

5-7-7 on top chord, and 21 lb down and 12 lb up at 2-9-8, 21 lb down and 12 lb up at 2-9-8, 28 lb down at 5-7-7, 28 lb down at 5-7-7, 208 lb down and 59 lb up at 8-5-6, 190 lb down and 49 lb up at 8-5-6, and 299 lb down and 58 lb up at 11-3-5, and 285 lb down and 51 lb up at 11-3-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	CJ1	Diagonal Hip Girder	3	1	
					Job Reference (optional)
C&R Building Supply, Autryville NC 8.430 s Jan 20 2021 MiTek Industries, Inc. Fri Jan 13 10:04:52 2023 F					21 MiTek Industries, Inc. Fri Jan 13 10:04:52 2023 Page 2
ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-CpBONyctvaPohzUchmEljr1_HWpIYhpc					WZEk4yKdbQ-CpBONyctvaPohzUchmEljr1_HWplYhpowVo7q5zvpbf

NOTES-

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-5=-60, 5-6=-20, 7-11=-20 Concentrated Loads (lb)

Vert: 8=-584(F=-285, B=-299) 15=-5(F=-2, B=-2) 17=-30(F=-15, B=-15) 18=-398(F=-190, B=-208)



2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 1 and 229 Ib uplift at joint 7.

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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 52 lb down and 23 lb up at 2-9-8, 52 lb down and 23 lb up at 2-9-8, and 73 lb down and 40 lb up at 5-7-7, and 80 lb down and 53 lb up at 5-7-7 on top chord, and 14 lb down and 13 lb up at 2-9-8, 14 lb down and 13 lb up at 2-9-8, 28 lb down at 5-7-7, 29 lb down at 5-7-7, 208 lb down and 59 lb up at 8-5-6, 208 lb down and 59 lb up at 8-5-6, and 299 lb down and 58 lb up at 11-3-5, and 299 lb down and 58 lb up at 11-3-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others

8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B). Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	CJ2	Diagonal Hip Girder	1	1	
					Job Reference (optional)
C&R Building Supply, Autryville NC			.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:04:53 2023 Page 2

8.430 s Jan 20 2021 MiTek Industries, Inc. Fri Jan 13 10:04:53 2023 Page 2 ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-g?ImblcVgtXfI73oEUI_G3aFnv9DH8Zy99YgMXzvpbe

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-4=-60, 4-5=-20, 6-10=-20 Concentrated Loads (lb) Vert: 7=-597(F=-299, B=-299) 14=-14(F=-2, B=-12) 15=-27(F=-14, B=-14) 16=-44(F=-15, B=-29) 17=-417(F=-208, B=-208)



- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 174 lb uplift at joint 2 and 182 lb uplift at joint 8.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 53 lb down and 12 lb up at 2-9-8, 53 lb down and 12 lb up at 2-9-8, and 73 lb down and 40 lb up at 5-7-7, and 73 lb down and 40 lb up at 5-7-7 on top chord, and 21 lb down and 12 lb up at 2-9-8, 21 lb down and 12 lb up at 2-9-8, 28 lb down at 5-7-7, 28 lb down at 5-7-7, 190 lb down and 49 lb up at 8-5-6, 190 lb down and 49 lb up at 8-5-6, and 280 lb down and 55 lb up at 11-3-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller		
27070A	CJ3	Diagonal Hip Girder	4	1			
					Job Reference (optional)		
C&R Building Supply, Autryville NC 8.430 s Jan 20 2021 MiTek Industries, Inc. Fri Jan 13 10:04:54 2023					21 MiTek Industries, Inc. Fri Jan 13 10:04:54 2023 Page 2		
		ID:4zX	ID:4zXVbv?CfCTRFBl3YWZEk4yKdbQ-8Bl8odd7RBfWwHe_oBGDoG7KnJUl0aq5NpHEu_				

NOTES-

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-5=-60, 5-6=-20, 7-11=-20 Concentrated Loads (lb)

Vert: 15=-5(F=-2, B=-2) 17=-30(F=-15, B=-15) 18=-379(F=-190, B=-190) 19=-560(F=-280, B=-280)



			<u>4-0-11</u> <u>4-0-11</u>		-12 5-1	-	<u>11-2-4</u> 3-8-9	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 NO	CSI. TC 0.58 BC 0.28 WB 0.34 Motiv MS	DEFL. in Vert(LL) -0.02 Vert(CT) -0.05 Horz(CT) 0.01 Wind(L) 0.02	(loc) l/defl 9-10 >999 9-10 >999 8 n/a 0 10 >000	L/d 480 360 n/a	PLATES MT20	GRIP 244/190
BCDL 10.0		1912014	Matrix-MS		9-10 >999	240	vveight: 65 lb	FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x6 S WEBS 2x4 S	SP No.2 SP No.1 SP No.3			BRACING- TOP CHORD BOT CHORD	Structural wood purlins, except Rigid ceiling dir	l sheathin end vertie ectly appl	ng directly applied or cals. lied or 10-0-0 oc brad	5-4-14 oc cing.
					MiTek recomi bracing be ins accordance w	nends tha talled dur ith Stabili	at Stabilizers and req ring truss erection, in zer Installation guide	uired cross

