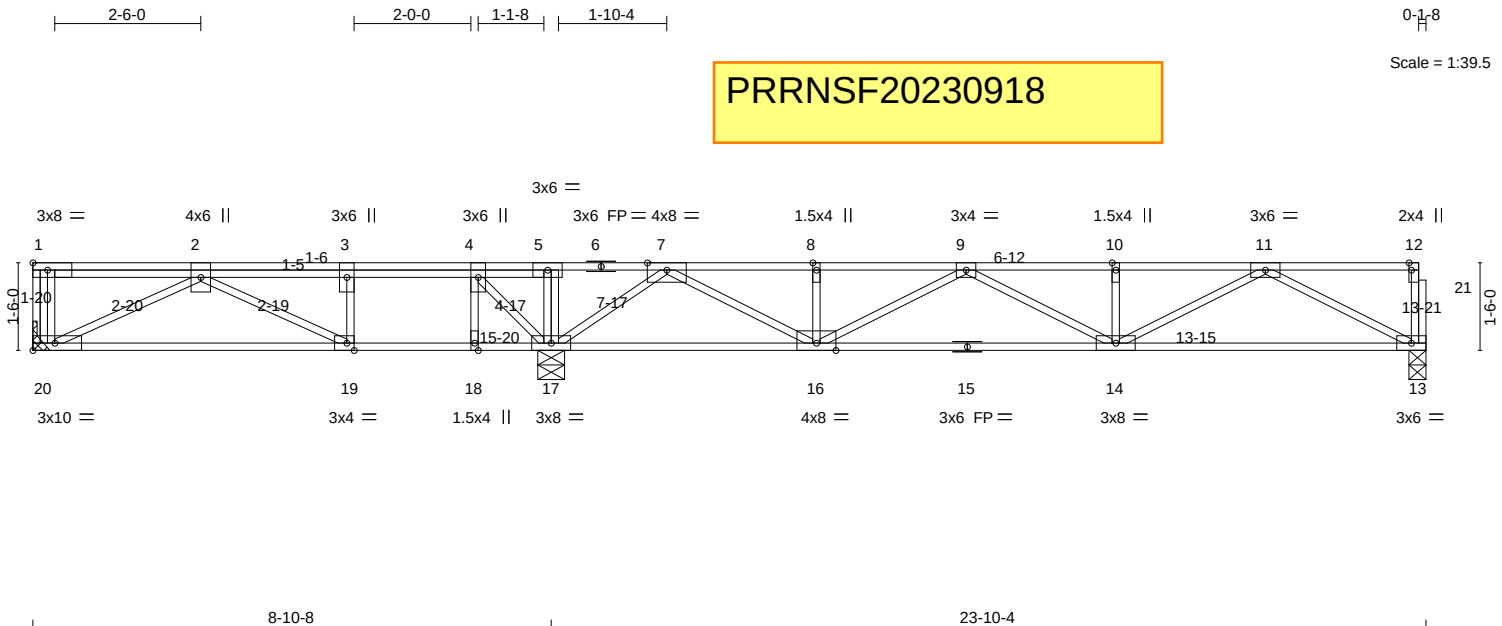

Plate Offsets (X,Y)-- [12:0-1-8,Edge], [19:0-1-8,Edge]

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	0.64	Vert(LL)	-0.11	19-20	>993	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.48	Vert(CT)	-0.25	19-20	>416	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.03	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 119 lb	FT = 20%F, 9%E

LUMBER-
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 DF No.1&Btr(flat)
WEBS 2x4 DF Stud(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 6-0-0 oc bracing.

REACTIONS. (lb/size) 20=437/Mechanical, 13=834/0-3-8 (min. 0-1-8), 17=1547/0-5-8 (min. 0-1-8)
Max Grav 20=534(LC 3), 13=837(LC 7), 17=1547(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-763/317, 3-4=-763/317, 4-5=-78/758, 5-6=-95/751, 6-7=-95/751, 7-8=-1746/0, 8-9=-1746/0, 9-10=-2077/0, 10-11=-2077/0
BOT CHORD 19-20=-0/802, 18-19=-317/763, 17-18=-317/763, 16-17=0/689, 15-16=0/2155, 14-15=0/2155, 13-14=0/1328
WEBS 2-20=-893/0, 2-19=-356/0, 4-17=-1198/0, 11-13=-1494/0, 11-14=0/850, 9-16=-515/0, 8-16=-252/0, 7-16=0/1247, 7-17=-1491/0

NOTES- (7)
1) Unbalanced floor live loads have been considered for this design.
2) Attach ribbon block to truss with 3-10d nails applied to flat face.
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 10-0-0 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.
6) CAUTION, Do not erect truss backwards.
7) All dimensions given in feet-inches-sixteenths (FFIISS) format.

