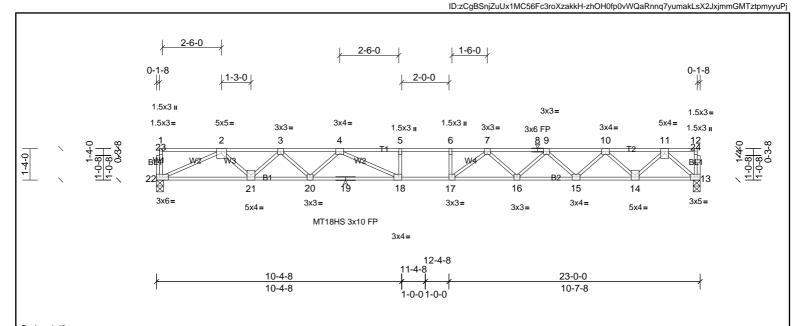


Run: 8.62 S Sep 22 2022 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Fri Jul 12 07:29:20

Page: 1



Scale = 1:49

Plate Offsets (X, Y):	[13:0-2-0,Ed	ge], [18:0-1-8,Edge]										
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.94	Vert(LL)	-0.47	17-18	>575	480	MT18HS	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.65	17-18	>418	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.09	13	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 115 lb	FT = 20%F, 11%E

LUMBER BRACING

TOP CHORD 2x4 SP No.2(flat) TOP CHORD Structural wood sheathing directly applied, except end verticals.

BOT CHORD 2x4 SP SS(flat) BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 2x4 SP No.3(flat)

OTHERS 2x4 SP No.3(flat)

**REACTIONS** (lb/size) 13=995/0-3-8, (min. 0-1-8), 22=995/0-3-8, (min. 0-1-8)

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

TOP CHORD 2-3=-2643/0, 3-4=-3775/0, 4-5=-4676/0, 5-6=-4676/0, 6-7=-4676/0, 7-8=-4165/0, 8-9=-4165/0, 9-10=-3261/0, 10-11=-1899/0

BOT CHORD 21-22=0/1951, 20-21=0/3307, 19-20=0/4216, 18-19=0/4216, 17-18=0/4676, 16-17=0/4488, 15-16=0/3819, 14-15=0/2686, 13-14=0/1088

WEBS 2-22=-2143/0, 2-21=0/962, 3-21=-924/0, 3-20=0/650, 4-20=-613/0, 4-18=0/829, 11-13=-1447/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 7-16=-457/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 7-16=-457/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 7-16=-457/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 7-16=-457/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 7-16=-457/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 7-16=-457/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 7-16=-457/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 7-16=-457/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 7-16=-457/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 7-16=-457/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 7-16=-457/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 7-16=-457/0, 11-14=0/1127, 10-14=-1094/0, 10-15=0/801, 9-15=-775/0, 9-16=0/481, 9-15=0/801,

7-17=-173/610

# NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- This truss is designed in accordance with the 2015 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.

OS4919
7/12/2024

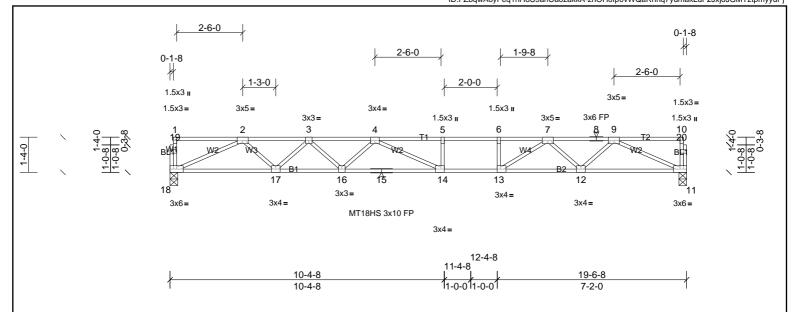
NGINEER B





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Scale = 1:43.8

Plate Offsets (X, Y):	[13:0-1-8,E0	gej, [14:0-1-8,Eagej										
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.83	Vert(LL)	-0.35	14-16	>656	480	MT18HS	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.49	14-16	>473	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.06	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 97 lb	FT = 20%F, 11%E