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REACTIONS. (lb/size) 2=718/0-4-9 (min. 0-1-8), 8=740/Mechanical
Max Horz 2=114(LC 7)
Max Uplift2=-162(LC 4), 8=-93(LC 4)
```

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

- TOP CHORD 2-14=-1145/28, 3-14=-1112/37, 3-15=-969/102, 4-15=-946/107
- BOT CHORD 2-16=-66/1073, 10-16=-66/1073, 10-17=-66/1073, 9-17=-66/1073,
- 9-18=-88/922, 8-18=-88/922
- WEBS 4-9=-9/504, 4-8=-1038/128

NOTES-

- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 162 lb uplift at joint 2 and 93 lb uplift at joint 8.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 53 lb down and 12 lb up at 2-9-8, 53 lb down and 12 lb up at 2-9-8, and 73 lb down and 40 lb up at 5-7-7, and 73 lb down and 40 lb up at 5-7-7 on top chord, and 21 lb down and 12 lb up at 2-9-8, 21 lb down and 12 lb up at 2-9-8, 28 lb down at 5-7-7, 28 lb down at 5-7-7, and 190 lb down and 49 lb up at 8-5-6, and 190 lb down and 49 lb up at 8-5-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	CJ4	Diagonal Hip Girder	2	1	
					Job Reference (optional)
C&R Building Supply, A	utryville NC	8	.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:04:54 2023 Page 2

ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-8BI8odd7RBfWwHe_oBGDoG7KnJVR0cB5NpHEu_zvpbd

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-5=-60, 5-6=-20, 7-11=-20 Concentrated Loads (lb) Vert: 15=-5(F=-2, B=-2) 17=-30(F=-15, B=-15) 18=-379(F=-190, B=-190)



4x6 = 6

			3-3-0			0-2-	14	
		1	3-3-8			2-11	-6	I
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.58 BC 0.11 WB 0.07 Matrix-MP	DEFL. in Vert(LL) -0.00 Vert(CT) -0.01 Horz(CT) 0.00 Wind(LL) -0.00	(loc) 8 8 7 8-11	l/defl >999	L/d 180 360 n/a 240	PLATES MT20 Weight: 35 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x6 S WEBS 2x4 S	SP No.2 SP No.1 SP No.3		BRACING- TOP CHORD BOT CHORD	Struc excep Rigid MiT brac acce	tural wood s ot end vertica ceiling direc ek recomme cing be instal ordance with	heathing o als. tly applied nds that S lled during Stabilize	directly applied or d or 10-0-0 oc bra Stabilizers and re g truss erection, j r Installation guid	r 6-0-0 oc purlins, acing. quired cross n e.

REACTIONS. (Ib/size) 2=440/0-4-9 (min. 0-1-8), 7=331/Mechanical Max Horz 2=70(LC 7) Max Uplift2=-141(LC 4), 7=-6(LC 5)

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

TOP CHORD 2-12=-338/0, 3-12=-302/0

BOT CHORD 2-14=-9/291, 8-14=-9/291, 8-15=-9/291, 7-15=-9/291

WEBS 3-7=-307/0

NOTES-

1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

4x4 =

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 2 and 6 lb uplift at joint 7.

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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 53 lb down and 12 lb up at 2-9-8, 53 lb down and 12 lb up at 2-9-8, and 64 lb down and 39 lb up at 5-7-7, and 71 lb down and 50 lb up at 5-7-7 on top chord, and 21 lb down and 12 lb up at 2-9-8, 21 lb down and 12 lb up at 2-9-8, and 33 lb down at 5-7-7, and 37 lb down at 5-7-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	CJ5	Diagonal Hip Girder	2	1	
					Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Fri Jan 13 10:04:55 2023 Page 2 ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-cNsX?zelCVnNYRDBMvoSLUfVXjuPI7IFcT1nRQzvpbc

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-4=-60, 4-5=-20, 6-9=-20 Concentrated Loads (lb) Vert: 13=-64(F=-23, B=-41) 15=-60(F=-23, B=-37)

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/I	Viller	
27070A	F1	Floor Supported Gable	1	1			
					Job Reference (option	al)	
C&R Building Supply, Autryville NC 8.430 s Jan 20 2021 MiTek Indu						. Fri Jan 13 10:04:56	2023 Page 1
		ID:4zX	/bv?CfCT	RFBI3YW	/ZEk4yKdbQ-5aQvDJfNzov	E9boNwcJhuhCo37F5Ub	XOr7mKzszvpbb
							0 ₁ 1 ₇ 8
							Scale = 1:21.7
			_				
1 2	3	4 5 6	/		8 9	10	11
	•						
			OT1			eT1	
						311	
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			~~~~		~~~~~~ ^{~~}	
22 21	20	19 18 17	16		15 14	13	12
							$4x4 \equiv$

l			<u>13-4-0</u> 13-4-0				
Plate Offsets (X,Y)-	- [1:Edge,0-0-12], [12:Edge,0-1-8	], [23:0-1-8,0-0-12]					
LOADING         (psf)           TCLL         40.0           TCDL         10.0           BCLL         0.0           BCDL         5.0	SPACING-2-0-0Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCode IRC2018/TPI2014	<b>CSI.</b> TC 0.08 BC 0.02 WB 0.03 Matrix-R	<b>DEFL.</b> i Vert(LL) n/ Vert(CT) n/ Horz(CT) 0.0	n (loc) a - a - 0 12	l/defl L/d n/a 999 n/a 999 n/a n/a	PLATES MT20 Weight: 56 II	<b>GRIP</b> 244/190 FT = 20%F, 11%
LUMBER- TOP CHORD 2x4 BOT CHORD 2x4 WEBS 2x4 OTHERS 2x4	SP No.2(flat) SP No.2(flat) SP No.3(flat) SP No.3(flat)		BRACING- TOP CHORD BOT CHORD	Structi except Rigid c	ural wood sheath t end verticals. ceiling directly ap	ning directly applied o pplied or 10-0-0 oc br	or 6-0-0 oc purlins, acing.

REACTIONS. All bearings 13-4-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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

## NOTES-

- 1) All plates are 1.5x4 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) 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.



L			13-4-0		
Plate Offsets (X,Y)-	- [1:Edge,0-1-8], [5:0-1-8,Edge], [	13:0-1-8,Edge], [16:0-	13-4-0 -1-8,0-0-12]		'
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- 1-7-3 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.16 BC 0.29 WB 0.27 Matrix-S	<b>DEFL.</b> in Vert(LL) -0.07 Vert(CT) -0.10 Horz(CT) 0.02	i (loc) l/defl L/d 12 >999 360 11-12 >999 240 9 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 68 lb         FT = 20%F, 11%
LUMBER- TOP CHORD 2x4 3 BOT CHORD 2x4 3 WEBS 2x4 3	SP 2400F 2.0E(flat) SP 2400F 2.0E(flat) SP No.3(flat)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing except end verticals. Rigid ceiling directly applie	directly applied or 6-0-0 oc purlins, ed or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 15=575/Mechanical, 9=570/0-3-8 (min. 0-1-8)

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

TOP CHORD 2-3=-1124/0, 3-4=-1776/0, 4-5=-1776/0, 5-6=-1689/0, 6-7=-1136/0

- BOT CHORD 14-15=0/704, 13-14=0/1532, 12-13=0/1776, 11-12=0/1776, 10-11=0/1550, 9-10=0/698
- WEBS 2-15=-884/0, 2-14=0/546, 3-14=-531/0, 3-13=0/439, 7-9=-874/0, 7-10=0/570, 6-10=-539/0, 5-11=-255/49

## NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) All plates are 4x4 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 10-0-0 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.

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	F3	Floor Supported Gable	1	1	
					Job Reference (optional)
C&R Building Supply, A	utryville NC		8.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:04:57 2023 Page 1
		ID:42	XVbv?CfC1	RFBI3YW	/ZEk4yKdbQ-Zm_HQff0k615nkNZTJqwQvlznXbOD2nY4nWuVJzvpba

0-<u>1</u>-8



18-4-8 18-4-8 Plate Offsets (X,Y)-- [1:Edge,0-0-12], [17:Edge,0-1-8], [33:0-1-8,0-0-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) l/defl L/d PLATES GRIP in ä0.ó Plate Grip DOL 1.00 ΤС 0.08 TCLL Vert(LL) 999 244/190 n/a n/a **MT20** TCDL 10.0 Lumber DOL 1.00 BC 0.01 Vert(CT) n/a n/a 999 **Rep Stress Incr** WB 0.03 Horz(CT) 0.00 17 BCLL 0.0 YES n/a n/a BCDL Code IRC2018/TPI2014 5.0 Matrix-R Weight: 76 lb FT = 20%F, 11% LUMBER-**BRACING-**TOP CHORD 2x4 SP No.2(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, BOT CHORD 2x4 SP No.2(flat) except end verticals. 2x4 SP No.3(flat) BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 2x4 SP No.3(flat) OTHERS

**REACTIONS.** All bearings 18-4-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18

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

#### NOTES-

1) All plates are 1.5x4 MT20 unless otherwise indicated.

- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) 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.



			<u>16-0-8</u> 16-0-8		
Plate Offsets (X,Y)-	- [1:Edge,0-1-8], [7:0-1-8,Edge], [	16:0-1-8,Edge], [21:0	-1-8,0-0-12]		
LOADING         (psf)           TCLL         40.0           TCDL         10.0           BCLL         0.0           BCDL         5.0	SPACING- 1-7-3 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.41 BC 0.80 WB 0.35 Matrix-S	<b>DEFL.</b> in Vert(LL) -0.18 Vert(CT) -0.25 Horz(CT) 0.05	(loc) l/defl L/d 16-17 >999 360 16-17 >767 240 12 n/a n/a	PLATES         GRIP           MT20         244/190           Weight:         84 lb         FT = 20%F, 11%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S	SP No.2(flat) SP No.2(flat) SP No.3(flat)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing except end verticals. Rigid ceiling directly applie	directly applied or 6-0-0 oc purlins,

REACTIONS. (lb/size) 20=694/Mechanical, 12=689/0-3-8 (min. 0-1-8)

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

 TOP CHORD
 2-3=-1429/0, 3-4=-2321/0, 4-5=-2321/0, 5-6=-2597/0, 6-7=-2597/0, 7-8=-2310/0, 8-9=-2310/0, 9-10=-1431/0

 BOT CHORD
 19-20=0/862, 18-19=0/1972, 17-18=0/1972, 16-17=0/2547, 15-16=0/2597,

WEBS 2-20=-1081/0, 2-19=0/738, 3-19=-707/0, 3-17=0/2647, 10=10=0/2647 14-15=0/2597, 13-14=0/1970, 12-13=0/862 WEBS 2-20=-1081/0, 2-19=0/738, 3-19=-707/0, 3-17=0/446, 10-12=-1079/0, 10-13=0/741, 9-13=-701/0, 9-14=0/434, 7-14=-531/0, 5-17=-287/0, 5-16=-149/309

## NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) All plates are 4x4 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 10-0-0 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.



		<u>15-10-12</u> 15-10-12				18-	4-8
Plate Offsets (X	Y) [1:Edge,0-1-8], [7:0-1-8,Edge], [	14:0-1-8,Edge], [15:E	dge,0-1-8], [20:0-1-8,	Edge]			
LOADING         (psf)           TCLL         40.0           TCDL         10.0           BCLL         0.0           BCDL         5.0	SPACING-1-7-3Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCode IRC2018/TPI2014	<b>CSI.</b> TC 0.25 BC 0.32 WB 0.56 Matrix-S	<b>DEFL.</b> in Vert(LL) -0.10 Vert(CT) -0.15 Horz(CT) 0.02	(loc) l/defl 20-21 >999 20-21 >999 16 n/a	L/d 360 240 n/a	<b>PLATES</b> MT20 Weight: 98 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%
LUMBER- TOP CHORD 2 BOT CHORD 2 WEBS 2	g directly applied or ed or 10-0-0 oc bra 5-16.	r 6-0-0 oc purlins, acing, Except:					
6-0-0 oc bracing: 16-17,15- <b>REACTIONS.</b> (lb/size) 24=583/Mechanical, 15=-627/Mechanical, 16=1638/0-3-8 (min. 0-1-8) Max Uplift15=-700(LC 3) Max Grav24=584(LC 3), 16=1638(LC 1)							
FORCES. (Ib) - TOP CHORD BOT CHORD WEBS	Max. Comp./Max. Ten All forces 25 2-3=-1150/0, 3-4=-1777/0, 4-5=-1777 7-8=-1180/0, 8-9=-1180/0, 11-12=0/1 23-24=0/715, 22-23=0/1565, 21-22=0 18-19=0/1702, 17-18=0/718, 16-17=- 2-24=-897/0, 2-23=0/566, 3-23=-541/ 11-17=0/907, 9-17=-872/0, 9-18=0/58 13-15=0/1178, 13-16=-1067/0	50 (Ib) or less except ( /0, 5-6=-1702/0, 6-7= 627, 12-13=0/1626 0/1565, 20-21=0/1859 653/0, 15-16=-939/0 0, 3-21=0/271, 11-16 30, 7-18=-708/0, 5-20	when shown. 1702/0, 0, 19-20=0/1702, =-1226/0, =-312/103,				
NOTES-							

1) Unbalanced floor live loads have been considered for this design.

2) All plates are 4x4 MT20 unless otherwise indicated.

3) Refer to girder(s) for truss to truss connections.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 700 lb uplift at joint 15.

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.



3x6 =

3x6 =

	L					5-0-0						
	I					5-0-0						1
Plate Offs	sets (X,Y)	- [1:Edge,0-1-8], [2:0-1	1-8,Edge], [	<u>3:0-1-8,Ed</u>	ge], [4:0-1-	-8,Edge]						
LOADING TCLL TCDL BCLL BCDL	i (psf) 40.0 10.0 0.0 5.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TI	1-7-3 1.00 1.00 YES PI2014	CSI. TC BC WB Matriz	0.13 0.11 0.06 x-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.01 0.00	(loc) 7 7 5	l/defl >999 >999 n/a	L/d 360 240 n/a	PLATES MT20 Weight: 28 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%
LUMBER- TOP CHC BOT CHC WEBS	)RD 2x4 S )RD 2x4 S )RD 2x4 S 2x4 S	SP No.2(flat) SP No.2(flat) SP No.3(flat)				BRACING- TOP CHO BOT CHO	RD RD	Structu except Rigid c	iral woo end ver eiling di	d sheathing ticals. rectly appli	g directly applied or ed or 10-0-0 oc bra	5-0-0 oc purlins, cing.

REACTIONS. (lb/size) 8=209/Mechanical, 5=209/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 2-8=-275/0, 3-5=-275/0

## NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) Refer to girder(s) for truss to truss connections.

3) This truss is designed in accordance with the 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.



					12-3-0					
Г					12-9-0					
Plate Of	fsets (X,Y)-	- [1:Edge,0-0-12], [8:0-	1-8,Edge],	[11:0-1-8,Edge], [12:	0-1-8,Edge], [15:0	-1-8,0-0-12]				
		1								
LOADIN	<b>G</b> (psf)	SPACING-	1-7-3	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	<b>40.0</b>	Plate Grip DOL	1.00	TC 0.17	Vert(LL) -(	0.06 10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC 0.20	Vert(CT) -(	0.08 10-11	>999	240	-	
BCLL	0.0	Rep Stress Incr	YES	WB 0.24	Horz(CT) (	0.02 9	n/a	n/a		
BCDL	5.0	Code IRC2018/TF	PI2014	Matrix-S	(0.)				Weight: 64 lb	FT = 20%F, 11%
LUMBEF	२-				BRACING-					
TOP CH	ORD 2x4 S	SP 2400F 2.0E(flat)			TOP CHORE	D Structu	ral wood	d sheathing	directly applied o	r 6-0-0 oc purlins,
BOT CH	ORD 2x4 S	SP 2400F 2.0E(flat)				except	end ver	ticals.	, , , , ,	· · ·
WEBS	2x4 \$	SP No.3(flat)			BOT CHORE	D Rigid c	eiling di	ectly applie	ed or 10-0-0 oc bra	acing.

12 0 0

**REACTIONS.** (lb/size) 14=545/0-3-8 (min. 0-1-8), 9=550/Mechanical

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

TOP CHORD 2-3=-1066/0, 3-4=-1616/0, 4-5=-1616/0, 5-6=-1616/0, 6-7=-1066/0

BOT CHORD 13-14=0/672, 12-13=0/1431, 11-12=0/1616, 10-11=0/1431, 9-10=0/673

WEBS 2-14=-842/0, 2-13=0/512, 3-13=-476/0, 3-12=0/398, 7-9=-844/0, 7-10=0/511,

6-10=-475/0, 6-11=0/398

# NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) All plates are 4x4 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 10-0-0 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.



4x4 =

			5-3-8			
			5-3-8			
Plate Offsets (X	Y) [1:Edge,0-0-12], [10:Edge,0-1-8	3], [11:0-1-8,0-0-12]				
LOADING (psf) TCLL 40.0	SPACING- 2-0-0 Plate Grip DOL 1.00	<b>CSI.</b> TC 0.08	<b>DEFL.</b> in Vert(LL) n/a	(loc) l/defl L/d - n/a 999	PLATES MT20	<b>GRIP</b> 244/190
TCDL         10.0           BCLL         0.0	Lumber DOL 1.00 Rep Stress Incr YES	BC 0.02 WB 0.03	Vert(CT) n/a Horz(CT) 0.00	- n/a 999 6 n/a n/a		
BCDL 5.0	Code IRC2018/1PI2014	Matrix-R			Weight: 23 lb	FT = 20%F, 11%
LUMBER- TOP CHORD 2	x4 SP No.2(flat)		BRACING- TOP CHORD	Structural wood sheathing	directly applied or	5-3-8 oc purlins,
BOT CHORD 2 WEBS 2	x4 SP No.2(flat) x4 SP No.3(flat)		BOT CHORD	except end verticals. Rigid ceiling directly appli	ed or 10-0-0 oc bra	cing.
UTHERS Z	x4 SP IN0.3(IIal)					

REACTIONS. All bearings 5-3-8.

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

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

## NOTES-

1) All plates are 1.5x4 MT20 unless otherwise indicated.

2) Gable requires continuous bottom chord bearing.

3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

4) Gable studs spaced at 1-4-0 oc.

5) 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.