LOAD CASE(S) Standard

April 17,2023

Job	Truss	Truss Type	Qty	Ply	HC Homes Inc
J1086674F	F04	FLOOR	8	1	I14706683
					Job Reference (optional)

The Truss Company (Sumner), Sumner, WA - 98390, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:50:32 2023 Page 1

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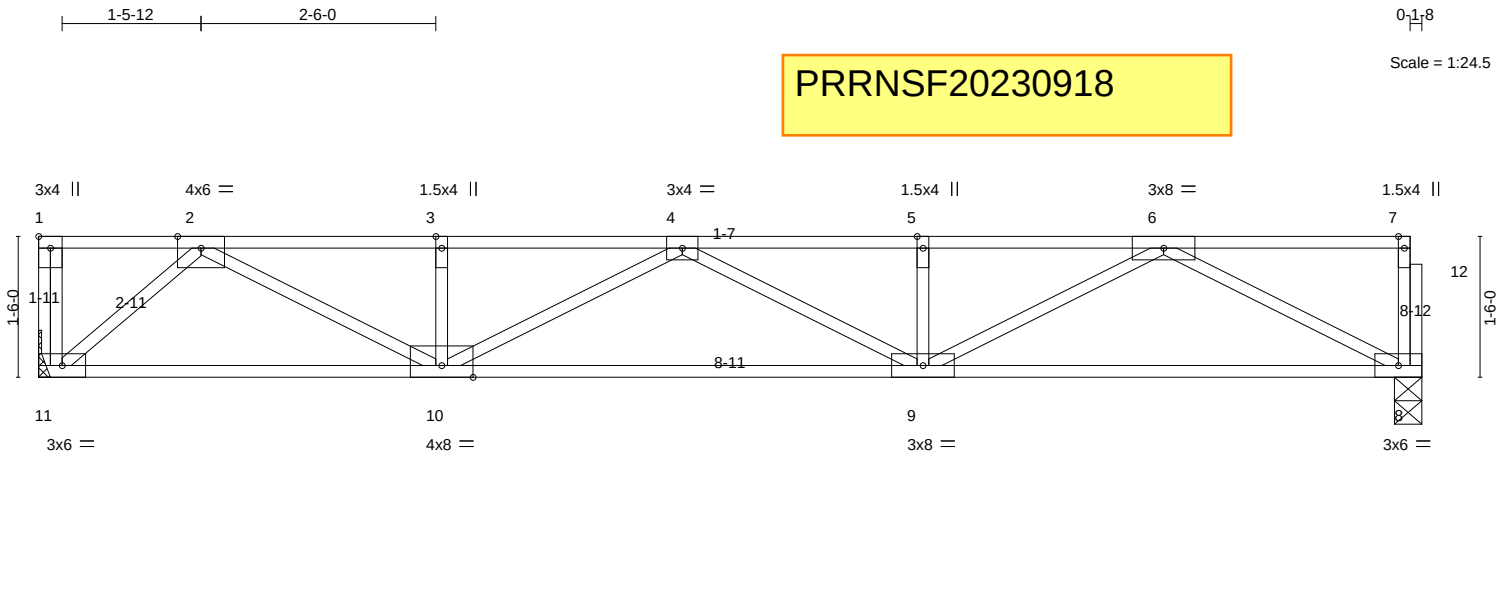

Plate Offsets (X,Y)-- [1:Edge,0-1-8]

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	0.35	Vert(LL)	-0.11	9-10	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.75	Vert(CT)	-0.21	8-9	>816	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 66 lb	FT = 20%F, 9%E

LUMBER-
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 DF Stud(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) 11=869/Mechanical, 8=863/0-3-8 (min. 0-1-8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1938/0, 3-4=-1938/0, 4-5=-2173/0, 5-6=-2173/0
BOT CHORD 10-11=0/914, 9-10=0/2296, 8-9=0/1375
WEBS 6-8=-1547/0, 6-9=0/905, 4-10=-406/0, 3-10=-259/0, 2-10=0/1162, 2-11=-1204/0

NOTES- (6)
1) Attach ribbon block to truss with 3-10d nails applied to flat face.
2) Refer to girder(s) for truss to truss connections.
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 10-0-0 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.
5) CAUTION, Do not erect truss backwards.
6) All dimensions given in feet-inches-sixteenths (FFIISS) format.

LOAD CASE(S) Standard

April 17,2023

Job	Truss	Truss Type	Qty	Ply	HC Homes Inc
J1086674F	F05	FLOOR	8	1	I14706684
					Job Reference (optional)

The Truss Company (Sumner), Sumner, WA - 98390, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:50:33 2023 Page 1