LUMBER **BRACING** 

TOP CHORD 2x4 SP No.1(flat) TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end **BOT CHORD** 2x4 SP SS(flat)

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SP No.3(flat) WEBS

OTHERS 2x4 SP No.3(flat)

REACTIONS (lb/size) 11=843/0-3-8, (min. 0-1-8), 18=843/0-3-8, (min. 0-1-8)

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

TOP CHORD 2-3=-2152/0, 3-4=-2999/0, 4-5=-3274/0, 5-6=-3274/0, 6-7=-3274/0, 7-8=-2137/0, 8-9=-2137/0

**BOT CHORD**  $17 - 18 = 0/1621,\ 16 - 17 = 0/2667,\ 15 - 16 = 0/3269,\ 14 - 15 = 0/3269,\ 13 - 14 = 0/3274,\ 12 - 13 = 0/2656,\ 11 - 12 = 0/1620$ 

WEBS  $6-13=-316/0,\ 2-18=-1779/0,\ 2-17=0/739,\ 3-17=-716/0,\ 3-16=0/461,\ 4-16=-376/0,\ 4-14=-266/417,\ 9-11=-1778/0,\ 9-12=0/720,\ 7-12=-722/0,\ 7-13=0/888$ 

- 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/
- 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.

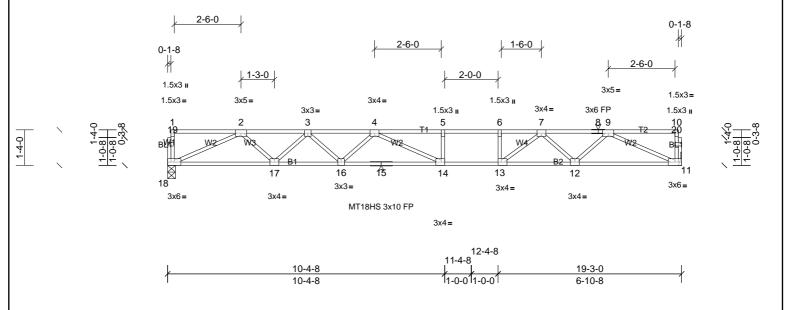






Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Fri Jul 12 07:29:20 ID: 8 KrLm Yr SIs KTAuRDOQmRkszakk 6-zhOH0 fp 0vWQaRnnq 7 yumak Lt Y2J1 jo PGMTztpmyyuPjakk 1000 fb 1000 fb

Page: 1



Scale = 1:43.4

Plate Offsets (X, Y):	[13:0-1-8,Ed	gej, [14:0-1-8,Eage]										
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.87	Vert(LL)	-0.34	14-16	>663	480	MT18HS	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.48	14-16	>477	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.06	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 96 lb	FT = 20%F, 11%E

LUMBER **BRACING** 

TOP CHORD 2x4 SP No.1(flat) TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end **BOT CHORD** 2x4 SP SS(flat)

BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SP No.3(flat) WEBS OTHERS 2x4 SP No.3(flat)

REACTIONS (lb/size) 11=830/ Mechanical, (min. 0-1-8), 18=830/0-3-8, (min. 0-1-8)

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

2-3=-2111/0, 3-4=-2933/0, 4-5=-3158/0, 5-6=-3158/0, 6-7=-3158/0, 7-8=-2094/0, 8-9=-2094/0

**BOT CHORD**  $17 - 18 = 0/1593,\ 16 - 17 = 0/2613,\ 15 - 16 = 0/3189,\ 14 - 15 = 0/3189,\ 13 - 14 = 0/3158,\ 12 - 13 = 0/2605,\ 11 - 12 = 0/1592$ 

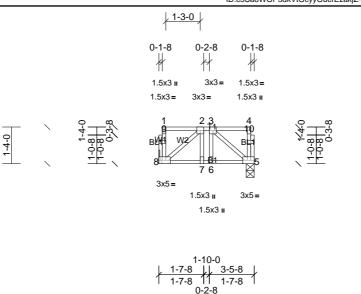
WEBS  $6-13=-344/0,\ 2-18=-1749/0,\ 2-17=0/720,\ 3-17=-699/0,\ 3-16=0/445,\ 4-16=-357/0,\ 4-14=-285/381,\ 9-11=-1748/0,\ 9-12=0/698,\ 7-12=-711/0,\ 7-13=0/849$ 

- 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/
- 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.