	<u>2-10-4</u> 2-10-4			<u>7-5-8</u> 4-7-4	
Plate Offsets (X,Y)	- [1:Edge,0-1-8], [4:0-1-8,Edge], [5	i:0-1-8,Edge], [13:0-1-	-8,0-0-12]		
LOADING(psf)TCLL40.0TCDL10.0BCLL0.0BCDL5.0	SPACING-1-7-3Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCode IRC2018/TPI2014	<b>CSI.</b> TC 0.10 BC 0.08 WB 0.06 Matrix-P	DEFL.         in           Vert(LL)         -0.00           Vert(CT)         -0.00           Horz(CT)         0.00	(loc) l/defl L/d 8 >999 360 8 >999 240 7 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 43 lb         FT = 20%F, 11%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S	SP No.2(flat) SP No.2(flat) SP No.3(flat)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing except end verticals. Rigid ceiling directly applie	directly applied or 6-0-0 oc purlins, d or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 12=111/Mechanical, 7=186/0-3-8 (min. 0-1-8), 10=331/0-3-8 (min. 0-1-8) Max Grav 12=136(LC 8), 7=187(LC 4), 10=353(LC 7)

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

## NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) Refer to girder(s) for truss to truss connections.

3) This truss is designed in accordance with the 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.



Plate Offsets (X,Y)	[1:Edge,0-1-8], [2:0-1-8,Edge], [3	3:0-1-8,Edge], [9:0-1-{	4-5-8 4-5-8 8,0-0-12]		
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- 1-7-3 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.10 BC 0.09 WB 0.05 Matrix-S	<b>DEFL.</b> in Vert(LL) -0.00 Vert(CT) -0.01 Horz(CT) 0.00	(loc) l/defl L/d 7 >999 360 7 >999 240 5 n/a n/a	<b>PLATES GRIP</b> MT20 244/190 Weight: 26 lb FT = 20%F, 11%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S	SP No.2(flat) SP No.2(flat) SP No.3(flat)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing except end verticals. Rigid ceiling directly applie	directly applied or 4-5-8 oc purlins, ed or 10-0-0 oc bracing.

REACTIONS. (lb/size) 8=185/Mechanical, 5=180/0-3-8 (min. 0-1-8)

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

# NOTES-

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.

¹⁾ Unbalanced floor live loads have been considered for this design.



1			13-0-8			1
Γ			13-0-8			
Plate Offsets (X,Y)-	- [1:Edge,0-0-12], [5:0-1-8,Edge],	[12:0-1-8,Edge], [15:	0-1-8,0-0-12], [16:0-1	-8,0-0-12]		
LOADING         (psf)           TCLL         40.0           TCDL         10.0           BCLL         0.0           BCDL         5.0	SPACING- 1-7-3 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.20 BC 0.22 WB 0.25 Matrix-S	<b>DEFL.</b> ir Vert(LL) -0.07 Vert(CT) -0.09 Horz(CT) 0.02	n (loc) I/defl L/d 7 12-13 >999 360 9 12-13 >999 240 2 9 n/a n/a	PLATES G MT20 24 Weight: 69 lb	<b>RIP</b> 14/190 FT = 20%F, 11%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S	SP 2400F 2.0E(flat) SP 2400F 2.0E(flat) SP No 3(flat)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing except end verticals. Rigid ceiling directly appli	directly applied or 6-	0-0 oc purlins,

. . . .

REACTIONS. (lb/size) 14=557/0-3-8 (min. 0-1-8), 9=557/0-3-8 (min. 0-1-8)

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

TOP CHORD 2-3=-1098/0, 3-4=-1684/0, 4-5=-1692/0, 5-6=-1692/0, 6-7=-1097/0

BOT CHORD 13-14=0/689, 12-13=0/1478, 11-12=0/1692, 10-11=0/1478, 9-10=0/689

WEBS 2-14=-863/0, 2-13=0/532, 3-13=-495/0, 3-12=0/421, 7-9=-863/0, 7-10=0/531,

6-10=-496/0, 6-11=0/432

## NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) 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.

3) 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.





12-8-0 12-8-0 Plate Offsets (X,Y)-- [2:0-0-14,0-2-0], [8:0-0-14,0-2-2] LOADING (psf) SPACING-2-0-0 CSI. DEFL. l/defl L/d PLATES GRIP in (loc) 20.Ó ΤС TCLL Plate Grip DOL 1.15 0.24 120 Vert(LL) -0.01 9 n/r **MT20** 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.04 Vert(CT) -0.02 9 n/r 120 0.0 0.03 **Rep Stress Incr** WB Horz(CT) 8 BCLL YES 0.00 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-S Weight: 59 lb FT = 20% **BRACING-**LUMBER-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. BOT CHORD 2x4 SP No.2 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SP No.3 OTHERS MiTek recommends that Stabilizers and required cross

bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

SLIDER Left 2x4 SP No.3 - 1-6-0, Right 2x4 SP No.3 -È 1-6-0

**REACTIONS.** All bearings 12-8-0.

(lb) - Max Horz 2=-33(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 14, 12 except 2=-100(LC 8), 8=-100(LC 8) Max Grav All reactions 250 lb or less at joint(s) 2, 8, 13, 14, 15, 12,

11

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

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) All plates are 1.5x4 MT20 unless otherwise indicated.

5) Gable requires continuous bottom chord bearing.

6) Gable studs spaced at 2-0-0 oc.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 12 except (jt=lb) 2=100, 8=100.

10) 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.





16 0 0

			16-0-0						
Plate Offsets (X,Y)-	- [2:0-0-14,0-2-0], [10:0-0-14,0-2-2	2]							
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.24 BC 0.05 WB 0.03 Matrix-S	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.02 0.00	(loc) 11 11 10	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 76 lb	<b>GRIP</b> 244/190 FT = 20%
BCLL         0.0         Rep Stress Incr         YES         WB         0.03           BCDL         10.0         Code IRC2018/TPI2014         Matrix-S           LUMBER- TOP CHORD         2x4 SP No.2         OTHERS         2x4 SP No.3           SLIDER         Left 2x4 SP No.3 -È 1-6-0, Right 2x4 SP No.3 -È 1-6-0         REACTIONS.         All bearings 16-0-0.           (lb) -         Max Horz 2=40(LC 7)         Max Uplift All uplift 100 lb or less at joint(s) 17, 18, 15, 14 exc 2=-100(LC 8), 10=-100(LC 8)           Max Grav         All reactions 250 lb or less at joint(s) 2, 10, 16, 17, 15, 14, 13			BRACING- TOP CHOF BOT CHOF	RD RD	Structu Rigid c MiTe bracil accol	ural wood eiling di k recom ng be ins rdance v	d sheathing rectly appli mends tha' stalled duri vith Stabiliz	g directly applied or ed or 10-0-0 oc bra t Stabilizers and re ng truss erection, i zer Installation guid	r 6-0-0 oc purlins. acing. quired cross n e.
FORCES. (lb) - Ma	x. Comp./Max. Ten All forces 25	0 (lb) or less except w	/hen shown.						
<b>NOTES-</b> 1) Unbalanced roof	live loads have been considered fo	or this design.							

- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 18, 15, 14 except (jt=lb) 2=100, 10=100.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 11) 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.



Scale = 1:40.8



F	7-3-13 7-3-13		14-4-3		21-8	<u>3-0</u> -13	
Plate Offsets (X,Y)	· [2:0-1-11,0-3-1], [4:0-2-0,0-0-4],	[6:0-1-11,0-3-1]					
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.19 BC 0.27 WB 0.19 Matrix-AS	DEFL.         in           Vert(LL)         -0.08           Vert(CT)         -0.18           Horz(CT)         0.03           Wind(LL)         0.06	(loc) l/defl 9-11 >999 9-11 >999 6 n/a 9-11 >999	L/d 480 360 n/a 240	<b>PLATES</b> MT20 Weight: 126 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S OTHERS 2x4 S SLIDER Left 2	SP 2400F 2.0E SP 2400F 2.0E SP No.3 SP No.3 2x4 SP No.3 -È 1-6-0, Right 2x4 SI	⊃ No.3 -È 1-6-0	BRACING- TOP CHORD BOT CHORD	Structural woo Rigid ceiling di MiTek recom bracing be in accordance v	d sheathing rectly applie mends that stalled durir with Stabilize	directly applied. ed. Stabilizers and requise truss erection, in er Installation guide	uired cross
<b>REACTIONS</b> . (Ib/si Max Max	ze)	979/0-3-8 (min. 0-1-8)					
FORCES. (lb) - Mat TOP CHORD 2-3: BOT CHORD 2-12 8-9:	x. Comp./Max. Ten All forces 25 =-1781/146, 3-4=-1591/128, 4-5=- 2=-52/853, 11-12=-67/1639, 10-11 =-67/1639, 6-8=-52/853	0 (lb) or less except whe 1591/128, 5-6=-1781/14 =-15/1183, 9-10=-15/11	en shown. 6 83,				
WEBS 3-1	1=-292/98, 4-11=0/454, 4-9=0/454	, 5-9=-292/98					
NOTES- 1) Unbalanced roof I 2) Wind: ASCE 7-16 eave=4ft; Cat. II; I exposed; Lumber 3) Truss designed fr Standard Industry 4) All plates are 1.5x 5) Gable studs space 6) This truss has be 6-0-0 between the 8) Provide mechanic (jt=lb) 2=131, 6=1 9) This truss is design referenced standar 10) This truss design gypsum sheetroor Continued on page 2	ive loads have been considered for ; Vult=140mph (3-second gust) Va- Exp B; Enclosed; MWFRS (directi DOL=1.60 plate grip DOL=1.60 or wind loads in the plane of the tr Gable End Details as applicable, 4 MT20 unless otherwise indicate ed at 2-0-0 oc. en designed for a 10.0 psf bottom een designed for a live load of 20. a bottom chord and any other men cal connection (by others) of truss 31. gned in accordance with the 2018 ard ANSI/TPI 1. n requires that a minimum of 7/16" ck be applied directly to the bottom	or this design. asd=111mph; TCDL=6.0 onal); cantilever left and uss only. For studs exp or consult qualified build d. chord live load noncond Opsf on the bottom chor ibers. to bearing plate capable International Residential structural wood sheathin o chord.	Opsf; BCDL=6.0psf; right exposed ; end osed to wind (norm ding designer as pe d in all areas with a of withstanding 10 I Code sections R50 ing be applied direct	h=20ft; B=45ft; d vertical left an al to the face), s r ANSI/TPI 1. er live loads. clearance grea 0 lb uplift at joir 02.11.1 and R8 stly to the top ch	L=24ft; d right see ater than ht(s) except 02.10.2 and ord and 1/2		

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	G3	GABLE	1	1	
					Job Reference (optional)
C&R Building Supply, Au	utryville NC	8	.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:03 2023 Page 2

8.430 s Jan 20 2021 MiTek Industries, Inc. Fri Jan 13 10:05:03 2023 Page 2 ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-NwLYhikmJynEVfqjqaxKgA_yUxahdjpQSizCjyzvpbU



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

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) All plates are 1.5x4 MT20 unless otherwise indicated.

- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 15 , 12, 11 except (jt=lb) 16=111, 10=111.
- 11) 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.



(lb) - Max Horz 12=77(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 11, 9 except 12=-101(LC 8), 8=-101(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 12, 8, 10, 11, 9

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

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) Gable requires continuous bottom chord bearing.

5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

6) Gable studs spaced at 2-0-0 oc.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 9 except (jt=lb) 12=101, 8=101.

10) 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.



	8-0-0		16-0-0						
Plate Offsets (X,Y)	[3:0-1-7,0-0-12], [5:0-1-7,0-0-12]					0-0-	.0		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.43 BC 0.25 WB 0.30 Matrix-AS	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.05 -0.10 0.01 0.01	(loc) 8-9 8-9 8 9	l/defl >999 >999 n/a >999	L/d 480 360 n/a 240	PLATES MT20 Weight: 110 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S OTHERS 2x4 S REACTIONS. (lb/siz	=750/0-3-8 (min. 0-1-6	BRACING- TOP CHOF BOT CHOF	RD RD	Structu vertica Rigid c MiTe braci acco	ural wood Is. ceiling dii k recomi ng be ins rdance v	d sheathing rectly appli mends tha stalled duri vith Stabiliz	g directly applied, es ed. t Stabilizers and req ng truss erection, in er Installation guide	ccept end uired cross	
FORCES. (Ib) - Max TOP CHORD 3-4= BOT CHORD 9-10 WEBS 4-9=	Horz 10=-119(LC 6) Uplift10=-118(LC 8), 8=-118(LC 8 <. Comp./Max. Ten All forces 25 663/75, 4-5=-663/75, 2-10=-305 D=0/651, 8-9=0/651 =0/365, 3-10=-661/119, 5-8=-661/	) 0 (lb) or less except wh /93, 6-8=-305/93 119	nen shown.						
NOTES- 1) Unbalanced roof I 2) Wind: ASCE 7-16 eave=4ft; Cat. II; F exposed; Lumber 3) Truss designed for Standard Industry 4) All plates are 1.5x 5) Gable studs space 6) This truss has bee 7) * This truss has be 6-0-0 between the 8) Provide mechanic	ive loads have been considered for ; Vult=140mph (3-second gust) Va Exp B; Enclosed; MWFRS (directi DOL=1.60 plate grip DOL=1.60 or wind loads in the plane of the tr Gable End Details as applicable, 4 MT20 unless otherwise indicate ed at 2-0-0 oc. en designed for a 10.0 psf bottom een designed for a live load of 20. bottom chord and any other men al connection (by others) of truss	or this design. asd=111mph; TCDL=6. onal); cantilever left and uss only. For studs exp or consult qualified bui d. chord live load noncon Opsf on the bottom cho ibers. to bearing plate capabl	0psf; BCDL=6 d right expose cosed to wind lding designer current with ar rd in all areas e of withstand	3.0psf; d ; enc (norma as per ny othe with a ing 10	h=20ft; d vertica al to the r ANSI/ er live lo cleara 0 lb upl	; B=45ft; al left and e face), s TPI 1. pads. nce grea	L=24ft; d right see ter than t(s) except		

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=118, 8=118.

9) 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.

10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



	<u>3-4-13</u> 3-4-13	<u>6-4-0</u> 2-11-3	9-3-3	3	<u>12-8-0</u> 3-4-13	ł
Plate Offsets (X,Y)-	- [1:0-0-0,0-2-9], [5:Edge,0-2-9]					
LOADING (psf)	SPACING- 2-0-0 Plate Grip DOI 115	CSI. DE	<b>FL.</b> in (loc)	l/defl L/d >999 480	<b>PLATES GRIP</b> MT20 244/190	
TCDL         10.0           BCLL         0.0 *	Lumber DOL 1.15 Rep Stress Incr NO	BC 0.47 Ve WB 0.40 Ho	rt(CT) -0.09 7-8 rz(CT) 0.02 5	>999 360 n/a n/a	M120 2+4/100	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS Wi	nd(LL) 0.03 7	>999 240	Weight: 128 lb FT = 20%	)
LUMBER-	•	BR	ACING-			

#### LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.1 2x4 SP No.3 WEBS

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 5-8-7 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=2439/0-3-8 (min. 0-1-8), 5=4318/0-3-8 (min. 0-2-9) Max Horz 1=-26(LC 25) Max Uplift1=-176(LC 8), 5=-428(LC 8)

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

TOP CHORD 1-2=-4054/317, 2-3=-3421/284, 3-4=-3426/284, 4-5=-4658/389

- BOT CHORD 1-15=-275/3801, 8-15=-275/3801, 8-16=-275/3801, 7-16=-275/3801,
- 7-17=-346/4399. 6-17=-346/4399. 6-18=-346/4399. 5-18=-346/4399
- WEBS 3-7=-125/1924, 4-7=-1324/145, 4-6=-69/794, 2-7=-664/67, 2-8=-22/400

# NOTES-

1) 2-ply truss to be connected together with 10d (0.131"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 roof live loads have been considered for this design.

4) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 1=176, 5=428.

8) 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.

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	GR1	Common Girder	1	2	Job Reference (optional)
C&R Building Supply, Autryville NC				an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:05 2023 Page 2