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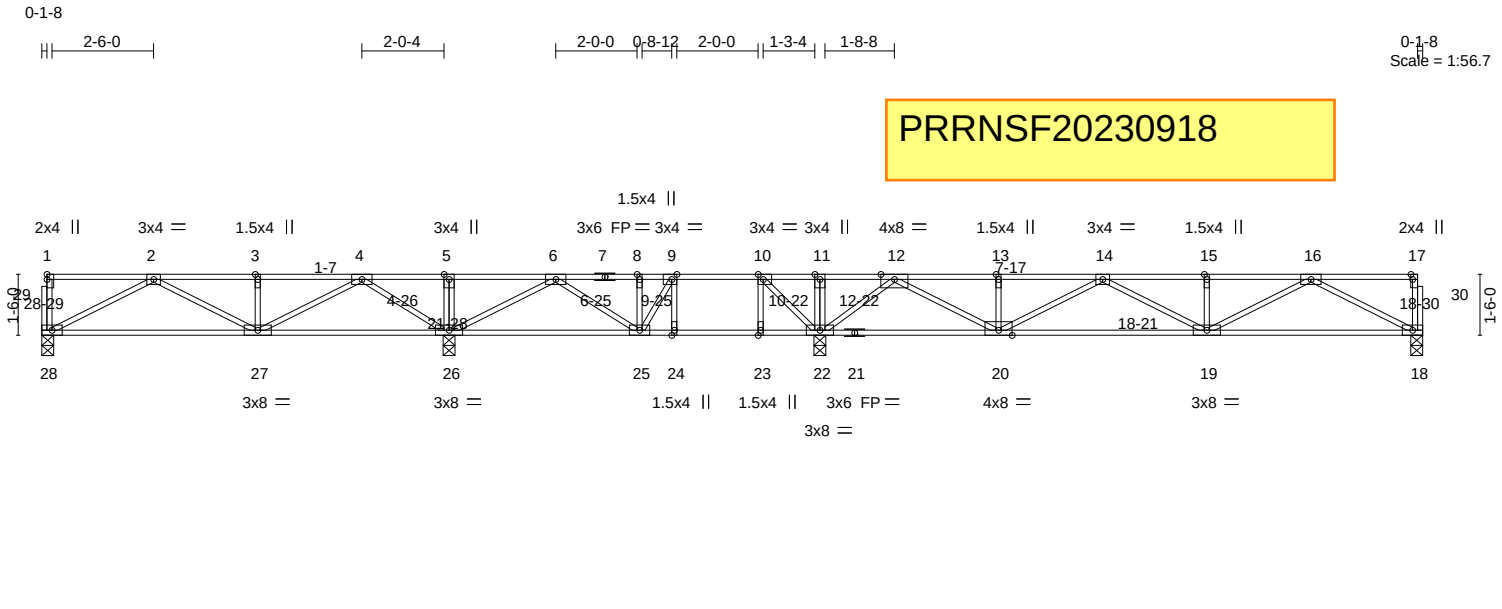

Plate Offsets (X,Y)-- [9:0-1-8,Edge], [10:0-1-8,Edge], [17:0-1-8,Edge]

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	0.63	Vert(LL)	-0.09	19-20	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.69	Vert(CT)	-0.20	18-19	>866	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.02	18	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 150 lb	FT = 20%F, 9%E

LUMBER-
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 DF Stud(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 6-0-0 oc bracing.

REACTIONS. All bearings 0-3-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) except 28=453(LC 5), 26=1489(LC 3), 18=809(LC 4), 22=1400(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-633/307, 3-4=-633/307, 4-5=0/1511, 5-6=0/1512, 6-7=-337/609, 7-8=-337/609, 8-9=-337/609, 9-10=-292/705, 10-11=0/916, 11-12=0/916, 12-13=-1533/0, 13-14=-1533/0, 14-15=-1971/0, 15-16=-1971/0
BOT CHORD 27-28=-101/595, 26-27=-825/0, 25-26=-718/0, 24-25=-705/292, 23-24=-705/292, 22-23=-705/292, 21-22=0/416, 20-21=0/416, 19-20=0/1993, 18-19=0/1273
WEBS 2-28=-667/116, 3-27=-253/0, 4-27=0/906, 4-26=-1218/0, 6-26=-1143/0, 6-25=0/517, 10-22=-687/0, 16-18=-1432/0, 16-19=0/792, 14-20=-566/0, 13-20=-258/0, 12-20=0/1311, 12-22=-1424/0

NOTES- (7)
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x6 MT20 unless otherwise indicated.
3) Attach ribbon block to truss with 3-10d nails applied to flat face.
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 10-0-0 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.
6) CAUTION, Do not erect truss backwards.
7) All dimensions given in feet-inches-sixteenths (FFIISS) format.

LOAD CASE(S) Standard

April 17,2023

Job	Truss	Truss Type	Qty	Ply	HC Homes Inc
J1086674F	F06	FLOOR	4	1	I14706685
					Job Reference (optional)