Job	Truss	Truss Type	Qty	Ply	PBS\WILSON C OR D 2ND FL
72421463	F103	Truss	1	1	Job Reference (optional)

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Scale = 1:42

Plate Offsets (X, Y):	[5:0-2-0,Edg	e], [8:0-2-0,Edge]										
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	0.00	7-8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.05	Vert(CT)	0.00	7-8	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 24 lb	FT = 20%F, 11%E

LUMBER **BRACING** 

TOP CHORD 2x4 SP No.2(flat) TOP CHORD BOT CHORD 2x4 SP No.2(flat)

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SP No.3(flat) WEBS OTHERS 2x4 SP No.3(flat)

REACTIONS (lb/size) 5=136/0-3-8, (min. 0-1-8), 8=136/ Mechanical, (min. 0-1-8) **FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

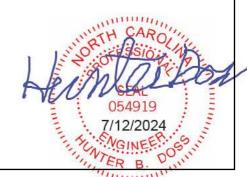
NOTES

Unbalanced floor live loads have been considered for this design.

2) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/

3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached

to walls at their outer ends or restrained by other means.

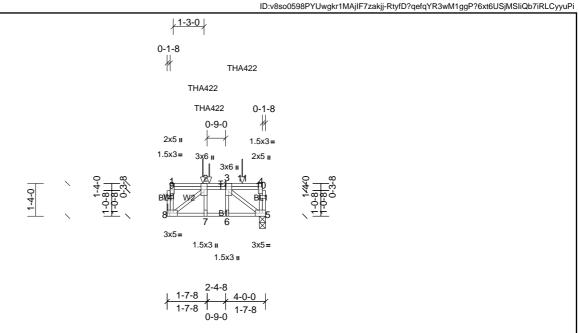


Structural wood sheathing directly applied or 3-5-8 oc purlins, except end



Job	Truss	Truss Type	Qty	Ply	PBS\WILSON C OR D 2ND FL
72421463	F104	Truss	1	1	Job Reference (optional)

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Fri Jul 12 07:29:21 Page: 1



Scale = 1:47.1

Plate Offsets (X, Y):	[4:0-3-0,Edg	ej, [5:0-2-0,Edgej, [8:0-2-	-U,Edgej									
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	0.61	Vert(LL)	-0.01	7-8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.39	Vert(CT)	-0.02	7-8	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.29	Horz(CT)	0.01	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 30 lb	FT = 20%F, 11%E

LUMBER BRACING

 TOP CHORD
 2x4 SP No.2(flat)
 TOP CHORD

 BOT CHORD
 2x4 SP No.2(flat)
 TOP CHORD

WEBS 2x4 SP No.3(flat)

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

OTHERS 2x4 SP No.3(flat)

REACTIONS (lb/size) 5=1097/0-3-0, (min. 0-1-8), 8=863/ Mechanical, (min. 0-1-8)

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

TOP CHORD 5-10=-410/0, 4-10=-410/0, 2-3=-962/0
BOT CHORD 7-8=0/962, 6-7=0/962, 5-6=0/962
WEBS 3-5=-1207/0, 2-8=-1224/0

### NOTES

- Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- This truss is designed in accordance with the 2015 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.

  5) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 1-8-9 from the left end to connect truss(es) to front face of top chord.
- 6) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 1-7-3 oc max. starting at 1-5-7 from the left end to 3-0-10 to
- connect truss(es) to back face of top chord.
- 7) Fill all nail holes where hanger is in contact with lumber.
   8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

# LOAD CASE(S) Standard

Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 5-8=-10, 1-4=-100

Concentrated Loads (lb)

Vert: 2=-807 (F=-56, B=-751), 11=-752 (B)