## NOTES-

8.450 s Jan 20 2021 Millek Industries, Inc. Fri Jan 13 10:05:05 2023 Page 2 ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-KJTJ6Om1rZ1ylz_6x?zolb4InlC75Z1jv0SJnrzvpbS

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 526 lb down and 37 lb up at 0-0-0, 519 lb down and 45 lb up at 2-3-4, 519 lb down and 45 lb up at 4-3-4, 519 lb down and 45 lb up at 6-3-4, 519 lb down and 45 lb up at 8-3-4, and 519 lb down and 45 lb up at 10-3-4, and 2622 lb down and 316 lb up at 12-2-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

## LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-Ӟ=-60, 3-5=-60, 9-12=-20

Concentrated Loads (lb)

Vert: 7=-519(B) 9=-526(B) 14=-2622(B) 15=-519(B) 16=-519(B) 17=-519(B) 18=-519(B)



F		4-2-13	8-0-0			11-9-3			16-0-0	
Plate Offsets	s (X.Y)	<u>4-2-13</u> [1:0-1-1.0-2-0], [5:0-1-1.0-2-0]	3-9-3			3-9-3			4-2-13	
	- (, - /									
LOADING (p	osf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20	0.0	Plate Grip DOL 1.15	TC 0.17	Vert(LL)	-0.06	6-7	>999	480	MT20	244/190
TCDL 10	0.0	Lumber DOL 1.15	BC 0.39	Vert(CT)	-0.11	6-7	>999	360		
BCLL (	0.0 *	Rep Stress Incr NO	WB 0.34	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10	0.0	Code IRC2018/TPI2014	Matrix-MS	Wind(LL)	0.04	6-7	>999	240	Weight: 163 lb	FT = 20%
LUMBER-	BRACING-									
TOP CHORE	D 2x4 SF	P No.2		TOP CHO	RD	Structu	ural woo	d sheathing	directly applied or 6	6-0-0 oc purlins.
BOT CHORE	D 2x6 SF	9 No.1		BOT CHO	RD	Rigid c	eiling di	rectly appli	ed or 10-0-0 oc brac	ing.
WEBS	2x4 SF	° No.3				U	Ũ	, ,,		0
REACTIONS	6. (ID/SIZE	e) 1=1983/0-3-8 (min. 0-1-8), 3	5=1983/0-3-8 (min. 0	-1-8)						
	Max H	1012 1=-33(LC 0) 1011ft1= 194/LC 9) 5= 194/LC 9)								
	IVIAX U	p(111 - 164)(10 6), 5 - 164)(10 6)								
FORCES. (	lb) - Max.	Comp./Max. Ten All forces 25	50 (lb) or less except	when shown.						
TOP CHORE	D 1-2=-	4017/399, 2-3=-3048/324, 3-4=	-3048/324, 4-5=-4017	7/399						
BOT CHORE	D 1-15=	-347/3769, 15-16=-347/3769, 8	-16=-347/3769, 8-17	=-347/3769,						
	7-17=	347/3769, 7-18=-347/3769, 6-	18=-347/3769, 6-19=	-347/3769,						
	19-20	0=-347/3769, 5-20=-347/3769								
WEBS	3-7=-	-135/1657, 4-7=-1027/118, 4-6=	-34/530, 2-7=-1027/1	18, 2-8=-34/530	)					
NOTES										
NUIES-		reported to woth an with 40d (0.42	1"v2") neile ee fellevu							
Top shore		nnected together with Tod (0.13	T X3 ) halls as follows	5.						
Bottom ch	is connec	nected as follows: 2x4 - 1 10w at 0-	9-0 0C. staggered at 0.0 0 oc							
Webs con	nected as	$r_{1} = 1$ row at $0.9$	staggered at 0-3-0 00	-						
2) All loads a	are consid	dered equally applied to all plies	excent if noted as fro	ont (E) or back (	B) face	in the l		ASE(S)		
section P	lv to plv c	connections have been provided	to distribute only load	ds noted as (F)	or (B) 1	inless of	otherwis	e indicated		
3) Unbalance	ed roof liv	e loads have been considered f	or this design.		(-), -					
) Wind: ASCE 7-16: Vult=140mph (3-second gust) Vasd=111mph: TCDL=6.0psf: BCDL=6.0psf: h=20ft: B=45ft: L=24ft										
eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right										
exposed; Lumber DOL=1.60 plate grip DOL=1.60										
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.										
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than										
6-0-0 betw	6-0-0 between the bottom chord and any other members.									
7) Provide m	nechanica	I connection (by others) of truss	to bearing plate capa	able of withstand	ding 10	) lb upl	itt at join	it(s) except		
(jt=lb) 1=1	84, 5=18	4.			<b>D</b> -1			00 40 0		
8) 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.										

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	GR2	Common Girder	1	2	Job Reference (optional)
C&R Building Supply, Autryville NC				in 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:06 2023 Page 2

### NOTES-

8.430 s Jan 20 2021 MiTek Industries, Inc. Fri Jan 13 10:05:06 2023 Page 2 ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-oV1hJkmfct9pM7ZIViU1locU79Zaq17s8gBsJHzvpbR

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 285 lb down and 27 lb up at 1-8-12, 302 lb down and 41 Ib up at 2-0-12, 302 lb down and 41 lb up at 4-0-12, 302 lb down and 41 lb up at 6-0-12, 302 lb down and 41 lb up at 8-0-0, 302 lb down and 41 lb up at 9-11-4, 302 lb down and 41 lb up at 11-11-4, and 302 lb down and 41 lb up at 13-11-4, and 285 lb down and 27 lb up at 14-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-3=-60, 3-5=-60, 9-12=-20

Concentrated Loads (lb)

Vert: 6=-302(B) 7=-302(B) 8=-302(B) 15=-285(B) 16=-302(B) 17=-302(B) 18=-302(B) 19=-302(B) 20=-285(B)



		4-5-2	8-4-10		11-7-7		14-10-4		1	8-9-11	23-2-	14
	1	4-5-2	3-11-7		3-2-13		3-2-13		3	3-11-7	4-5-	2
Plate Offs	ets (X,Y)	· [9:0-3-8,0-4-12], [11:	0-3-8,0-4-12	2]								
LOADING TCLL TCDL BCLL BCDL	(psf) 20.0 10.0 0.0 * 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/T	2-0-0 1.15 1.15 NO Pl2014	<b>CSI</b> . TC BC WB Matri	0.51 0.67 0.95 x-MS	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT Wind(LL)	in -0.09 -0.17 ) 0.02 ) 0.07	(loc) 8-9 8-9 7 8-9	l/defl >999 >999 n/a >999	L/d 480 360 n/a 240	PLATES MT20 Weight: 264	<b>GRIP</b> 244/190 b FT = 20%
LUMBER-       BRACING-         TOP CHORD 2x4 SP No.2       TOP CHORD 2x6 SP No.1       TOP CHORD 2x6 SP No.1         BOT CHORD 2x4 SP No.3 *Except*       BOT CHORD 2x4 SP No.3 *Except*       BOT CHORD 80T CHO							r 4-7-3 oc purlins. cing.					
REACTIO	REACTIONS. (Ib/size) 1=-662/0-3-8 (min. 0-1-8), 7=2636/Mechanical, 11=7758/0-3-8 (req. 0-4-9) Max Horz 1=-47(LC 6) Max Uplift1=-804(LC 20), 7=-301(LC 8), 11=-885(LC 8) Max Grav1=216(LC 6), 7=2637(LC 20), 11=7758(LC 1)											
FORCES. TOP CHC	(lb) - Max 0RD 1-2=	x. Comp./Max. Ten / =-370/2317, 2-3=-314/	All forces 25 /2712, 3-4=-2	0 (lb) or le 2242/320,	ess except w 4-5=-2243/3	hen shown. 320,						
BOT CHC	5-6=-6270/834, 6-7=-6349/772 BOT CHORD 1-13=-2171/385, 12-13=-2171/385, 11-12=-2171/385, 11-20=-2542/356, 20-21=-2542/356, 10-21=-2542/356, 10-22=-720/5929, 9-22=-720/5929, 9-23=-698/5962, 23-24=-698/5962, 8-24=-698/5962, 8-25=-698/5962, 25-26=-698/5962, 7-26=-698/5962											
WEBS	NEBS         4-10=-193/1287, 5-10=-5246/718, 5-9=-580/4601, 6-9=-370/265, 3-10=-756/6340, 3-11=-6090/780, 2-11=-581/82											
<ul> <li>NOTES-</li> <li>1) 2-ply truss to be connected together with 10d (0.131"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.</li> <li>Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.</li> <li>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.</li> <li>3) Unbalanced roof live loads have been considered for this design.</li> <li>4) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> </ul>												
C) * This +	/ The table has been designed for a first back of 0.0 or f and the back for the and with a short and the back the											

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	GR3	Common Girder	1	2	Ich Reference (ontional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Fri Jan 13 10:05:07 2023 Page 2 ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-Ghb3X4nHNBHg_H8U3Q?Gq09aZZrVZLs0NKxQskzvpbQ

# NOTES-

- 7) WARNING: Required bearing size at joint(s) 11 greater than input bearing size.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=804, 7=301, 11=885.
- 10) 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.
   11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1123 lb down and 106 lb up at 8-10-2, 1123 lb down and 106 lb up at 10-10-2, 1243 lb down and 175 lb up at 12-10-2, 3701 lb down and 553 lb up at 14-9-6, 285 lb down and 27 lb up at 15-2-2, and 204 lb down and 24 lb up at 17-2-2, and 134 lb down and 22 lb up at 19-2-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

# LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-4=-60, 4-7=-60, 14-17=-20

Concentrated Loads (lb)

Vert: 9=-3701 20=-1123(B) 21=-1123(B) 22=-1243 23=-285(B) 24=-204 25=-134 26=-59





	4-3-11 4-3-11	8-1-12 3-10-1	<u>13-2-4</u> 5-0-8		-6-4 4-0
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.14 BC 0.13 WB 0.09 Matrix-MS	DEFL.         in         (loc)           Vert(LL)         -0.01         12-15           Vert(CT)         -0.01         12-15           Horz(CT)         0.00         8           Wind(LL)         0.00         12-15	l/defl L/d >999 480 >999 360 n/a n/a >999 240	PLATES         GRIP           MT20         244/190           Weight: 222 lb         FT = 20%
LUMBER- TOP CHORD 2X4 S BOT CHORD 2X6 S WEBS 2X4 S	6P No.2 6P No.1 6P No.3		BRACING- TOP CHORD Structur except e BOT CHORD Rigid ce 6-0-0 oc	al wood sheathing d nd verticals. iling directly applied bracing: 9-10.	irectly applied or 6-0-0 oc purlins, or 10-0-0 oc bracing, Except:

REACTIONS. (lb/size) 2=725/0-3-8 (min. 0-1-8), 10=997/0-3-8 (min. 0-1-8), 8=334/0-1-8 (min. 0-1-8) Max Horz 2=88(LC 7) Max Uplift2=-99(LC 8), 10=-63(LC 8), 8=-28(LC 34)

Max Grav2=733(LC 19), 10=997(LC 1), 8=364(LC 27)

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

TOP CHORD 2-3=-534/1, 3-4=-6/264, 5-6=-319/65

- BOT CHORD 2-16=-1/477, 16-17=-1/477, 12-17=-1/477, 11-12=-1/477, 10-11=-1/477, 8-9=-23/335
- WEBS 3-12=0/281, 3-10=-734/35, 5-10=-491/31, 5-9=-5/280, 6-8=-356/22

## NOTES-

1) 2-ply truss to be connected together with 10d (0.131"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 roof live loads have been considered for this design.

4) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

7) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 8.

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	GR4	Common Girder	1	2	Job Reference (optional)
C&R Building Supply, Autryville NC				n 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:08 2023 Page 2

## NOTES-

10) 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.

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11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 358 lb down and 30 lb up at 1-1-8, and 116 lb down and 56 lb up at 3-11-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-5=-60, 5-7=-60, 8-13=-20

Concentrated Loads (lb)

Vert: 16=-358(B) 17=-116(B)


187/143

3-10-11 oc

cing.

FT = 20%

	TCDL BCLL	10.0 0.0 *	Lumber DOL 1.15 Rep Stress Incr NO	BC 0.81 WB 0.83	Vert(CT) -0.41 Horz(CT) 0.09	6-7 >579 5 n/a	360 MT20HS n/a				
	BCDL	10.0	Code IRC2018/TPI2014	Matrix-MS	Wind(LL) 0.16	6-7 >999	240 Weight: 209 lk				
	LUMBER TOP CHO	- DRD 2x4 S	SP 2400F 2.0E		BRACING- TOP CHORD	Structural wood s	sheathing directly applied or				
	WEBS	2x4 S W3: 2	SP No.3 *Except* 2x4 SP No.2		BOT CHORD	BOT CHORD Rigid ceiling directly applied or 10-0-0 or					
	WEDGE Left: 2x4	SP No.3 , I	Right: 2x4 SP No.3								
	REACTIC	<b>DNS.</b> (lb/si Max Max Max	ize) 1=7206/0-3-8 (min. 0-3-0) Horz 1=41(LC 26) Uplift1=-669(LC 8), 5=-658(LC	, 5=7631/0-3-8 (min. 0 3)	-3-3)						

- 17-18=-1257/14449, 7-18=-1257/14449, 7-19=-1224/14332, 19-20=-1224/14332, 6-20=-1224/14332, 6-21=-1224/14332, 21-22=-1224/14332, 5-22=-1224/14332 WEBS
- 3-7=-554/6797, 4-7=-3834/363, 4-6=-179/2527, 2-7=-3960/399, 2-8=-200/2599

# NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
  - Bottom chords connected as follows: 2x6 2 rows staggered at 0-7-0 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 roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20 0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	GR5	Common Girder	1	2	Job Reference (optional)
C&R Building Supply, Au	utryville NC	8	.430 s Ja	in 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:08 2023 Page 2

NOTES-

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- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=669, 5=658.
  9) 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.
  10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1429 lb down and 189 lb up at 1-4-12, 1310 lb down and 121 lb up at 3-4-12, 1310 lb down and 121 lb up at 5-4-12, 1310 lb down and 121 lb up at 7-4-12, 1310 lb down and 121 lb up at 9-4-12, 1310 lb
- and 121 ib up at 3-4-12, 1310 ib down and 121 ib up at 5-4-12, 1310 ib down and 121 ib up at 7-4-12, 1310 ib down and 121 ib up at 9-4-12, 1310 ib down and 121 ib up at 11-4-12, 1313 ib down and 123 ib up at 13-4-12, 1313 ib down and 123 ib up at 15-4-12, and 1313 ib down and 123 ib up at 17-4-12, and 1317 ib down and 119 ib up at 19-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

## LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-3=-60, 3-5=-60, 9-12=-20

Concentrated Loads (lb)

Vert: 8=-1310(F) 14=-1317(F) 15=-1429(F) 16=-1310(F) 17=-1310(F) 18=-1310(F) 19=-1310(F) 20=-1313(F) 21=-1313(F) 22=-1313(F)



Scale = 1:51.6



	5-3-12 5-3-12	10-4-0 5-0-4		18-4-0 8-0-0	23-4-4 5-0-4	28-8-0 5-3-12			
Plate Offsets (X,Y) [1:0-0-1,0-1-10], [6:0-1-2,0-1-10]									
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	* SPACING- Plate Grip D Lumber DOL Rep Stress I Code IRC20	2-0-0 OL 1.15 . 1.15 ncr YES 18/TPI2014	<b>CSI.</b> TC 0.48 BC 0.41 WB 0.14 Matrix-AS	<b>DEFL.</b> in Vert(LL) -0.12 Vert(CT) -0.29 Horz(CT) 0.07 Wind(LL) 0.08	(loc) l/defi L/d 10-12 >999 480 10-12 >999 360 6 n/a n/a 9-10 >999 240	PLATES         GRIP           MT20         244/190           Weight: 138 lb         FT = 20%			
LUMBER- TOP CHORD BOT CHORD WEBS	2x4 SP 2400F 2.0E 2x4 SP 2400F 2.0E 2x4 SP No.3			BRACING- TOP CHORD BOT CHORD	Structural wood sheat 2-0-0 oc purlins (4-9-8 Rigid ceiling directly a	hing directly applied, except 8 max.): 3-4. pplied.			

WEBS

WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 -È 1-6-0, Right 2x4 SP No.3 -È 1-6-0

Rigid ceiling directly applied. 1 Row at midpt 3-10

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

### REACTIONS. (lb/size) 1=1143/Mechanical, 6=1263/0-3-8 (min. 0-1-8) Max Horz 1=-53(LC 6) Max Uplift1=-86(LC 8), 6=-155(LC 8)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 1-2=-2528/212, 2-3=-2268/202, 3-4=-2121/208, 4-5=-2261/197,

5-6=-2484/188 1-14=-125/1252, 13-14=-133/2343, 12-13=-133/2343, 11-12=-82/2127, BOT CHORD 10-11=-82/2127, 9-10=-108/2299, 8-9=-108/2299, 6-8=-43/1115 WEBS 2-12=-251/58, 3-12=0/369, 4-10=0/366

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

 Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=29ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20 0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

6) Refer to girder(s) for truss to truss connections.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 6=155.

8) 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.

9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	H1	HIP	1	1	
					Job Reference (optional)
C&R Building Supply, Autryville NC			430 s Ja	an 20 20	21 MiTek Industries, Inc. Fri Jan 13 10:05:09 2023 Page 2
			v?CfCTRF	BI3YW	Ek4yKdbQ-C4ipxmpXvoYODaHtAr2kvREwSMbw1R2JqeQWwczvpbO

**NOTES-**10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Scale = 1:50.5



H	4-4-13		8-4-0		12-4-9		16-3-7	20-4	4-0	+ 2	4-3-3	28-8-0	-1
Plate Offset	s (X,Y) [	, [3:0-5-4,0-2-8	3-11-3 3], [6:0-5-4	4,0-2-8], [*	<u>4-0-9</u> 11:0-3-8,0-	-4-0], [15	5:0-3-8,0-4-	4-0 []	-9		-11-3	4-4-15	