The Truss Company (Sumner), Sumner, WA - 98390, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:50:35 2023 Page 1
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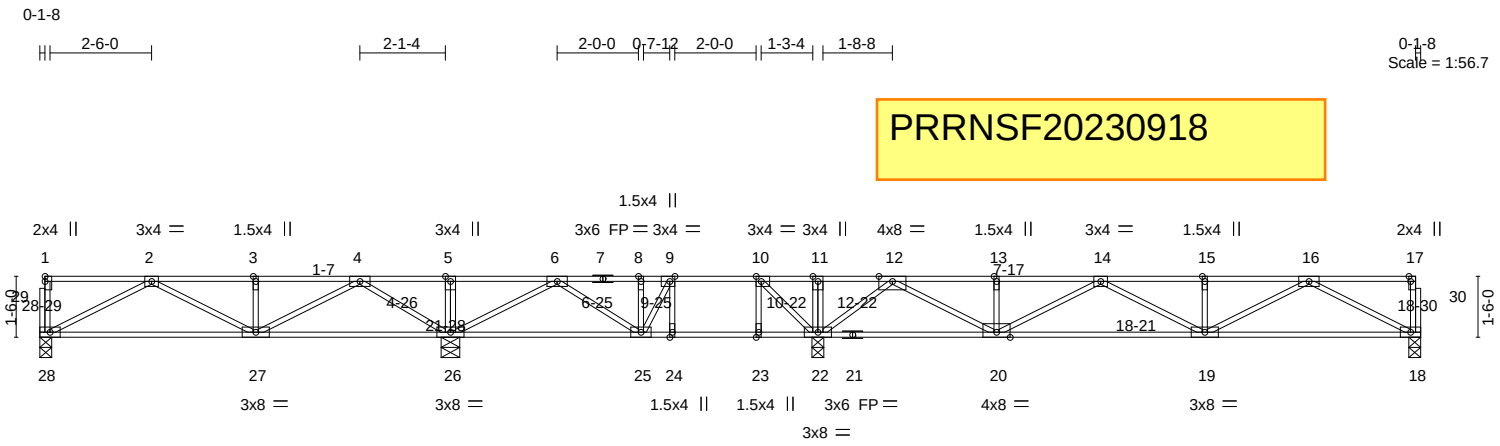

Plate Offsets (X,Y)-- [9:0-1-8,Edge], [10:0-1-8,Edge], [17:0-1-8,Edge]

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	0.62	Vert(LL)	-0.09	19-20	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.69	Vert(CT)	-0.20	18-19	>867	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	18	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 150 lb	FT = 20%F, 9%E

LUMBER-
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 DF Stud(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 6-0-0 oc bracing.

REACTIONS. All bearings 0-3-8 except (jt=length) 26=0-5-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) except 28=459(LC 5), 26=1483(LC 3), 18=808(LC 4), 22=1400(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-655/285, 3-4=-655/285, 4-5=0/1493, 5-6=0/1495, 6-7=-330/619, 7-8=-330/619, 8-9=-330/619, 9-10=-280/714, 10-11=0/923, 11-12=0/923, 12-13=-1526/0, 13-14=-1526/0, 14-15=-1967/0, 15-16=-1967/0
BOT CHORD 27-28=-90/607, 26-27=-793/31, 25-26=-724/0, 24-25=-714/280, 23-24=-714/280, 22-23=-714/280, 21-22=0/408, 20-21=0/408, 19-20=0/1988, 18-19=0/1271
WEBS 5-26=-252/0, 2-28=-680/103, 3-27=-252/0, 4-27=0/887, 4-26=-1244/0, 6-26=-1125/0, 6-25=0/502, 10-22=-682/0, 16-18=-1430/0, 16-19=0/790, 14-20=-567/0, 13-20=-258/0, 12-20=0/1312, 12-22=-1425/0, 9-25=0/256

NOTES- (7)
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x6 MT20 unless otherwise indicated.
3) Attach ribbon block to truss with 3-10d nails applied to flat face.
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 10-0-0 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.
6) CAUTION, Do not erect truss backwards.
7) All dimensions given in feet-inches-sixteenths (FFIISS) format.

LOAD CASE(S) Standard

April 17,2023

Job	Truss	Truss Type	Qty	Ply	HC Homes Inc
J1086674F	F07	GABLE	2	1	I14706686
					Job Reference (optional)

The Truss Company (Sumner), Sumner, WA - 98390, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:50:37 2023 Page 1
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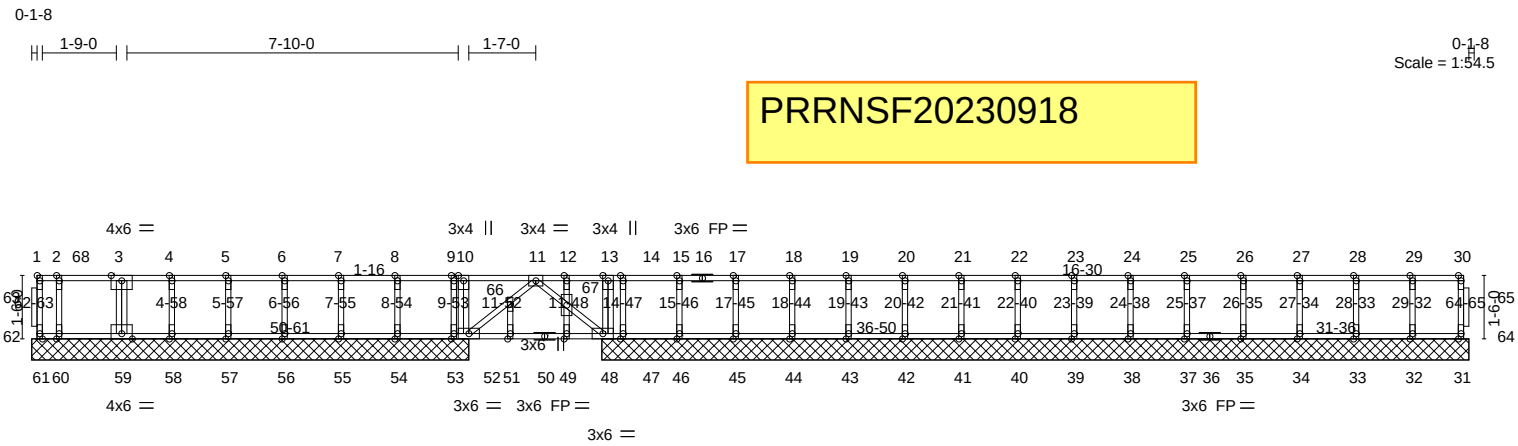