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

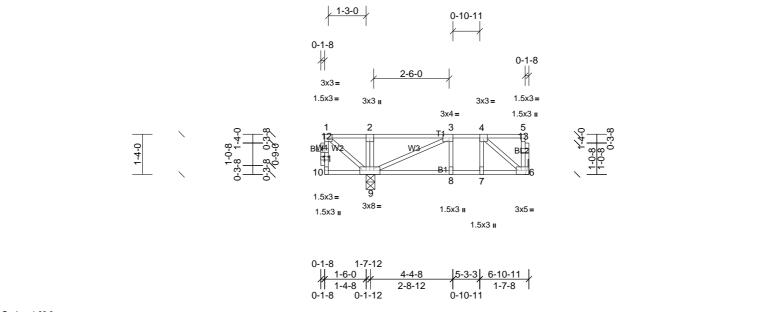


Job	Truss	Truss Type	Qty	Ply	PBS\WILSON C OR D 2ND FL
72421463	F106	Truss	14	1	Job Reference (optional)

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Fri Jul 12 07:29:21

Page: 1 ID:VxKXnKvnmLl8DoL9UPA3?qzZk9C-RtyfD?qefqYR3wM1ggP?6xtAGSnpSK9Qb7iRLCyyuPi

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end



Scale = 1:38.3

Plate Offsets (X, Y):	[3:0-1-8,Eag	ej, [6:0-2-0,Eagej										
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.36	Vert(LL)	0.02	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.17	Vert(CT)	0.01	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 41 lb	FT = 20%F, 11%E

LUMBER BRACING

TOP CHORD 2x4 SP No.2(flat) TOP CHORD 2x4 SP No.2(flat) BOT CHORD

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 9-10. 2x4 SP No.3(flat) WEBS **OTHERS** 2x4 SP No.3(flat)

REACTIONS 6=126/ Mechanical, (min. 0-1-8), 9=707/0-3-8, (min. 0-1-8) (lb/size) Max Uplift 6=-33 (LC 3)

Max Grav 6=140 (LC 4), 9=707 (LC 1)

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

**FORCES** TOP CHORD 1-2=0/381, 2-3=0/384 WEBS 1-9=-494/0, 3-9=-479/0

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 6.
- 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/ TPI 1
- Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
- 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 5) to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

#### LOAD CASE(S) Standard

Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 1)

Uniform Loads (lb/ft)

Vert: 6-10=-8, 1-5=-80

Concentrated Loads (lb)

Vert: 10=-100, 1=-160





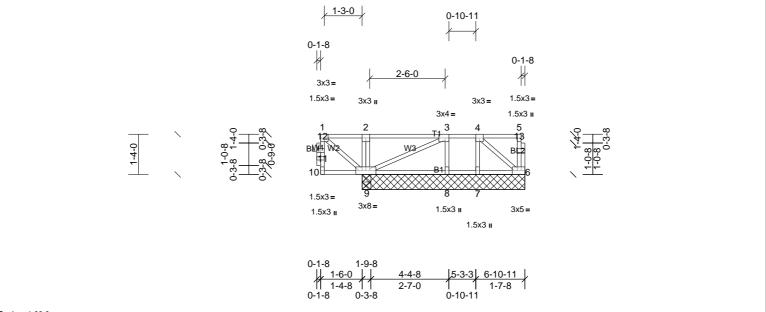
Job	Truss	Truss Type	Qty	Ply	PBS\WILSON C OR D 2ND FL
72421463	F107	Truss	1	1	Job Reference (optional)

Run: 8.62 S Sep 22 2022 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Fri Jul 12 07:29:21

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Structural wood sheathing directly applied or 6-0-0 oc purlins, except end

Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 9-10.