LOADING (p TCLL 2 TCDL 1 BCLL BCDL 1	osf) 0.0 0.0 0.0 0.0 * 0.0	SPACING- Plate Grip Lumber Do Rep Stres Code IRC	- 2 DOL OL s Incr 2018/TPI	2-0-0 1.15 1.15 NO 2014	<b>CSI.</b> TC BC WB Matri	0.75 0.99 0.39 x-MS	DEF Vert Vert Horz Win	L. ir (LL) -0.29 (CT) -0.58 2(CT) 0.09 d(LL) 0.24	n (loc) 9 12-14 3 12-14 9 8 4 12-14	l/defl >999 >598 n/a >999	L/d 480 360 n/a 240	<b>PLATES</b> MT20 Weight: 335 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER-           TOP CHORD         2x4 SP No.2           BOT CHORD         2x6 SP No.1 *Except*           B2: 2x6 SP 2400F 2.0E           WEBS         2x4 SP No.3           OTHERS         2x4 SP No.3					BRACING- TOP CHORDStructural wood sheathing directly applied or 3-3-10 oc purlins, except 2-0-0 oc purlins (3-4-13 max.): 3-6.BOT CHORDRigid ceiling directly applied or 10-0-0 oc bracing.							3-3-10 oc ing.	
REACTIONS. (lb/size) 1=3575/Mechanical, 8=3721/0-3-8 (min. 0-1-9) Max Horz 1=-46(LC 6) Max Uplift1=-451(LC 8), 8=-533(LC 8)													
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-8773/1140, 2-3=-9559/1283, 3-23=-10308/1382, 23-24=-10308/1382, 4-24=-10308/1382, 4-5=-10308/1382, 5-25=-10361/1397, 6-25=-10361/1397, 6-7=-9607/1313, 7-8=-8755/1137													
BOT CHOR	D 1-16= 13-14 12-28 2-16= 5-12= 7-10=	1017/8251, !=-1284/1036 3=-1157/9183 685/146, 2-1 250/94, 6-12 746/168	15-16=-1( 1, 13-27= , 11-28=- 15=-256/1 2=-159/15	017/8251, 1284/103 1157/9183 1064, 3-15 558, 6-11=	, 15-26=-1 361, 12-27 3, 10-11=- 5=-226/187 =-247/1894	128/913 '=-1284/ 1014/82 70, 3-14= 1, 7-11=-	9, 14-26=-1 10361, 39, 8-10=-1 =-175/1552, -245/1092,	128/9139, 014/8239					
NOTES- 1) 2-ply trust Top chore Bottom ch Webs cor 2) All loads a section. F 3) Unbalanc 4) Wind: AS eave=4ft; exposed; 5) Provide a	<ul> <li>WEBS 2-16=-685/146, 2-15=-226/1064, 3-15=-226/1870, 3-14=-175/1552, 5-12=-250/94, 6-12=-159/1558, 6-11=-247/1894, 7-11=-245/1092, 7-10=-746/168</li> <li>NOTES- <ol> <li>Pothers to be connected together with 10d (0.131"x3") nails as follows:</li> <li>Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.</li> </ol> </li> <li>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.</li> <li>3) Unbalanced roof live loads have been considered for this design.</li> <li>4) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=29ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60</li> </ul>												

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	H2	HIP GIRDER	1	2	
				_	Job Reference (optional)
C&R Building Supply, A	utryville NC	8	.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:10 2023 Page 2

## NOTES-

7)* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

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- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=451, 8=533.
- 10) 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. 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1629 lb down and 273 lb up at 8-4-0, 314 lb down and 49 lb up at 10-4-12, 314 lb down and 49 lb up at 10-4-12, 314 lb down and 49 lb up at 10-4-12, 314 lb down and 49 lb up at 10-4-12, 314 lb down and 49 lb up at 10-4-12, 314 lb down and 49 lb up at 10-4-12, 314 lb down and 49 lb up at 18-3-4, and 1694 lb down and 306 lb up at 20-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

## LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-3=-60, 3-6=-60, 6-9=-60, 17-20=-20

Concentrated Loads (lb)

Vert: 15=-1629(B) 14=-314(B) 12=-314(B) 11=-1694(B) 26=-314(B) 27=-314(B) 28=-314(B)



Scale = 1:52.9



12-4-0 22-4-4 28-8-0 6-3-12 16-4-0 6-3-12 6-0-4 4-0-0 6-0-4 6-3-12 Plate Offsets (X,Y)-- [2:0-0-11,0-1-14], [7:0-0-1,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) l/defl L/d PLATES GRIP TCLL 20.0 Plate Grip DOL 1.15 ΤС 0.27 Vert(LL) 480 -0.12 12-13 >999 **MT20** 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.42 Vert(CT) -0.25 12-13 >999 360 0.0 **Rep Stress Incr** 0.42 Horz(CT) BCLL YES WB 0.07 n/a n/a 7 BCDL 10.0 Code IRC2018/TPI2014 Matrix-AS Wind(LL) 0.09 12-13 >999 240 Weight: 140 lb FT = 20% **BRACING-**LUMBER-TOP CHORD 2x4 SP 2400F 2.0E TOP CHORD Structural wood sheathing directly applied, except BOT CHORD 2x4 SP 2400F 2.0E 2-0-0 oc purlins (5-11-14 max.): 4-5. 2x4 SP No.3 BOT CHORD WEBS Rigid ceiling directly applied. SLIDER Left 2x4 SP No.3 -È 1-6-0, Right 2x4 SP No.3 -È 1-6-0 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. REACTIONS. (lb/size) 7=1143/Mechanical, 2=1263/0-3-8 (min. 0-1-8) Max Horz 2=62(LC 7) Max Uplift7=-86(LC 8), 2=-155(LC 8) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2515/194, 3-4=-2035/195, 4-5=-1877/205, 5-6=-2039/196, 6-7=-2549/214 BOT CHORD 2-14=-84/1154, 13-14=-138/2327, 12-13=-138/2327, 11-12=-82/1874, 10-11=-82/1874, 9-10=-158/2362, 8-9=-158/2362, 7-8=-165/1288 WEBS 3-12=-514/62, 4-12=0/351, 5-10=0/353, 6-10=-548/83 NOTES-1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=29ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=155.
- 8) 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.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	HP1	Нір	2	1	
					Job Reference (optional)
C&R Building Supply, Au	utryville NC	8.	.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:11 2023 Page 2

8.430 s Jan 20 2021 MiTek Industries, Inc. Fri Jan 13 10:05:11 2023 Page 2 ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-8SqaMSqoRPo6TuRFIG4C?sKJMAGGVH7blyvd?VzvpbM



Scale = 1:54.1



F	5-3-12 10	4-0	18-4-0	23-4-4	28-8-0				
Plate Offsets (X,Y)-	- [2:0-1-2,0-1-10], [7:0-1-2,0-1-10	-4	8-0-0	5-0-4	J-J-12				
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.48 BC 0.41 WB 0.14 Matrix-AS	DEFL.         in           Vert(LL)         -0.12           Vert(CT)         -0.29           Horz(CT)         0.07           Wind(LL)         0.08	(loc) l/defl L/d 11-13 >999 480 11-13 >999 360 7 n/a n/a 10-11 >999 240	PLATES         GRIP           MT20         244/190           Weight: 141 lb         FT = 20%				
LUMBER- TOP CHORD 2x4 3 BOT CHORD 2x4 3 WEBS 2x4 3 SLIDER Left 3	SP 2400F 2.0E SP 2400F 2.0E SP No.3 2x4 SP No.3 -È 1-6-0, Right 2x4 S	P No.3 -È 1-6-0	BRACING- TOP CHORD BOT CHORD WEBS	BRACING-         TOP CHORD       Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-9-13 max.): 4-5.         BOT CHORD       Rigid ceiling directly applied.         WEBS       1 Row at midpt       4-11         MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in					
REACTIONS.         (lb/size)         2=1259/0-3-8         (min. 0-1-8), 7=1259/0-3-8         (min. 0-1-8)           Max Horz 2=52(LC 7)         Max Uplift2=-153(LC 8), 7=-153(LC 8)         accordance with Stabilizer Installation guide.									
FORCES.         (lb)         - Ma           TOP CHORD         2-3         6-7           BOT CHORD         2-1         11-           WEBS         4-1         11-	x. Comp./Max. Ten All forces 28 =-2475/183, 3-4=-2249/191, 4-5=- =-2475/183 5=-40/1111, 14-15=-103/2291, 13 12=-72/2110, 10-11=-103/2291, 9 3=0/365, 5-11=0/365	i0 (lb) or less except wh 2111/202, 5-6=-2249/1 -14=-103/2291, 12-13= -10=-103/2291, 7-9=-40	nen shown. 91, -72/2110, )/1111						
<ul> <li>WEBS 4-13=0/365, 5-11=0/365</li> <li>NOTES- <ol> <li>Unbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=29ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>Provide adequate drainage to prevent water ponding.</li> <li>This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.</li> <li>Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=153, 7=153.</li> <li>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.</li> <li>This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.</li> </ol></li></ul>									

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	HP2	Нір	1	1	
					Job Reference (optional)
C&R Building Supply, A	utryville NC	8.	.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:11 2023 Page 2

8.430 s Jan 20 2021 MiTek Industries, Inc. Fri Jan 13 10:05:11 2023 Page 2 ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-8SqaMSqoRPo6TuRFIG4C?sKG_AGQVLabIyvd?VzvpbM



Scale = 1:53.1



	4-4-13	8-4-0	12-4-9	<u>) 16-3-</u> 3-10-7	7	20-4-0		24-3-3	28-8-0	-1
Plate Offsets ()	(,Y) [4:0-5-4,	0-2-8], [7:0-5-4,0-	2-8], [12:0-3-8,0-4	4-4], [16:0-3-8,0-4	-41	4-0-3		5-11-5	+-+-15	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	* Rep Scode	Sing-         2-0           Grip DOL         1.1           per DOL         1.7           Stress Incr         N           IRC2018/TPI207	-0 <b>CSI.</b> 5 TC 5 BC 0 WB 4 Matrix	0.75 Ve 1.00 Ve 0.38 Ho -MS Wi	FL. ir rt(LL) -0.29 rt(CT) -0.58 rz(CT) 0.10 nd(LL) 0.24	n (loc) 9 13-15 3 13-15 0 9 4 13-15	l/defl >999 >593 n/a >999	L/d 480 360 n/a 240	PLATES MT20 Weight: 337 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2 BOT CHORD 2 WEBS 2 REACTIONS.	2x4 SP No.2 2x6 SP No.1 2x4 SP No.3 (Ib/size) 2=36 Max Horz 2=44 Max Horz 2=44	BF TC -8 (min. 0-2-2)	ACING- P CHORD	Structu except 2-0-0 c Rigid c	ural woo t oc purlin ceiling di	od sheathing ns (3-5-14 m irectly applie	directly applied or 3 ax.): 4-7. ed or 10-0-0 oc brac	3-4-7 oc purlins,		
FORCES. (Ib) TOP CHORD BOT CHORD WEBS	$\begin{array}{l} \mbox{Max Hold} Z = 44(LC 26) \\ \mbox{Max Uplift} Z = -482(LC 8), 9 = -482(LC 8) \end{array}$									
NOTES- 1) 2-ply truss to Top chords of Bottom chord Webs conner 2) All loads are section. Ply tr 3) Unbalanced 4) Wind: ASCE eave=4ft; Ca exposed; Lur	<ul> <li>NOTES- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.</li> <li>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.</li> <li>3) Unbalanced roof live loads have been considered for this design.</li> <li>4) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=29ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right</li> </ul>									

5) Provide adequate drainage to prevent water ponding.

 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	HP3	Hip Girder	1	2	Job Reference (optional)
C&R Building Supply, Au	8	.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:12 2023 Page 2	

## NOTES-

ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-dfOyanrQBjwz420SszbRX3sNZaTUEl2IWceBXxzvpbL

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=482, 9=482. 9) 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.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1616 lb down and 265 lb up at 8-4-0, 300 lb down and
- 41 lb up at 10-4-12, 300 lb down and 41 lb up at 12-4-12, 300 lb down and 41 lb up at 14-4-0, 300 lb down and 41 lb up at 18-3-4, and 1616 lb down and 265 lb up at 20-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

## LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-4=-60, 4-7=-60, 7-10=-60, 18-21=-20

Concentrated Loads (lb)

Vert: 16=-1616(F) 15=-300(F) 13=-300(F) 12=-1616(F) 26=-300(F) 27=-300(F) 28=-300(F)



Scale = 1:59.3



	7-5-12	7-2-4	18-8-0	25-10-4		33-4-0	
Plate Offsets (X,Y)-	- [1:0-0-11,0-1-8], [7:0-0-11,0-1-1	0]	+00	1-2-4		1-0-12	
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.34 BC 0.50 WB 0.80 Matrix-AS	DEFL. in Vert(LL) -0.17 Vert(CT) -0.36 Horz(CT) 0.10 Wind(LL) 0.12	(loc) l/defl 10-12 >999 10-12 >999 7 n/a 10-12 >999	L/d 480 360 n/a 240	<b>PLATES</b> MT20 Weight: 162 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S SLIDER Left 2	SP 2400F 2.0E SP 2400F 2.0E SP No.3 2x4 SP No.3 -È 1-6-0, Right 2x4 S	P No.3 -È 1-6-0	BRACING- TOP CHORD BOT CHORD	Structural wood 2-0-0 oc purlins Rigid ceiling dira MiTek recomn bracing be ins accordance w	sheathing o (5-6-3 max ectly applied nends that S talled during ith Stabilize	directly applied, ex .): 3-4. J. Stabilizers and requ g truss erection, in r Installation quide	cept lired cross
REACTIONS. (lb/size) 1=1330/Mechanical, 7=1449/0-3-8 (min. 0-1-8) Max Horz 1=-74(LC 6) Max Uplift1=-101(LC 8), 7=-169(LC 8)							
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       1-2=-3038/255, 2-3=-2356/230, 3-25=-2164/239, 4-25=-2164/239, 4-5=-2284/228, 5-6=-2355/205, 6-7=-3004/238         BOT CHORD       1-16=-196/1555, 15-16=-161/2817, 14-15=-161/2817, 13-14=-161/2817, 12-13=-65/2165, 11-12=-143/2782, 9-10=-143/2782, 7-9=-117/1431         WEERD       0.40							
NOTES- 1) Unbalanced roof 2) Wind: ASCE 7-16 eave=4ft; Cat. II; exposed; Lumber 3) Provide adequate 4) This truss has be 5) * This truss has be 6-0-0 between the 6) Refer to girder(s) 7) Provide mechanin (jt=lb) 1=101, 7=1 8) This truss is design referenced stand 9) This truss design Goottinued on page	live loads have been considered f 5; Vult=140mph (3-second gust) V Exp B; Enclosed; MWFRS (direct DOL=1.60 plate grip DOL=1.60 e drainage to prevent water pondir en designed for a 10.0 psf bottom been designed for a live load of 20 e bottom chord and any other mer for truss to truss connections. cal connection (by others) of truss 169. gned in accordance with the 2018 ard ANSI/TPI 1. requires that a minimum of 7/16" k be applied directly to the bottom	or this design. asd=111mph; TCDL= ional); cantilever left a ng. chord live load nonco .0psf on the bottom c nbers. to bearing plate capa International Resider structural wood sheat chord.	=6.0psf; BCDL=6.0psf; and right exposed ; en oncurrent with any oth hord in all areas with a able of withstanding 10 ntial Code sections R5 thing be applied direct	h=20ft; B=45ft; I d vertical left and er live loads. a clearance great 0 lb uplift at joint 02.11.1 and R80 ly to the top chore	_=33ft; right er than (s) except 2.10.2 and d and 1/2"		

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	HP4	Нір	2	1	
					Job Reference (optional)
C&R Building Supply, A	utryville NC	8.	430 s Ja	in 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:13 2023 Page 2
		ID:4	zXVbv?C	CTRFBI3	YWZEk4yKdbQ-5ryKn7s2y12qiCbePg6g4HPeizxZz5nulGOk3NzvpbK

**NOTES-**10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Scale = 1:60.8



6-5-12 12 6-5-12 6	2-8-0	20-8-0	26-10-4	33-4-0	
Plate Offsets (X,Y) [2:0-0-11,0-1-10], [7:0-0-11,0-1-2	0]	000	027	0.0.12	
LOADING (psf)         SPACING-         2-0-0           TCLL         20.0         Plate Grip DOL         1.15           TCDL         10.0         Lumber DOL         1.15           BCLL         0.0 *         Rep Stress Incr         YES           BCDL         10.0         Code IRC2018/TPI2014	<b>CSI.</b> TC 0.63 BC 0.54 WB 0.38 Matrix-AS	DEFL.         in           Vert(LL)         -0.19           Vert(CT)         -0.40           Horz(CT)         0.09           Wind(LL)         0.14	(loc) l/defl L/d 13-14 >999 480 10-13 >991 360 7 n/a n/a 13-14 >999 240	PLATES         GRIP           MT20         244/190           Weight: 160 lb         FT = 20%	
LUMBER- TOP CHORD 2x4 SP No.2 *Except* T2: 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP 2400F 2.0E WEBS 2x4 SP No.3 SLIDER Left 2x4 SP No.3 -È 1-6-0, Right 2x4 SP	[⊃] No.3 -È 1-6-0	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing 2-0-0 oc purlins (4-4-14 m Rigid ceiling directly applie 1 Row at midpt MiTek recommends that bracing be installed durir	directly applied, except ax.): 4-5. ed. 4-10 Stabilizers and required cross	