Plate Offsets (X,Y)-- [1:Edge,0-0-12]

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	0.21	Vert(LL)	-0.01	49	>999	480	MT20	220/195
TCDL	10.0	Lumber DOL	1.00	BC	0.13	Vert(CT)	-0.01	49-51	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.00	31	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 153 lb	FT = 20%F, 9%E

LUMBER-
TOP CHORD 2x4 DF No.1&Btr(flat)
BOT CHORD 2x4 DF No.1&Btr(flat)
WEBS 2x4 DF Stud(flat)
OTHERS 2x4 DF Stud(flat)

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

REACTIONS. All bearings 20-6-0 except (jt=length) 61=10-4-0, 59=10-4-0, 52=10-4-0, 60=10-4-0, 58=10-4-0, 57=10-4-0, 56=10-4-0, 55=10-4-0, 54=10-4-0, 53=10-4-0.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 47 except 53=-212(LC 4)
Max Grav All reactions 250 lb or less at joint(s) 61, 31, 58, 57, 56, 55, 54, 53, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37, 35, 34, 33, 32 except 59=3868(LC 1), 48=611(LC 1), 52=695(LC 4), 60=408(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 51-52=0/252, 50-51=0/252, 49-50=0/252, 48-49=0/252
WEBS 3-59=-3840/0, 13-48=-294/0, 10-52=-368/0, 52-66=-323/0, 11-66=-321/0, 11-67=-321/0, 48-67=-324/0, 2-60=-382/0

NOTES- (9)
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x4 MT20 unless otherwise indicated.
3) Attach ribbon block to truss with 3-10d nails applied to flat face.
4) Gable studs spaced at 1-4-0 oc.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 47 except (jt=lb) 53=212.
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 10-0-0 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.
8) CAUTION, Do not erect truss backwards.
9) All dimensions given in feet-inches-sixteenths (FFIISS) format.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 31-61=-20, 1-68=-390, 4-68=-100, 4-10=-143, 10-13=-233, 13-30=-143
Concentrated Loads (lb)
Vert: 3=-3713

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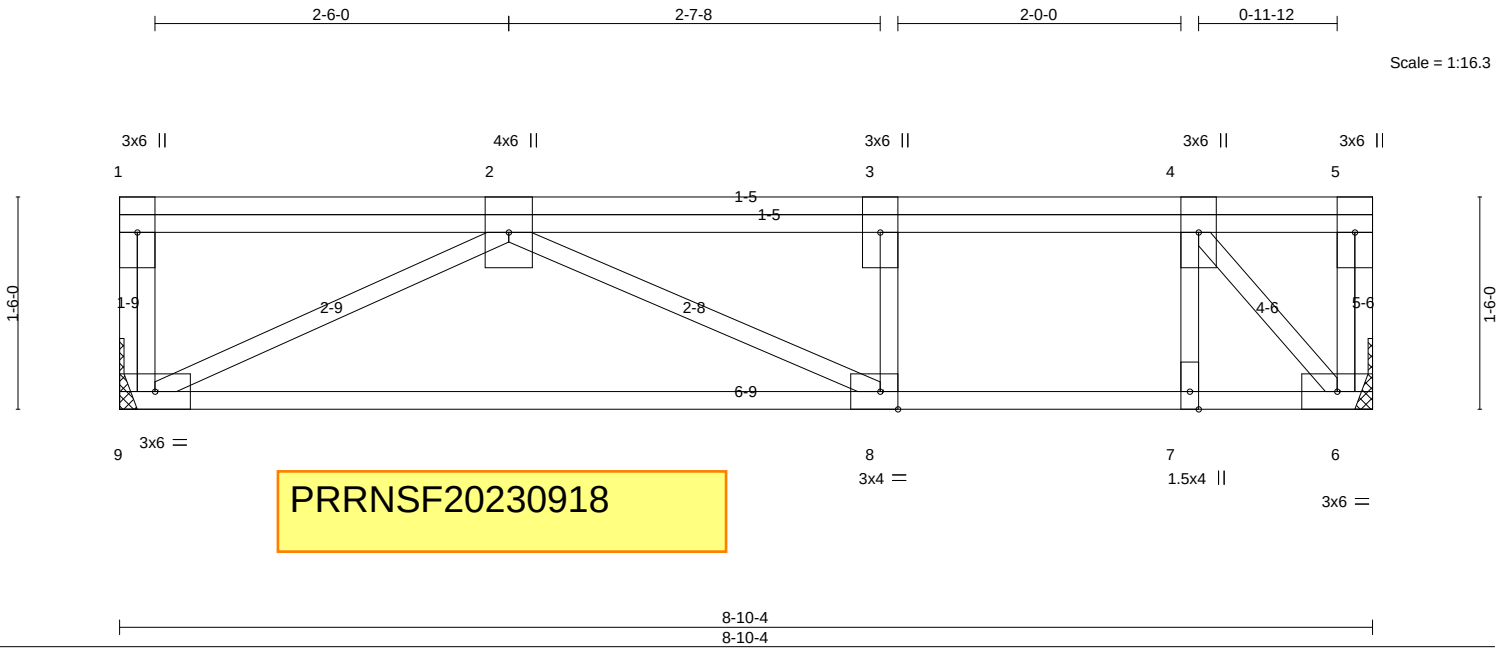
Job	Truss	Truss Type	Qty	Ply	HC Homes Inc
J1086674F	F08	FLOOR	8	1	I14706687
					Job Reference (optional)