Scale = 1:38.3

Plate Offsets (X, Y):	[3:0-1-8,Edg	ej, [6:0-2-0,Edge]										
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.36	Vert(LL)	0.00	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.04	Vert(CT)	0.00	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 41 lb	FT = 20%F, 11%E

LUMBER BRACING TOP CHORD

TOP CHORD 2x4 SP No.2(flat) 2x4 SP No.2(flat) BOT CHORD

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

**OTHERS** 2x4 SP No.3(flat) REACTIONS All bearings 5-4-11.

(lb) - Max Uplift All uplift 100 (lb) or less at joint(s) 6, 8

Max Grav All reactions 250 (lb) or less at joint(s) 6, 7, 8 except 9=632 (LC 1) (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=0/371, 2-3=0/374 WEBS 1-9=-481/0, 3-9=-299/0

#### NOTES

**FORCES** 

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 6 and 82 lb uplift at joint 8.
- 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/ TPI 1
- Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
- 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 5) to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 100 lb down at 0-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others. 7)

#### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 6-10=-8, 1-5=-80

Concentrated Loads (lb) Vert: 10=-100, 1=-160



Job	Truss	Truss Type	Qty	Ply	PBS\WILSON C OR D 2ND FL
72421463	F108	Truss	1	1	Job Reference (optional)

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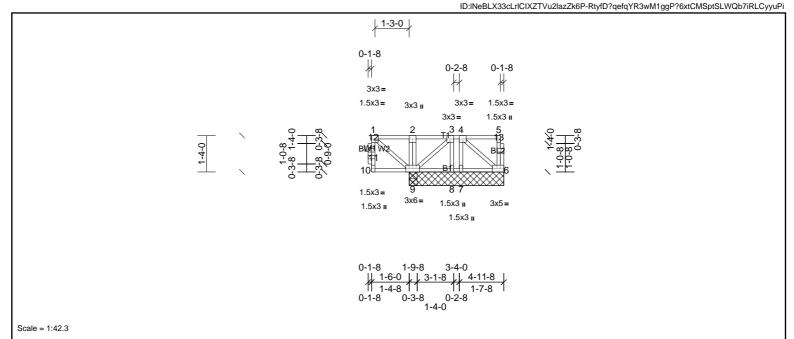


Plate Offsets (X, Y): [6:0-2-0,Edge	Plate Offsets (X, Y):	[6:0-2-0,Edge
-------------------------------------	-----------------------	---------------

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 34 lb	FT = 20%F, 11%E

BOT CHORD

LUMBER **BRACING** TOP CHORD

TOP CHORD 2x4 SP No.2(flat) 2x4 SP No.2(flat) BOT CHORD

2x4 SP No.3(flat) WEBS

**OTHERS** 2x4 SP No.3(flat)

REACTIONS All bearings 3-5-8.

(lb) - Max Uplift All uplift 100 (lb) or less at joint(s) 6 except 8=-203 (LC 3) Max Grav All reactions 250 (lb) or less at joint(s) 6, 7, 8 except 9=670 (LC 1)

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

TOP CHORD 1-2=0/366, 2-3=0/366 WEBS 1-9=-479/0, 3-9=-322/0

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 6 and 202 lb uplift at joint 8.
- 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/ TPI 1
- Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
- 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 5) to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 160 lb down at 0-2-4 on top chord, and 100 lb down at 0-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

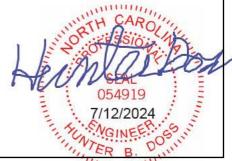
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 6-10=-8, 1-5=-80

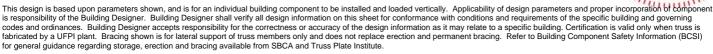
Concentrated Loads (lb)

Vert: 10=-100, 1=-160



Structural wood sheathing directly applied or 4-11-8 oc purlins, except end

Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 9-10.





Job	Truss	Truss Type	Qty	Ply	PBS\WILSON C OR D 2ND FL
72421463	F109	Truss	12	1	Job Reference (optional)

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

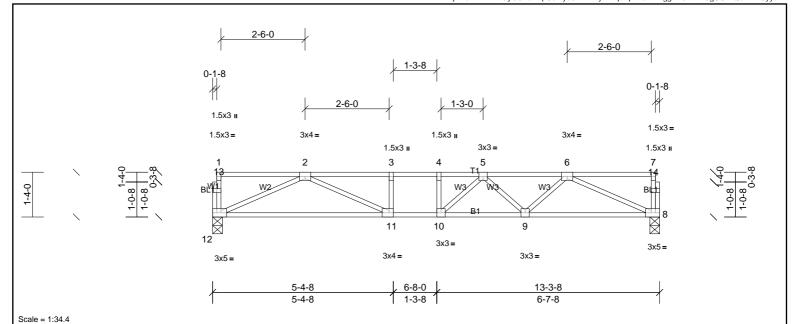


Plate Offsets (X, Y): [8:0-2-0,Edge], [11:0-1-8,Edge], [12:0-2-0,Edge]