REACTIONS. (Ib/size) 7=1330/0-3-8 (min. 0-1-8), 2=1449/0-3-8 (min. 0-1-8) Max Horz 2=65(LC 7) Max Uplift7=-101(LC 8), 2=-169(LC 8)					
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-3=-2997/233, 3-4=-2586/233, 4-24=-2407/246, 24-25=-2407/246, 5-25=-2407/246, 5-6=-2591/236, 6-7=-3034/254         BOT CHORD       2-15=-105/1315, 14-15=-173/2780, 13-14=-173/2780, 12-13=-119/2403, 11-12=-119/2403, 10-11=-119/2403, 9-10=-194/2817, 8-9=-194/2817, 7-8=-195/1465         WEBS       3-13=-428/61, 4-13=0/433, 5-10=0/435, 6-10=-461/81					
<ul> <li>11-12=-119/2403, 10-11=-119/2403, 9-10=-194/2817, 8-9=-194/2817, 7-8=-195/1465</li> <li>WEBS 3-13=-428/61, 4-13=0/433, 5-10=0/435, 6-10=-461/81</li> <li>NOTES- <ol> <li>Unbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 pate grip DOL=1.60</li> <li>Provide adequate drainage to prevent water ponding.</li> <li>This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.</li> <li>Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=101, 2=169.</li> <li>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.</li> </ol></li></ul>					

gypsum sheetrock be applied directly to the bottom chord. Continued on page 2 ahh

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	HP5	Hip	2	1	
					Job Reference (optional)
C&R Building Supply, A	utryville NC	8.	430 s Ja	in 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:13 2023 Page 2
		ID:4z>	(Vbv?CfC	TRFBI3YV	VZEk4yKdbQ-5ryKn7s2y12qiCbePg6g4HPa7zwvzCMulGOk3NzvpbK

**NOTES-**9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Scale = 1:61.9



5-5-12 10-8-0 5-5-12 5-2-4	<u> </u>	22-8-0	27-10-4	33-4-0	
Plate Offsets (X,Y) [2:0-0-11,0-1-10], [8:0-0-11,0-1	.10]				
LOADING (psf)         SPACING-         2-0-0           TCLL         20.0         Plate Grip DOL         1.15           TCDL         10.0         Lumber DOL         1.15           BCLL         0.0 *         Rep Stress Incr         YES           BCDL         10.0         Code IRC2018/TPI2014	<b>CSI.</b> TC 0.58 BC 0.55 WB 0.26 Matrix-AS	DEFL.         in         (loc           Vert(LL)         -0.22         1           Vert(CT)         -0.44         1           Horz(CT)         0.09         1           Wind(LL)         0.17         1	c) I/defl L/d 14 >999 480 14 >906 360 8 n/a n/a 14 >999 240	PLATES MT20         GRIP 244/190           Weight: 168 lb         FT = 20%	
LUMBER-       TOP CHORD 2x4 SP No.2       BRACING-         BOT CHORD 2x4 SP 2400F 2.0E       TOP CHORD 2x4 SP No.3       Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-10-12 max.): 4-6.         WEBS       2x4 SP No.3       Eft 2x4 SP No.3 -È 1-6-0, Right 2x4 SP No.3 -È 1-6-0       BOT CHORD       MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.					
REACTIONS. (lb/size) 2=1446/0-3-8 (min. 0-1-8), 8=1446/0-3-8 (min. 0-1-8) Max Horz 2=55(LC 7) Max Uplift2=-167(LC 8), 8=-167(LC 8)					
<b>FORCES.</b> (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2973/220, 3-4=-2743/235, 4-27=-2996/274, 5-27=-2998/274, 5-28=-2998/274, 6-28=-2996/274, 6-7=-2743/235, 7-8=-2973/220 BOT CHORD 2-18=-40/1236, 17-18=-139/2762, 16-17=-139/2762, 15-16=-108/2572, 14-15=-108/2572, 13-14=-108/2572, 12-13=-108/2572, 11-12=-139/2762, 10-11=-139/2762, 8-10=-40/1236 WEBS 4-16=0(231, 4-14=-39)(635, 5-14=-438/121, 6-14=-39)(635, 6-12=0/321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-16=-0)(321, 4-1					
<ul> <li>14-15=-108/2572, 13-14=-108/2572, 12-13=-108/2572, 11-12=-139/2762, 10-11=-139/2762, 10-11=-139/2762, 8-10=-40/1236</li> <li>WEBS 4-16=0/321, 4-14=-39/635, 5-14=-438/121, 6-14=-39/635, 6-12=0/321</li> <li>NOTES- <ol> <li>Unbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>Provide adequate drainage to prevent water ponding.</li> <li>This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>* This truss has been designed for a 10.0 psf bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord any other members.</li> </ol> </li> <li>Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (l=lb) 2=167, 8=167.</li> <li>This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1.</li> <li>This truss beet rock be applied directly to the bottom chord.</li> <li>O) Graphical puritin representation does not denot the size or the orientation of the puritin along the top and/or bottom chord</li> </ul>					

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	HP6	Нір	1	1	
					Job Reference (optional)
C&R Building Supply, A	utryville NC	8.	.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:14 2023 Page 2

8.430 s Jan 20 2021 MiTek Industries, Inc. Fri Jan 13 10:05:14 2023 Page 2 ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-Z1Wi?TtgjKAhKMAqzOdvcUyleNGzigM2_w7HcqzvpbJ



Scale = 1:60.7



⊢	4-6-13 8-8-0	14-0-9	19-3-7	24-8-0	28-9-3	33-4-0	_
Plate Offsets (X)	<u>4-6-13</u> <u>4-1-3</u> /\ [4:0-5-12:0-2-12] [7:0-5-12:0-2-	<u>5-4-9</u> 121 [12:0_3_8 0_4_0]	<u>5-2-13</u> [13:0_6_0_0_4_8]	<u>5-4-9</u> [14:0_6_0_0_4_8] [15	<u>4-1-3</u> •0_3_8 0_4_41	4-6-13	
	<u> [4.0-3-12,0-2-12], [7.0-3-12,0-2-</u>	12], [12.0-3-0,0-4-0],	[13.0-0-0,0-4-0],	[14.0-0-0,0-4-0], [13	.0-3-0,0-4-4]		
LOADING (psf) TCLL 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.57	<b>DEFL.</b> Vert(LL)	in (loc) l/defl -0.33 13-14 >999	L/d 480	<b>PLATES</b> MT20	<b>GRIP</b> 244/190
TCDL 10.0 BCLL 0.0 *	Lumber DOL 1.15 Rep Stress Incr NO	BC 0.58 WB 0.53	Vert(CT) Horz(CT)	-0.66 13-14 >605 0.11 9 n/a	360 n/a	MT20HS	187/143
BCDL 10.0	Code IRC2018/1PI2014	Matrix-MS	VVINd(LL)	0.27 13-14 >999	240	weight: 387 ib	FT = 20%
LUMBER- TOP CHORD 2x4 SP 2400F 2.0E     BRACING- TOP CHORD 2x6 SP 2400F 2.0E       BOT CHORD 2x6 SP 2400F 2.0E     TOP CHORD Structural wood sheathing directly applied or 4-11-14 oc purlins, except 2-0-0 oc purlins (4-7-1 max.): 4-7.       WEBS     2x4 SP No.3							
REACTIONS. (Ib/size) 2=4119/0-3-8 (min. 0-1-11), 9=4119/0-3-8 (min. 0-1-11) Max Horz 2=-47(LC 25) Max Uplift2=-522(LC 8), 9=-522(LC 8)							
<b>FORCES.</b> (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-9868/1120, 3-4=-10829/1287, 4-5=-12408/1450, 5-23=-12413/1452, 23-24=-12413/1452, 6-24=-12413/1452, 6-7=-12443/1456, 7-8=-10820/1285, 0 - 0.0921/14120							
BOT CHORD 2	BOT CHORD 2-16=-997/9280, 15-16=-997/9280, 15-25=-1128/10344, 25-26=-1128/10344, 14-26=-1128/10344, 14-27=-1341/12447, 27-28=-1341/12447, 28-29=-1341/12447, 13-29=-1341/12447, 13-30=-1126/10335,						
WEBS 3-16=-782/158, 3-15=-219/1238, 4-15=-197/1882, 4-14=-239/2489, 5-14=-314/112, 6-13=-348/114, 7-13=-247/2539, 7-12=-194/1859, 8-12=-221/1226, 8-11=-774/157							
NOTES- 1) 2-ply truss to b Top chords con Bottom chords Webs connector	NOTES- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 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 roof live loads have been considered for this design.

4) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

5) Provide adequate drainage to prevent water ponding.

6) All plates are MT20 plates unless otherwise indicated.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	HP7	Hip Girder	2	2	Job Reference (optional)
C&R Building Supply, A	utryville NC	8	.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:15 2023 Page 2

## NOTES-

ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-1E44CptlUelXxWl1X5989iUxenbeR3WBCatr8Gzvpbl

- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=522, 9=522.
- 10) 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. 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1573 lb down and 253 lb up at 8-8-0, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 43 lb up at 10-8-12, 314 lb down and 4

## LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 7-10=-60, 17-20=-20

Concentrated Loads (lb)

Vert: 15=-1573(B) 12=-1573(B) 25=-314(B) 26=-314(B) 27=-314(B) 28=-314(B) 29=-314(B) 30=-314(B) 31=-314(B)



Scale = 1:59.3



	5-5-12	10-8-0	16-8-0	22-8-0	1	27-10-4	1 ,	33-4-0	
	5-5-12	5-2-4	6-0-0	6-0-0	1	5-2-4		5-5-12	
Plate Offsets (X,Y	') [1:0-0-11,0-1-8]	, [7:0-0-11,0-1-10	)]						
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- Plate Grip D Lumber DOL Rep Stress I Code IRC20	2-0-0 OL 1.15 - 1.15 ncr YES 18/TPI2014	<b>CSI.</b> TC 0.31 BC 0.52 WB 0.27 Matrix-AS	<b>DEFL.</b> ii Vert(LL) -0.11 Vert(CT) -0.30 Horz(CT) 0.10 Wind(LL) 0.13	n (loc) 3 13 6 13-15 0 7 3 13	l/defl L >999 4 >999 3 n/a r >999 2	_/d .80 .60 n/a 240	<b>PLATES</b> MT20 Weight: 165 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER-       BRACING-         TOP CHORD 2x4 SP 2400F 2.0E       TOP CHORD 2x4 SP 2400F 2.0E         BOT CHORD 2x4 SP 2400F 2.0E       TOP CHORD         WEBS 2x4 SP No.3       BOT CHORD         SLIDER       Left 2x4 SP No.3 -È 1-6-0, Right 2x4 SP No.3 -È 1-6-0							cept uired cross		
REACTIONS.         (Ib/size)         1=1330/0-3-8         (min. 0-1-8)         accordance with Stabilizer Installation guide.           Max Horz 1=-57(LC 6)         Max Uplift1=-101(LC 8), 7=-169(LC 8)         Max Horz 1=-57(LC 6)         Max Uplift1=-101(LC 8), 7=-169(LC 8)									
FORCES. (Ib) - M TOP CHORD 1	/lax. Comp./Max. Te -2=-3027/250, 2-3≕ -27=-3013/282, 5-2	en All forces 25 -2762/246, 3-26= 7=-3011/283, 5-6	0 (lb) or less except v -3011/283, 4-26=-30	when shown. 13/282, 83/225					
BOT CHORD 1	-17=-136/1448, 16- 3-14=-118/2590, 12	-13=-168/2813, 1 -13=-113/2582, - -53/1312	5-16=-168/2813, 14-1 11-12=-113/2582, 10-	5=-118/2590, -11=-143/2769,					
WEBS 2	NEBS 2-15=-260/57, 3-15=0/320, 3-13=-37/635, 4-13=-436/121, 5-13=-43/643, 5-11=0/317								
NOTES- 1) Unbalanced roo 2) Wind: ASCE 7- eave=4ft; Cat. 1 exposed; Lumb 3) Provide adequa	of live loads have be 16; Vult=140mph (3 II; Exp B; Enclosed; ler DOL=1.60 plate g ate drainage to preve	een considered fo -second gust) Va MWFRS (directi grip DOL=1.60 ent water pondin	or this design. asd=111mph; TCDL= onal); cantilever left a g.	6.0psf; BCDL=6.0ps ind right exposed ; ei	f; h=20ft; nd vertica	B=45ft; L=3 I left and rig	33ft; ght		

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 1=101, 7=169.

7) 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.

8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	HP8	Нір	1	1	
					Job Reference (optional)
C&R Building Supply, Au	utryville NC	8	430 s Ja	n 20 20	21 MiTek Industries, Inc. Fri Jan 13 10:05:16 2023 Page 2
		ID:4zXV	bv?CfCTF	RFBI3YW	ZEk4yKdbQ-VQeTQ9uwFyQOZfKD5pgNiv1ASByuAapLREcOgizvpbH

**NOTES-**9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



	4-2-13	8-0-0	12-0-0	15-9-3		20-0-0	
		3-9-3	4-0-0	3-9-3	1	4-2-13	
Plate Offsets (X, Y	') [2:0-1-9,0-1-8], [4:0-5-4,0-2-0],	[7:0-1-9,0-1-8]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. i	n (loc) l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15		Vert(LL) -0.0	9 10-12 >999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.52	Vert(CT) -0.1	7 10-12 >999	360		
BCDL 0.0	Code IBC2018/TDI2014	VVD U.20		S / ∏/a 7 10 12 ∖000	11/a	Waight: 226 lb	FT - 200/
BCDL 10.0	Code IRC2016/1912014	Maurix-IMS		/ 10-12 >999	240	weight. 226 ib	FI - 20%
LUMBER- TOP CHORD 2x4 SP No.2     BRACING-       BOT CHORD 2x6 SP No.1     TOP CHORD 2x6 SP No.1       WEBS 2x4 SP No.3     DOP CHORD 2x6 SP No.1						5-6-14 oc ing.	
REACTIONS. (lb/size) 2=2054/0-3-8 (min. 0-1-8), 7=2054/0-3-8 (min. 0-1-8) Max Horz 2=-40(LC 25) Max Uplift2=-303(LC 8), 7=-303(LC 8)							
FORCES. (lb) - M TOP CHORD 2 6	Лах. Comp./Max. Ten All forces 2 -3=-4507/547, 3-4=-4745/639, 4-5= -7=-4508/547	50 (lb) or less except -4537/623, 5-6=-4741	when shown. I/637,				
BOT CHORD 2	-13=-457/4222, 12-13=-457/4222, ²	1-12=-515/4541, 10-	11=-515/4541,				
9	-10=-457/4224, 7-9=-457/4224						
WEBS 3 6	-13=-343/112, 3-12=-233/443, 4-12 -10=-237/438, 6-9=-339/111	=-131/1258, 5-10=-13	30/1249,				
<ul> <li>6-10=-237/438, 6-9=-339/111</li> <li>NOTES- <ol> <li>2-ply truss to be connected together with 10d (0.131"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.</li> <li>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.</li> <li>Unbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed: Lumber DOL =1 60 plate drip DOL =1 60</li> </ol> </li> </ul>							
5) Provide adequa	ate drainage to prevent water pondi	ng.					

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=303, 7=303.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	HP9	Hip Girder	1	2	Job Reference (optional)
C&R Building Supply, A	utryville NC	8	430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:16 2023 Page 2

NOTES-

- ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-VQeTQ9uwFyQOZfKD5pgNiv1ALBywAavLREcOgizvpbH
- 9) 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. 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 998 lb down and 174 lb up at 8-0-0, and 287 lb down and 53 lb up at 10-0-0, and 998 lb down and 174 lb up at 11-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

# LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-60, 5-8=-60, 14-17=-20

Concentrated Loads (lb)

Vert: 11=-287(F) 12=-998(F) 10=-998(F)



Scale = 1:21.9



4-6-0		8-6-0						
		4-0-0		2	4-6-0	·		
LOADING (psf)         SPACING-         2-0-0           TCLL         20.0         Plate Grip DOL         1.15           TCDL         10.0         Lumber DOL         1.15           BCLL         0.0 *         Rep Stress Incr         NO           BCDL         10.0         Code IRC2018/TPI2014         100	<b>CSI.</b> TC 0.24 BC 0.24 WB 0.10 Matrix-MS	DEFL. in Vert(LL) -0.03 Vert(CT) -0.06 Horz(CT) 0.01 Wind(LL) 0.02	(loc) l/de 7-8 >99 7-8 >99 6 n/ 7-8 >99	fl L/d 9 480 9 360 a n/a 9 240	<b>PLATES</b> MT20 Weight: 134 II	<b>GRIP</b> 244/190 D FT = 20%		
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.1 WEBS       BRACING- TOP CHORD 2x6 SP No.1 WEBS       Structural wood sheathing directly applied or 6-0-0 oc p except 2-0-0 oc purlins (6-0-0 max.): 3-4. BOT CHORD         REACTIONS.       (lb/size) 1=1026/0-3-8 (min. 0-1-8), 6=1026/0-3-8 (min. 0-1-8) Max Horz 1=18(LC 26) Max Uplift1=-96(LC 8), 6=-96(LC 8)       BOT CHORD       Structural wood sheathing directly applied or 6-0-0 oc p except								
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       1-2=-2236/240, 2-3=-2282/232, 3-4=-2204/231, 4-5=-2300/235, 5-6=-2243/241         BOT CHORD       1-8=-205/2061, 8-15=-192/2221, 7-15=-192/2221, 6-7=-206/2066         WEBS       3-8=-8/487, 4-7=-9/496								
<ul> <li>NOTES-</li> <li>1) 2-ply truss to be connected together with 10d (0.13° Top chords connected as follows: 2x4 - 1 row at 0-9 Bottom chords connected as follows: 2x4 - 1 row at 0-90 oc</li> <li>2) All loads are considered equally applied to all plies, section. Ply to ply connections have been provided</li> <li>3) Unbalanced roof live loads have been considered for</li> <li>4) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vaeave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directi exposed; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>5) Provide adequate drainage to prevent water pondint</li> <li>6) This truss has been designed for a 10.0 psf bottom</li> <li>7) * This truss has been designed for an use there means</li> </ul>	1"x3") nails as follows b-0 oc. staggered at 0-9-0 oc c. except if noted as fro to distribute only load or this design. asd=111mph; TCDL= onal); cantilever left a g. chord live load nonc opsf on the bottom c	s: 	<ul> <li>in the LOAE unless otherv</li> <li>h=20ft; B=4!</li> <li>d vertical left</li> <li>a clearance g</li> </ul>	0 CASE(S) vise indicated 5ft; L=24ft; and right reater than	l.			