The Truss Company (Sumner), Sumner, WA - 98390, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:50:38 2023 Page 1

ID:YLcgXvNyjDRbUpX6?FlHq?zUjAK-V4QD_mja7PFnZnvBuGz6lRTFsqRWR78nKxCnjizQkrF



PRRNSF20230918

Plate Offsets (X,Y)-- [8:0-1-8,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	0.56	Vert(LL)	-0.09	8-9	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.56	Vert(CT)	-0.28	8-9	>363	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 50 lb	FT = 20%F, 9%E

LUMBER-
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 DF Stud(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=516/Mechanical, 6=516/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=0/264, 2-3=-672/0, 3-4=-672/0
BOT CHORD 8-9=0/762, 7-8=0/672, 6-7=0/672
WEBS 2-9=-852/0, 4-6=-1012/0

NOTES- (5)
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 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 10-0-0 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.
5) All dimensions given in feet-inches-sixteenths (FFIISS) format.

LOAD CASE(S) Standard

April 17,2023

Job	Truss	Truss Type	Qty	Ply	HC Homes Inc
J1086674F	F09	FLOOR	6	1	I14706688
					Job Reference (optional)

The Truss Company (Sumner), Sumner, WA - 98390, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:50:38 2023 Page 1

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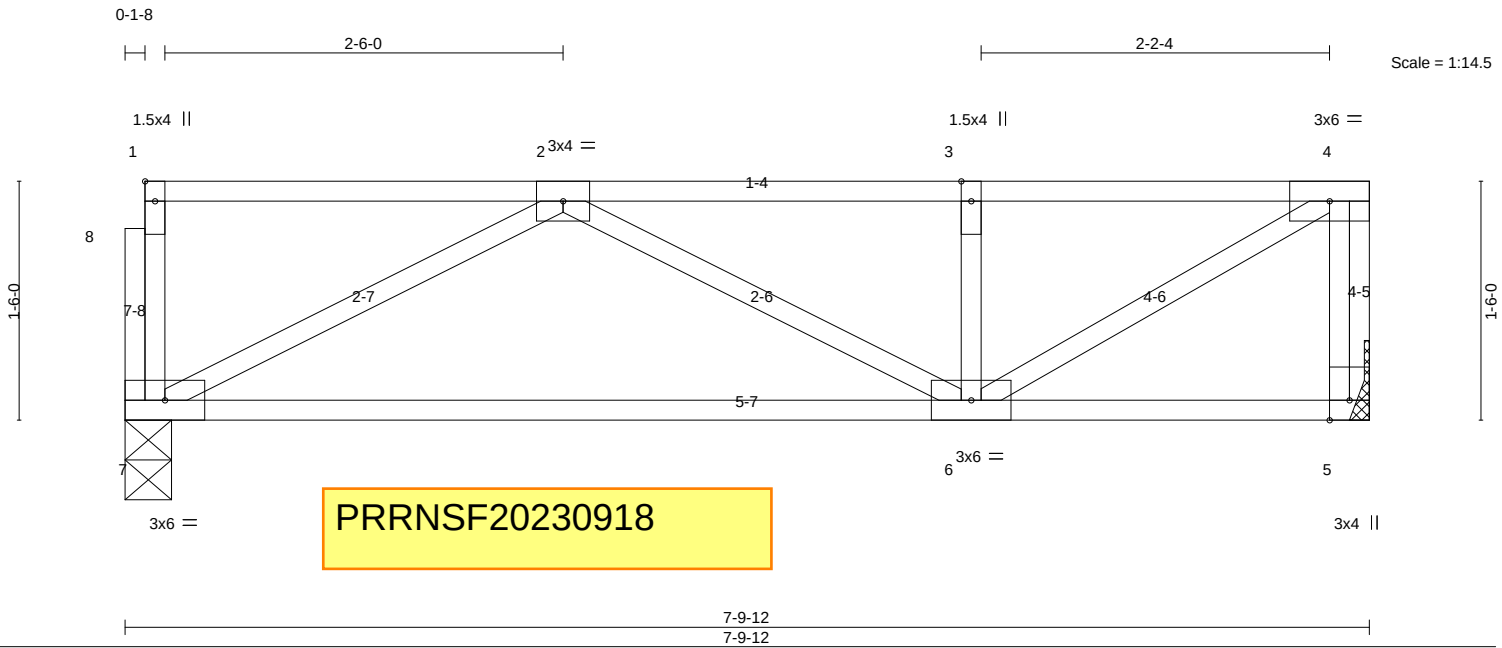