П													
	Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
1	TCLL	40.0	Plate Grip DOL	1.00	TC	0.33	Vert(LL)	-0.09	9-10	>999	480	MT20	244/190
	TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.13	11-12	>999	360		
١	BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.02	8	n/a	n/a		
	BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 68 lb	FT = 20%F, 11%E

LUMBER **BRACING** 

TOP CHORD 2x4 SP No.2(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end 2x4 SP No.2(flat) **BOT CHORD** 

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

REACTIONS (lb/size) 8=568/0-3-8, (min. 0-1-8), 12=568/0-3-8, (min. 0-1-8)

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

TOP CHORD 2-3=-1528/0, 3-4=-1528/0, 4-5=-1528/0, 5-6=-1281/0 **BOT CHORD**  $11\text{-}12\text{=}0/1025,\, 10\text{-}11\text{=}0/1528,\, 9\text{-}10\text{=}0/1491,\, 8\text{-}9\text{=}0/1032$ 

WEBS 6-8=-1132/0, 2-12=-1124/0, 6-9=0/346, 2-11=0/588, 5-9=-293/0, 5-10=-115/253

- 1) Unbalanced floor live loads have been considered for this design.
- 2) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



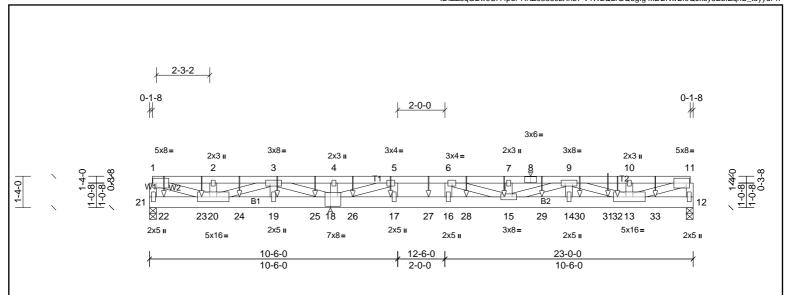


Job PBS\WILSON C OR D 2ND FL Truss Truss Type Qty Ply FG1 3 72421463 1 Truss Job Reference (optional)

UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Micah Clayton

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Scale = 1:49

Plate Offsets (X, Y): [1:0-1-12,0-2-8], [11:0-1-12,0-2-8], [12:0-2-8,0-0-8], [18:0-2-12,0-4-12], [21:0-2-8,0-1-12,0-2-8], [12:0-2-8,0-1-12], [12:0-2-8,0-1-8,0-1-12], [12:0-2-8,0-1-12],
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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.50	Vert(LL)	-0.49	16-17	>557	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.87	Vert(CT)	-0.65	16-17	>419	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.06	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 372 lb	FT = 11%

LUMBER **BRACING** 

TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 5-9-15 oc purlins, except end BOT CHORD 2x6 SP No.1

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing WEBS 2x4 SP No.3

REACTIONS (lb/size) 12=2618/0-3-8, (min. 0-1-8), 21=2104/0-3-8, (min. 0-1-8)

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

1-21-1741/0, 11-12-2299/0, 1-2-4498/0, 2-3-4498/0, 3-4-10266/0, 4-5-10287/0, 5-6-12312/0, 6-7-11320/0, 7-8-11320/0, 8-9-11320/0, 9-10-5974/0, 10-11-5974/0TOP CHORD BOT CHORD

21-22=0/301, 22-23=0/301, 20-23=0/301, 20-24=0/8416, 19-24=0/8416, 19-25=0/8416, 18-25=0/8416, 18-26=0/12312, 17-26=0/12312, 17-26=0/12312, 17-27=0/12312, 16-28=0/12312, 15-28=0/12312, 15-28=0/12312, 15-29=0/10169, 14-29=0/10169, 14-30=0/10169, 30-31=0/10169, 31-32=0/10169, 13-32=0/10169, 13-33=0/379, 12-33=0/379