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6.
9) 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. 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	HP10	Hip Girder	1	2	Job Reference (optional)
C&R Building Supply, Autryville NC			.430 s Ja	n 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:17 2023 Page 2

ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-zcBrdVvY0FYFBpvPeWBcE7aLCbNRv4dUguMxC8zvpbG

## NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 438 lb down and 64 lb up at 4-6-0, and 135 lb down and 30 lb up at 6-6-0, and 438 lb down and 64 lb up at 8-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

# LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-3=-60, 3-4=-60, 4-6=-60, 9-12=-20 Concentrated Loads (lb) Vert: 8=-438(B) 7=-438(B) 15=-135(B)



Scale = 1:21.7



<b> </b>	5-1-0		7-11-0		13-0-0	———————————————————————————————————————		
Plate Offsets (X,Y)-	- [1:0-0-0,0-2-5], [4:0-5-12,0-2-12]	, [6:0-0-0,0-2-9], [7:0	-3-8,0-4-12], [8:0-4-0	,0-4-4]	5-1-0			
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	<b>CSI.</b> TC 0.63 BC 0.62 WB 0.72 Matrix-MS	<b>DEFL.</b> ir Vert(LL) -0.1( Vert(CT) -0.2( Horz(CT) 0.03 Wind(LL) 0.08	1 (loc) l/defl L/d 1 7-14 >999 480 1 7-14 >784 360 3 6 n/a n/a 3 7-14 >999 240	H PLATES GF MT20 24 MT20 24 Weight: 135 lb	<b>RIP</b> 4/190 FT = 20%		
LUMBER- TOP CHORD       BRACING- TOP CHORD         BOT CHORD       2x4 SP No.2         BOT CHORD       2x6 SP 2400F 2.0E         WEBS       2x4 SP No.3         REACTIONS.       (lb/size)         1=4534/0-3-8 (min. 0-1-14), 6=5933/0-3-8 (min. 0-2-7)         Max Horz 1=21(LC 7)         Max Uplift1=-412(LC 8), 6=-599(LC 8)								
FORCES. (Ib) - Max. Comp./Max. Ten All forces 250 (Ib) or less except when shown.         TOP CHORD       1-2=-9243/883, 2-3=-9297/868, 3-4=-9018/851, 4-5=-9974/968, 5-6=-9982/992         BOT CHORD       1-15=-812/8699, 15-16=-812/8699, 8-16=-812/8699, 8-17=-901/9714, 7-17=-901/9714, 7-17=-901/9714, 7-18=-919/9413, 18-19=-919/9413, 6-19=-919/9413         WEBS       2-8=-129/252, 3-8=-219/2730, 4-8=-917/148, 4-7=-327/3460								
NOTES- 1) 2-ply truss to be a Top chords conne Bottom chords co Webs connected 2) All loads are cons section. Ply to ply 3) Unbalanced roof 4) Wind: ASCE 7-16 eave=4ft; Cat. II; exposed; Lumber 5) Provide adequate 6) This truss has be 6-0-0 between the 8) Provide mechania (it=lb) 1=412. 6=5	connected together with 10d (0.131 ected as follows: 2x4 - 1 row at 0-7 onnected as follows: 2x6 - 2 rows s as follows: 2x4 - 1 row at 0-9-0 oc sidered equally applied to all plies, connections have been provided live loads have been considered fo by Vult=140mph (3-second gust) Va Exp B; Enclosed; MWFRS (direction DOL=1.60 plate grip DOL=1.60 e drainage to prevent water pondim- en designed for a 10.0 psf bottom been designed for a live load of 20. e bottom chord and any other merr cal connection (by others) of truss 199.	"x3") nails as follows -0 oc. taggered at 0-6-0 oc - except if noted as fro to distribute only load or this design. asd=111mph; TCDL= onal); cantilever left a g. chord live load nonco opsf on the bottom c ibers. to bearing plate capa	s: ont (F) or back (B) fac ds noted as (F) or (B) =6.0psf; BCDL=6.0ps and right exposed ; er oncurrent with any oth hord in all areas with able of withstanding 1	e in the LOAD CASE( unless otherwise indic f; h=20ft; B=45ft; L=24 nd vertical left and right ner live loads. a clearance greater tha 00 lb uplift at joint(s) e:	S) cated. ft; t an xcept			

9) 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. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	HP11	Hip Girder	1	2	Job Reference (optional)
C&R Building Supply, Au	utryville NC	8	.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:18 2023 Page 2

## NOTES-

ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-RpIDqrwBnZg6ozTcCEirnK6Qw cneNHdvY5VlbzvpbF

- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1313 lb down and 123 lb up at 2-0-12, 1313 lb down and 123 lb up at 4-0-12, 1313 lb down and 123 lb up at 6-0-12, 1313 lb down and 123 lb up at 8-0-12, 1429 lb down and 189 lb up at 8-7-4, and 1310 lb down and 121 lb up at 10-7-4, and 1435 lb down and 183 lb up at 12-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

## LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-60, 4-6=-60, 9-12=-20

Concentrated Loads (lb)

Vert: 7=-1313(B) 14=-1435(B) 15=-1313(B) 16=-1313(B) 17=-1313(B) 18=-1429(B) 19=-1310(B)



L	8-4-0								_
Γ	8-4-0								
Plate Offsets (X,Y) [2:0-1-11,0-3-1]									
LOADING (psf) SPACING-	2-0-0 C	SI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 Plate Grip DOL	1.15 T	C 0.41	Vert(LL)	-0.10	<b>7-11</b>	>995	480	MT20	244/190
TCDL 10.0 Lumber DOL	1.15 B	C 0.50	Vert(CT)	-0.19	7-11	>509	360		
BCLL 0.0 * Rep Stress Incr	YES W	B 0.16	Horz(CT)	0.01	2	n/a	n/a		
BCDL 10.0 Code IRC2018/TP	2014 M	atrix-AS	Wind(LL)	-0.01	7-11	>999	240	Weight: 41 lb	FT = 20%

## LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3SLIDERLeft 2x4 SP No.3 -È 1-6-0

BRACING-TOP CHORD

Structural wood sheathing directly applied, except end verticals.

BOT CHORD Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

### REACTIONS. (Ib/size) 2=448/0-3-8 (min. 0-1-8), 7=320/Mechanical Max Horz 2=121(LC 7) Max Uplift2=-93(LC 8), 7=-21(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-425/58

BOT CHORD2-8=-275/14, 7-8=-54/394WEBS3-7=-424/67

## NOTES-

1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.

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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Blata Of	facta (X V)	[2:0 0 14 0 2 0]		-		1	-10-15					
Flate OI	15ets (A, I)	[2.0-0-14,0-2-0]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	0.00	8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	8	>999	360		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-MP	Wind(LL)	-0.00	8	>999	240	Weight: 11 lb	FT = 20%

## LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 SLIDER Left 2x4 SP No.3 -È 1-6-0

BRACING-
TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 1-10-15 oc purlins.

Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (Ib/size) 3=24/Mechanical, 2=244/0-3-8 (min. 0-1-8), 4=-3/Mechanical Max Horz 2=48(LC 8) Max Uplift3=-5(LC 5), 2=-95(LC 8), 4=-3(LC 1) Max Grav 3=24(LC 1), 2=244(LC 1), 4=24(LC 3)

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

## NOTES-

- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 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.



REACTIONS. (lb/size) 2=286/0-3-8 (min. 0-1-8), 5=43/Mechanical, 3=78/Mechanical Max Horz 2=65(LC 8) Max Uplift2=-83(LC 8), 3=-20(LC 8) Max Grav 2=286(LC 1), 5=74(LC 3), 3=78(LC 1)

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

### NOTES-

- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3.
- 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



				5-10-15							
				5-10-15							
Plate Of	ffsets (X,Y)-	- [2:0-0-14,0-2-0]									
LOADIN	<b>G</b> (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.Ó	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	-0.03 È-1Ó	>999	480	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.08 6-10	>804	360			
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.01 2	n/a	n/a			

## LUMBER-

BCDL

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3SLIDERLeft 2x4 SP No.3 -È 1-6-0

10.0

Wind(LL)

TOP CHORD BOT CHORD Structural wood sheathing directly applied. Rigid ceiling directly applied.

240

0.02 6-10 >999

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Weight: 26 lb

FT = 20%

REACTIONS. (lb/size) 2=356/0-3-8 (min. 0-1-8), 6=218/Mechanical Max Horz 2=88(LC 8) Max Uplift2=-79(LC 8), 6=-20(LC 8)

Code IRC2018/TPI2014

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

### NOTES-

1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-AS

- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Plate Of	Plate Offsets (X,Y) [2:0-1-10,0-2-1]										
LOADIN TCLL	<b>G</b> (psf) 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.36	DEFL.         in         (loc)         I/defl         L/d         PLATES         GRIP           Vert(LL)         -0.08         7-11         >999         480         MT20         244/190							
TCDL	10.0	Lumber DOL 1.15	BC 0.43	Vert(CT) -0.15 7-11 >620 360							
BCLL	0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01 2 n/a n/a							
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL) -0.01 7-11 >999 240 Weight: 39 lb FT = 20%	,						

## LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3SLIDERLeft 2x4 SP No.3 -È 1-6-0

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (Ib/size) 2=431/0-3-8 (min. 0-1-8), 7=303/Mechanical Max Horz 2=108(LC 8) Max Uplift2=-79(LC 8), 7=-33(LC 8)

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

 TOP CHORD
 2-3=-392/17

 BOT CHORD
 7-8=-59/363

 WEBS
 3-7=-392/64

## NOTES-

- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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

 TOP CHORD
 1-2=-457/77

 BOT CHORD
 6-7=-57/432

 WEBS
 2-6=-464/90

## NOTES-

1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



⁷⁾ This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



^{3) *} This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6.

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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.


LOADIN	<b>G</b> (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d PLATES GRIP	l/defl L/d	_
TCLL	20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) -0.00 7 >999 480 MT20 244/190	>999 480	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) $-0.00$ $7$ $-9999$ $-300$ Horz(CT) $-0.00$ $1$ $n/a$ $n/a$	n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MP	Wind(LL) 0.00 7 >999 240 Weight: 8 lb FT = 209	>999 240	

## LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 SLIDER Left 2x4 SP No.3 -È 1-6-0

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 1-10-15 oc purlins.

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=76/0-3-8 (min. 0-1-8), 2=41/Mechanical, 3=35/Mechanical Max Horz 1=19(LC 8) Max Uplift2=-12(LC 8) Max Grav 1=76(LC 1), 2=41(LC 1), 3=37(LC 3)

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

## NOTES-

- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- 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.



TCLL20.0Plate Grip DOL1.15TCDL10.0Lumber DOL1.15BCLL0.0 *Rep Stress IncrYES	TC 0.19 BC 0.25 WB 0.00	DEFL. in Vert(LL) -0.01 Vert(CT) -0.02 Horz(CT) 0.01	(loc) 3-7 3-7 1	l/defl L/d >999 480 >999 360 n/a n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL 10.0 Code IRC2018/TPI2014	Matrix-MP	Wind(LL) 0.01	3-7	>999 240	Weight: 14 lb	FT = 20%

# LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 SLIDER Left 2x4 SP No.3 -È 1-6-0

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 3-10-15 oc purlins.

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=154/0-3-8 (min. 0-1-8), 2=97/Mechanical, 3=57/Mechanical Max Horz 1=39(LC 8) Max Uplift1=-2(LC 8), 2=-29(LC 8) Max Grav 1=154(LC 1), 2=97(LC 1), 3=71(LC 3)

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

## NOTES-

- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 2.
- 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.



			<u>8-8-0</u> 8-8-0		
Plate Offsets (X,Y)	- [2:0-1-11,0-2-13]				
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.45 BC 0.54 WB 0.19 Matrix-AS	<b>DEFL.</b> in Vert(LL) -0.12 Vert(CT) -0.23 Horz(CT) 0.01 Wind(LL) -0.01	(loc) l/defl L 7-11 >866 44 7-11 >443 36 2 n/a n 7-11 >999 24	/d PLATES GRIP MT20 244/190 %/a 40 Weight: 43 lb FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S	6P No.2 6P No.2 6P No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sh verticals. Rigid ceiling directl	eathing directly applied, except end

Left 2x4 SP No.3 -È 1-6-0 SLIDER

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

#### (lb/size) 2=461/0-3-8 (min. 0-1-8), 7=334/Mechanical REACTIONS. Max Horz 2=125(LC 7) Max Uplift2=-93(LC 8), 7=-23(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-448/62

BOT CHORD 2-8=-310/9, 7-8=-57/416 3-7=-447/72 WEBS

# NOTES-

1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.

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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Plate Of	Plate Offsets (X,Y) [2:0-3-10,Edge]										
LOADIN	<b>G</b> (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP							
TCLL	20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) -0.08 7-11 >999 480 MT20 244/190							
TCDL	10.0	Lumber DOL 1.15	BC 0.45	Vert(CT) -0.16 7-11 >595 360							
BCLL	0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01 2 n/a n/a							
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL)         -0.01         7-11         >999         240         Weight: 40 lb         FT = 20%							

# LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3SLIDERLeft 2x4 SP No.3 -È 1-6-0

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (Ib/size) 2=434/0-3-8 (min. 0-1-8), 7=307/Mechanical Max Horz 2=109(LC 8) Max Uplift2=-79(LC 8), 7=-33(LC 8)

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

 TOP CHORD
 2-3=-399/18

 BOT CHORD
 7-8=-60/369

 WEBS
 3-7=-398/65

# NOTES-

- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



				4-0-0						
				4-6-0						
Plate Of	Plate Offsets (X,Y) [2:0-0-14,0-2-0]									
LOADIN	<b>G</b> (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP						
TCLL	20.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) -0.01 6-10 >999 480 MT20 244/190						
TCDL	10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) -0.02 6-10 >999 360						
BCLL	0.0 *	Rep Stress Incr YES	WB 0.02	Horz(CT) 0.00 2 n/a n/a						
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL) 0.01 6-10 >999 240 Weight: 21 lb FT = 20%	J					

## LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3SLIDERLeft 2x4 SP No.3 -È 1-6-0

BRACING-
----------

TOP CHORD BOT CHORD Structural wood sheathing directly applied. Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (Ib/size) 2=305/0-3-8 (min. 0-1-8), 6=155/Mechanical Max Horz 2=74(LC 8) Max Uplift2=-80(LC 8), 6=-10(LC 8)

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

# NOTES-

- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL)	0.00	6	****	240	Weight: 43 lb	FT = 20%
LUMBER TOP CHO BOT CHO WEBS	_ ORD 2x4 \$ ORD 2x4 \$ 2x4 \$	SP No.2 SP 2400F 2.0E SP No.3		BRACING- TOP CHOF BOT CHOF	אם א אם איני אם ו	Structur vertical Rigid ce	ral woo s. eiling di	d sheathing rectly appli	g directly applied, ex ed.	cept end