PRRNSF20230918

Plate Offsets (X,Y)-- [1: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	0.31	Vert(LL)	-0.01	6-7	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.43	Vert(CT)	-0.16	6-7	>583	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 37 lb	FT = 20%F, 9%E

LUMBER-
TOP CHORD 2x4 HF No.2(flat)
BOT CHORD 2x4 HF No.2(flat)
WEBS 2x4 DF Stud(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) 5=454/Mechanical, 7=448/0-3-8 (min. 0-1-8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-450/0, 2-3=-613/0, 3-4=-613/0
BOT CHORD 6-7=0/582
WEBS 2-7=-651/0, 3-6=-267/0, 4-6=0/709

NOTES- (6)
1) Attach ribbon block to truss with 3-10d nails applied to flat face.
2) Refer to girder(s) for truss to truss connections.
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 10-0-0 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.
5) CAUTION, Do not erect truss backwards.
6) All dimensions given in feet-inches-sixteenths (FFIISS) format.

LOAD CASE(S) Standard

April 17,2023

Job	Truss	Truss Type	Qty	Ply	HC Homes Inc
J1086674F	F10	GABLE	2	1	I14706689
					Job Reference (optional)

The Truss Company (Sumner), Sumner, WA - 98390, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:50:39 2023 Page 1

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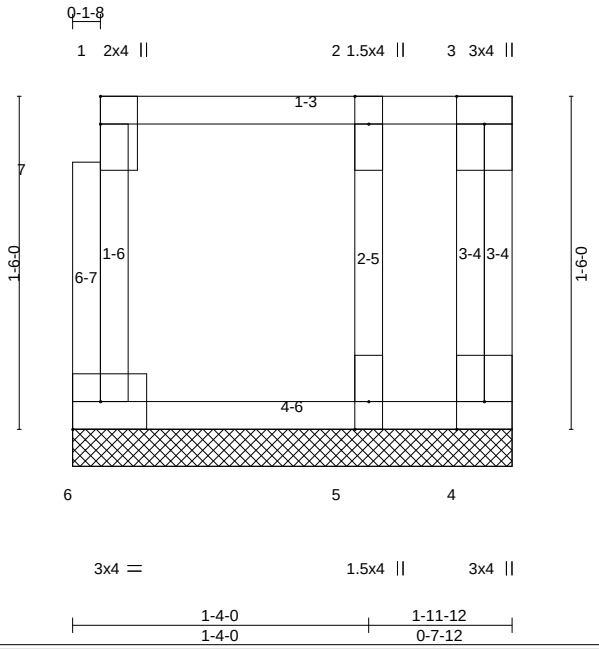

PRRNSF20230918

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	0.20	Vert(LL)	n/a	-	n/a	999	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 13 lb	FT = 20%F, 9%E

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-11-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=223/1-11-12 (min. 0-1-8), 4=104/1-11-12 (min. 0-1-8), 5=358/1-11-12 (min. 0-1-8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-368/0

NOTES- (8)
1) Attach ribbon block to truss with 3-10d nails applied to flat face.
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) 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 10-0-0 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.
7) CAUTION, Do not erect truss backwards.
8) All dimensions given in feet-inches-sixteenths (FFIISS) format.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 4-6=-20, 1-3=-390

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Job	Truss	Truss Type	Qty	Ply	HC Homes Inc
J1086674F	F11	Floor Girder	2	2	I14706690
					Job Reference (optional)

The Truss Company (Sumner), Sumner, WA - 98390, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 16:50:40 2023 Page 1