 $11-13=0/5976,\ 1-20=0/4483,\ 9-13=-4481/0,\ 3-20=-4186/0,\ 9-15=0/1251,\ 3-18=0/1991,\ 6-15=-2011/336,\ 5-18=-2704/0,\ 5-17=-38/663,\ 3-19=0/476,\ 9-14=0/867,\ 6-16=-216/510$ 

# WEBS NOTES

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows: 1)
  - Top chords connected as follows: 2x4 1 row at 0-9-0 oc.
  - Bottom chords connected as follows: 2x6 2 rows staggered at 0-7-0 oc. Web 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) The Fabrication Tolerance at joint 8 = 11%
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/ 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) 135 lb down and 38 lb up at 0-7-5, 134 lb down and 39 lb up at 2-2-8, 134 lb down and 39 lb up at 3-9-11, 134 lb down and 39 lb up at 5-4-14, 134 lb down and 39 lb up at 7-0-1, 134 lb down and 39 lb up at 8-7-4, 134 lb down and 39 lb up at 10-2-7, 134 lb down and 39 lb up at 11-9-11, 134 lb down and 39 lb up at 13-4-14, 134 lb down and 39 lb up at 15-0-1, 134 lb down and 39 lb up at 16-7-4, 134 lb down and 39 lb up at 18-2-7, 855 lb down at 19-4-12, and 134 lb down and 39 lb up at 19-9-10, and 134 lb down and 39 lb up at 21-4-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 12-21=-8, 1-11=-80

Concentrated Loads (lb)

Vert: 15=-134 (F), 17=-134 (F), 19=-134 (F), 22=-135 (F), 23=-134 (F), 24=-134 (F), 25=-134 (F), 26=-134 (F), 27=-134 (F), (F), 29=-134 (F), 30=-134 (F), 31=-855 (B), 32=-134 (F), 33=-134 (F)







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FT = 20%F, 11%E

Weight: 101 lb

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end

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

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LUMBER BRACING

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

2x4 SP No.3(flat) 2x4 SP No.3(flat)

5.0

Code

**REACTIONS** All bearings 23-0-0.

(lb) - Max Grav All reactions 250 (lb) or less at joint(s) 21, 23, 24, 25, 26, 27, 28, 29, 30,

31, 32, 33, 34, 35, 36, 37, 38 except 22=271 (LC 1)

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

WEBS 18-22=-255/0

#### NOTES

OTHERS

BCDL

- 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/

IRC2015/TPI2014

Matrix-R

TOP CHORD

**BOT CHORD** 

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)

Vert: 21-38=-10, 1-20=-100

Concentrated Loads (lb)

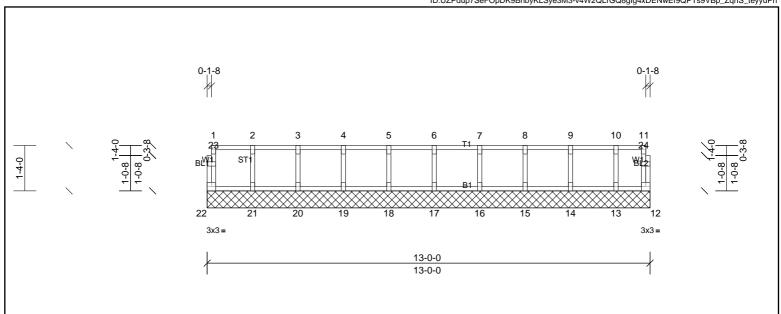
Vert: 41=-136







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Scale = 1:34

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	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 59 lb	FT = 20%F, 11%E

LUMBER **BRACING** 

TOP CHORD 2x4 SP No.2(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end BOT CHORD 2x4 SP No.2(flat) verticals

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 2x4 SP No.3(flat)

OTHERS 2x4 SP No.3(flat) \*Except\* BL2:2x4 SP No.2(flat)

REACTIONS All bearings 13-0-0

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

21, 22

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

- 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/
- 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.