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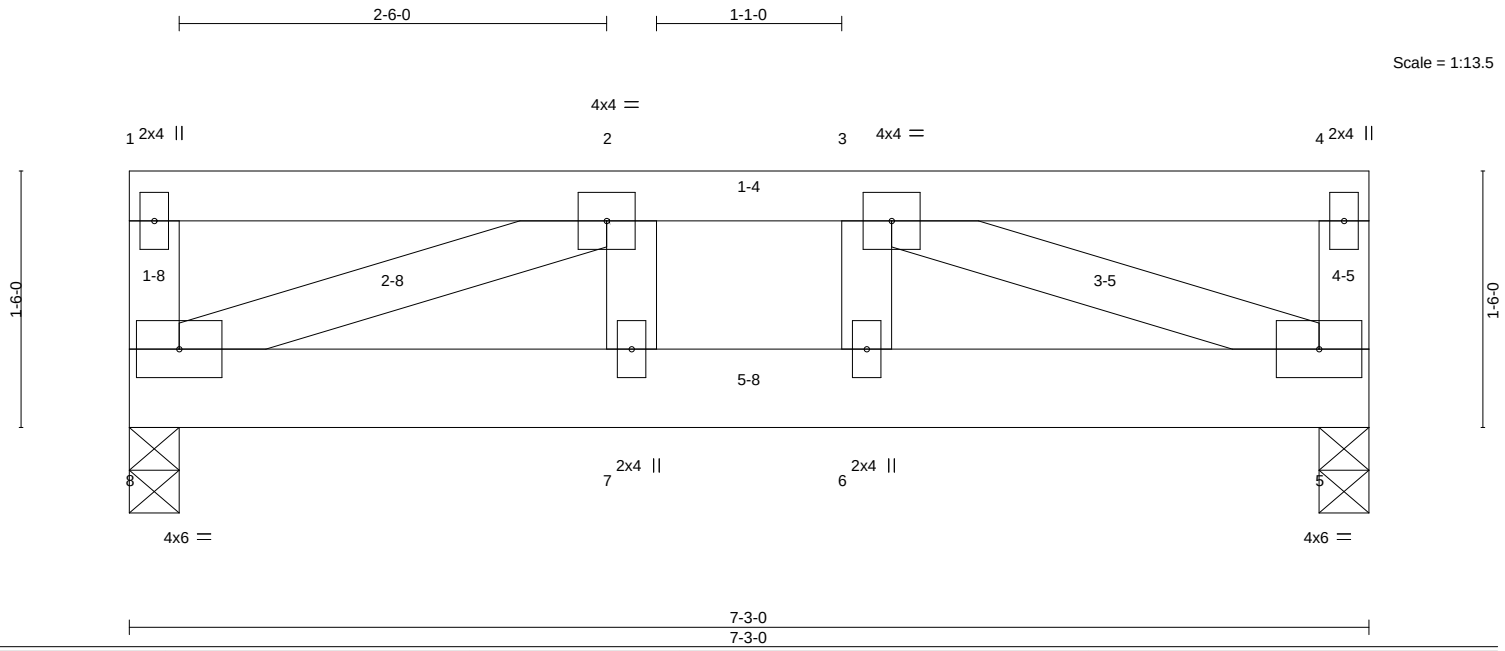

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.48	Vert(LL)	-0.03	7	>999	480	MT20	185/148
TCDL	10.0	Lumber DOL	1.00	BC	0.41	Vert(CT)	-0.05	6-7	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.47	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 70 lb	FT = 9%

LUMBER-
TOP CHORD 2x4 HF No.2
BOT CHORD 2x6 DF SS
WEBS 2x4 DF Stud

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

REACTIONS. (lb/size) 5=2888/0-3-8 (min. 0-1-9), 8=2888/0-3-8 (min. 0-1-9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-309/0, 2-3=-4154/0, 3-4=-309/0
BOT CHORD 7-8=0/4154, 6-7=0/4154, 5-6=0/4154
WEBS 3-5=-4145/0, 2-8=-4145/0, 2-7=0/1396, 3-6=0/1396

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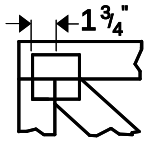
NOTES- (6)
1) 2-ply truss to be connected together with 10d (0.148"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced floor live loads have been considered for this design.
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 10-0-0 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.
6) All dimensions given in feet-inches-sixteenths (FFIISS) format.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 5-8=-730(F=-267, B=-442), 1-4=-100

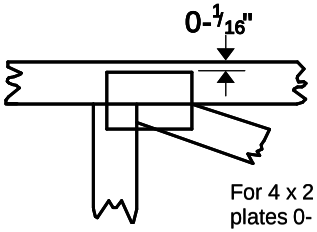
April 17,2023

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.

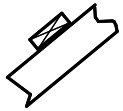
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

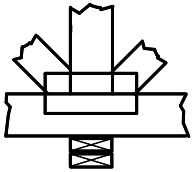
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

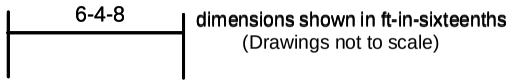


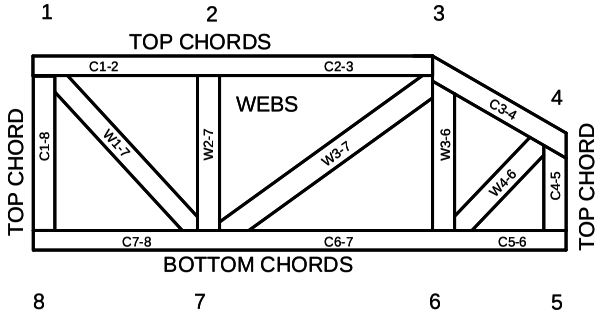
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI1: Building Component Safety Information, Guide to Good Practice for Handling, Installing & 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-1311, ESR-1352, ER-5243, 9604B, 9730, 95-43, 96-31, 9667A
NER-487, NER-561
95110, 84-32, 96-67, ER-3907, 9432A

theTRUSSCO. INC.

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 BCSI1.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator 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.

PRRNSF20230918