						MiTek bracin accore	recom g be in: dance v	mends that stalled duri vith Stabiliz	t Stabilizers and requing truss erection, in ter Installation guide.	uired cross

REACTIONS. (lb/size) 6=408/0-3-8 (min. 0-1-8), 5=250/0-1-8 (min. 0-1-8) Max Horz 6=168(LC 5) Max Uplift6=-92(LC 8), 5=-39(LC 5) Max Grav 6=408(LC 1), 5=256(LC 13)

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

## NOTES-

1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 5.
- 7) 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.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



							0-0-0						
							6-0-0				1		
Plate Of	fsets (X,Y)-	- [2:0-1-2,0-1-14]											
LOADIN	<b>G</b> (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.Ó	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.03	`4-8́	>999	480	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.08	4-8	>889	360			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a			

## LUMBER-

BCDL

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP 2400F 2.0E

 WEBS
 2x4 SP No.3

 SLIDER
 Left 2x4 SP No.3 -È 1-6-0

10.0

BRACING-TOP CHORD

0.02

4-8

Wind(LL)

Structural wood sheathing directly applied, except end verticals.

BOT CHORD Rigid ceiling directly applied.

>999

240

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Weight: 26 lb

FT = 20%

#### REACTIONS. (lb/size) 2=365/0-3-8 (min. 0-1-8), 4=216/0-1-8 (min. 0-1-8) Max Horz 2=92(LC 7) Max Uplift2=-90(LC 8), 4=-10(LC 8)

Code IRC2018/TPI2014

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. BOT CHORD 2-5=-112/274

## NOTES-

1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-AS

- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) 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.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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

Job	Truss	Truss Type	Qty	Ply	Whittenton Bldrs/Miller
27070A	MG1	Monopitch Girder	1	2	Job Reference (optional)
C&R Building Supply, Au	utryville NC	8.	.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:25 2023 Page 2

# NOTES-

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 383 lb down and 46 lb up at 1-0-12, and 383 lb down and 46 lb up at 3-0-12, and 385 lb down and 44 lb up at 5-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

ID:4zXVbv?CfCTRFBI3YWZEk4yKdbQ-k9gsIE?a8jZ782Wy6CKUZpvm0p6fngBfW7INUhzvpb8

LOAD CASE(S) Standard 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-3=-60, 4-6=-20 Concentrated Loads (lb)

Vert: 5=-383(F) 9=-383(F) 10=-385(F)



8-1-12		14-6-6		18-6-4	-				
Plate Offects (X X) [2:0.0.14.0.2.2]	· · ·	6-4-10		3-11-14	·				
Flate Olisets (A, I) [2.0-0-14,0-2-2]									
LOADING (psf)SPACING-2-0-0TCLL20.0Plate Grip DOL1.15TCDL10.0Lumber DOL1.15BCLL0.0 *Rep Stress IncrYESBCDL10.0Code IRC2018/TPI2014	CSI.DEFL.TC0.24Vert(LlBC0.19Vert(CWB0.18Horz(CMatrix-ASWind(L	in (loc) l/defl .) -0.04 11-15 >999 T) -0.08 11-15 >999 T) 0.01 2 n/a .L) 0.00 9 >999	L/d 480 360 n/a 240	<b>PLATES</b> MT20 Weight: 97 lb	<b>GRIP</b> 244/190 FT = 20%				
LUMBER-       BRACING-         TOP CHORD       2x4 SP No.2       TOP CHORD       Structural wood sheathing directly applied, exception verticals.         BOT CHORD       2x4 SP 2400F 2.0E       BOT CHORD       Rigid ceiling directly applied.         WEBS       2x4 SP No.3 -È 1-6-0       BOT CHORD       MiTek recommends that Stabilizers and required bracing be installed during truss erection, in accordance with Stabilizer Installation guide.         REACTIONS       (lb/size)       2=392/0-3-8 (min 0-1-8)       11=829/0-3-8 (min 0-1-8)       8=362/0-1-8 (min 0-1-8)									
REACTIONS.       (lb/size)       2=392/0-3-8 (min. 0-1-8), 11=829/0-3-8 (min. 0-1-8), 8=362/0-1-8 (min. 0-1-8)         Max Horz 2=91(LC 7)       Max Uplift2=-65(LC 8), 11=-107(LC 8), 8=-6(LC 8)         Max Grav 2=400(LC 19), 11=829(LC 1), 8=377(LC 20)									
FORCES.         (lb) - Max. Comp./Max. Ten All forces 250 (ll           TOP CHORD         2-3=-296/0, 5-6=-420/62, 6-7=-415/19, 7-           BOT CHORD         11-12=0/267           WEBS         3-11=-379/83, 5-11=-391/96, 5-9=-54/324	lb) or less except when shown -8=-342/23 4, 7-9=0/336	ι.							
<ul> <li>WEBS 3-11=-20267</li> <li>WEBS 3-11=-379/83, 5-11=-391/96, 5-9=-54/324, 7-9=0/336</li> <li>NOTES- <ol> <li>Uhbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.</li> <li>Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.</li> <li>Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.</li> <li>Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8 except (jt=lb) 11=107.</li> <li>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.</li> </ol></li></ul>									



Scale = 1:26.4



	6 6	-4-0 -4-0	<u> </u>								
Plate Offsets (X,Y)	late Offsets (X,Y) [2:0-0-14,0-1-12], [4:0-0-14,0-1-14]										
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI. E	DEFL. in	(loc) l/def	L/d	PLATES	GRIP				
TCLL 20.0	Plate Grip DOL 1.15	TC 0.32	/ert(LL) -0.03	7-11 >999	480	MT20	244/190				
TCDL 10.0	Lumber DOL 1.15	BC 0.15	/ert(CT) -0.05	7-11 >999	360						
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09 H	Horz(CT) 0.01	2 n/a	n/a						
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS V	Wind(LL) 0.01	7-15 >999	240	Weight: 52 lb	FT = 20%				
LUMBER-		F	BRACING-								

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

MiTek recommends that Stabilizers and required cross

Rigid ceiling directly applied.

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP 2400F 2.0EWEBS2x4 SP No.3

SLIDER Left 2x4 SP No.3 -È 1-6-0, Right 2x4 SP No.3 -È 1-6-0

REACTIONS. (lb/size) 2=619/0-3-8 (min. 0-1-8), 4=619/0-3-8 (min. 0-1-8) Max Horz 2=-33(LC 6) Max Uplift2=-103(LC 8), 4=-103(LC 8)

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

- TOP CHORD 2-3=-787/51, 3-4=-787/51
- BOT CHORD 2-8=-21/515, 7-8=0/697, 6-7=0/697, 4-6=-34/515

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=103, 4=103.

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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.





	8-0-0					16-0	-0		
	8-0-0		I			8-0-	-0		
Plate Offsets (X,Y)	[2:0-0-14,0-2-0], [6:0-0-14,0-2-2]								
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.23 BC 0.21 WB 0.15 Matrix-AS	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.04 -0.08 0.02 0.03	(loc) 9 9-17 6 9	l/defl >999 >999 n/a >999	L/d 480 360 n/a 240	PLATES MT20 Weight: 76 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP 2400F 2.0E				RD RD	Structural wood sheathing directly applied. Rigid ceiling directly applied.				
SLIDER         Left 2x4 SP No.3 -È 1-6-0, Right 2x4 SP No.3 -È 1-6-0					braci acco	k recom ng be ins rdance v	mends that stalled duri vith Stabiliz	ing truss erection, in zer Installation guid	quirea cross n e.
REACTIONS. (Ib/siz	e) 2=752/0-3-8 (min. 0-1-8), 6=	752/0-3-8 (min. 0-1-8)							

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

TOP CHORD 2-3=-1200/101, 3-4=-946/64, 4-5=-946/64, 5-6=-1200/101

BOT CHORD 2-10=-31/507, 9-10=-31/1103, 8-9=-31/1103, 6-8=-38/507

WEBS 3-9=-291/69, 4-9=0/385, 5-9=-291/69

Max Uplift2=-113(LC 8), 6=-113(LC 8)

Max Horz 2=40(LC 7)

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=113, 6=113.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



F	9-7-13		<u>19-0-3</u> 9-4-5			<u>28-8-0</u> 9-7-13		
Plate Offsets (X,Y)	- [2:0-0-11,0-1-10], [7:0-0-11,0-1-	10]	040			0-1-10		
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.28 BC 0.40 WB 0.28 Matrix-AS	DEFL.         in           Vert(LL)         -0.15           Vert(CT)         -0.35           Horz(CT)         0.06           Wind(LL)         0.11	(loc) l/c 9-11 >9 9-11 >9 7 9-11 >9	lefl L/d 199 480 175 360 n/a n/a 199 240	PLATES MT20 Weight: 125 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S SLIDER Left 2	SP 2400F 2.0E SP 2400F 2.0E SP No.3 2x4 SP No.3 -È 1-6-0, Right 2x4 S	P No.3 -È 1-6-0	BRACING- TOP CHORD BOT CHORD	Structural Rigid ceilin MiTek re bracing b	wood sheathin ng directly appl commends tha be installed dur nce with Stabili	g directly applied. ied. It Stabilizers and requ ing truss erection, in zer Installation quide	uired cross	
REACTIONS. (Ib/si Max Max	XEACTIONS.         (lb/size)         7=1143/0-3-8         (min. 0-1-8), 2=1263/0-3-8         (min. 0-1-8)           Max Horz 2=72(LC 7)         Max Uplift7=-86(LC 8), 2=-155(LC 8)         Image: Comparison of the second s							
FORCES.         (lb)         Ma           TOP CHORD         2-3         6-7           BOT CHORD         2-11         8-9           WEBS         3-1         1	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-3=-2500/223, 3-4=-2221/172, 4-5=-2155/193, 5-6=-2240/204, 6-7=-2523/237         BOT CHORD       2-12=-184/1216, 11-12=-158/2308, 10-11=-74/1623, 9-10=-74/1623, 8-9=-172/2334, 7-8=-255/1331         WEBS       3-11=-425/141, 5-11=0/661, 5-9=0/684, 6-9=-438/149							
NOTES- 1) Unbalanced roof I 2) Wind: ASCE 7-16 eave=4ft; Cat. II; exposed; Lumber 3) This truss has be 4) * This truss has be 6-0-0 between the 5) Provide mechanic except (jt=lb) 2=1 6) This truss is desir	live loads have been considered for ; Vult=140mph (3-second gust) V: Exp B; Enclosed; MWFRS (directi DOL=1.60 plate grip DOL=1.60 en designed for a 10.0 psf bottom een designed for a live load of 20. b bottom chord and any other men cal connection (by others) of truss 55. pned in accordance with the 2018	or this design. asd=111mph; TCDL= onal); cantilever left a chord live load nonco Opsf on the bottom c obers. to bearing plate capa International Resider	6.0psf; BCDL=6.0psf; and right exposed ; end oncurrent with any othe hord in all areas with a able of withstanding 10 ntial Code sections B5	h=20ft; B= d vertical le er live loads o clearance 0 lb uplift a 02 11 1 and	45ft; L=29ft; ft and right s. greater than t joint(s) 7	d		

referenced standard ANSI/TPI 1. 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2"

gypsum sheetrock be applied directly to the bottom chord.



Scale = 1:40.8



	7-3-13 7-3-13			14-4-3 7-0-5				2	1-8-0 -3-13	-1
Plate Offsets (X,Y)-	- [2:0-1-11,0-3-1], [6:0-1-11,1	0-3-1]								
LOADING (psf)	SPACING- 2-0-0	o csi.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	5 TC	0.19	Vert(LL)	-0.08	9-11	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	5 BC	0.27	Vert(CT)	-0.18	9-11	>999	360		
BCLL 0.0 *	Rep Stress Incr YES	S WB	0.19	Horz(CT)	0.03	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	4 Matrix	-AS	Wind(LL)	0.06	9-11	>999	240	Weight: 100 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x4 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SP No.3		MiTek recommends that Stabilizers and required cross
SLIDER	Left 2x4 SP No.3 -È 1-6-0, Right 2x4 SP No.3 -È 1-6-0		bracing be installed during truss erection. in
			accordance with Stabilizer Installation guide.
REACTIONS.	(lb/size) 2=979/0-3-8 (min. 0-1-8), 6=979/0-3-8 (min. 0-1-8)		
	Max Horz 2=-52(LC 6)		
	Max Uplift2=-131(LC 8), 6=-131(LC 8)		
ECDCEC /lb	) May Comp (May Tan All foreas 250 (lb) or loss execut who	nchown	

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

TOP CHORD 2-3=-1781/146, 3-4=-1591/128, 4-5=-1591/128, 5-6=-1781/146

BOT CHORD 2-12=-52/853, 11-12=-67/1639, 10-11=-15/1183, 9-10=-15/1183, 8-9=-67/1639, 6-8=-52/853

WEBS 3-11=-292/98, 4-11=0/454, 4-9=0/454, 5-9=-292/98

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=131, 6=131.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Scale = 1:35.6



	8-1-12		14-	6-6		18-6-4		
Plate Offsets (X Y)	<u>8-1-12</u>	1	6-4	-10	I	3-11-14		
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in	(loc) l/defl	L/d	PLATES	GRIP	
TCLL 20.0 TCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.24 BC 0.19	Vert(LL) -0.04 Vert(CT) -0.08	11-15 >999	480 360	MT20	244/190	
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.18 Matrix-AS	Horz(CT) 0.01 Wind(LL) 0.00	2 n/a 9 >999	n/a 240	Weight: 97 lb	FT = 20%	
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S SLIDER Left 2	SP No.2 SP 2400F 2.0E SP No.3 x4 SP No.3 -È 1-6-0		BRACING- TOP CHORD BOT CHORD	Structural woo verticals. Rigid ceiling di MiTek recom bracing be in accordance v	d sheathing rectly appli mends that stalled duri vith Stabiliz	g directly applied, ed. t Stabilizers and re ng truss erection, i ger Installation guid	except end quired cross n e	
REACTIONS.       (Ib/size)       2=392/0-3-8 (min. 0-1-8), 11=829/0-3-8 (min. 0-1-8), 8=362/0-1-8 (min. 0-1-8)         Max Horz 2=91(LC 7)       Max Uplift2=-65(LC 8), 11=-107(LC 8), 8=-6(LC 8)         Max Grav 2=400(LC 19), 11=829(LC 1), 8=377(LC 20)								
FORCES.(lb) - MaxTOP CHORD2-33BOT CHORD11-7WEBS3-17	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-3=-296/0, 5-6=-420/62, 6-7=-415/19, 7-8=-342/23         BOT CHORD       11-12=0/267         WEBS       3-11=-379/83, 5-11=-391/96, 5-9=-54/324, 7-9=0/336							
NOTES- 1) Unbalanced roof I 2) Wind: ASCE 7-16 eave=4ft; Cat. II; I exposed; Lumber 3) This truss has bee 4) * This truss has be 6-0-0 between the 5) Bearing at joint(s) verify capacity of	ive loads have been considered for ; Vult=140mph (3-second gust) V Exp B; Enclosed; MWFRS (directi DOL=1.60 plate grip DOL=1.60 en designed for a 10.0 psf bottom een designed for a live load of 20. bottom chord and any other men 8 considers parallel to grain value bearing surface.	or this design. asd=111mph; TCDL= onal); cantilever left a chord live load nonco 0psf on the bottom ch bers. e using ANSI/TPI 1 ar	6.0psf; BCDL=6.0psf ind right exposed ; en procurrent with any oth nord in all areas with a ngle to grain formula.	; h=20ft; B=45ft; d vertical left an her live loads. a clearance grea Building design	L=24ft; d right iter than er should			

6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8 except (jt=lb) 11=107.

8) 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.

9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.





1	8-4-10	1	15-8-0	1		23-2-14	1
	8-4-10		7-3-6	1		7-6-14	
Plate Offsets (X,Y)	- [2:0-0-14,0-2-2], [7:0-1-6,0-1-14]						
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.16 BC 0.20 WB 0.39 Matrix-AS	DEFL.         in           Vert(LL)         -0.04           Vert(CT)         -0.09           Horz(CT)         0.01           Wind(LL)         0.02	(loc) l/defl 11-19 >999 11-19 >999 2 n/a 9-15 >999	L/d 480 360 n/a 240	<b>PLATES</b> MT20 Weight: 109 I	<b>GRIP</b> 244/190 b FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S SLIDER Left 2	SP 2400F 2.0E SP 2400F 2.0E SP No.3 2x4 SP No.3 -È 1-6-0, Right 2x4 S	P No.3 -È 1-6-0	BRACING- TOP CHORD BOT CHORD	Structural woo Rigid ceiling d MiTek recom bracing be in accordance	d sheathing irectly appli mends that istalled duri with Stabiliz	g directly applied. ed. t Stabilizers and re ng truss erection, i er Installation guid	quired cross n
REACTIONS. (lb/si Max Max Max	ze) 7=532/Mechanical, 2=351/0- Horz 2=57(LC 7) Uplift7=-25(LC 8), 2=-60(LC 8), 1 Grav 7=539(LC 20), 2=388(LC 19)	3-8 (min. 0-1-8), 11= 1=-123(LC 8) ), 11=1089(LC 1)	:1089/0-3-8 (min. 0-1-	8)		er metanaton gala	<u></u>
FORCES. (Ib) - Mai TOP CHORD 2-3 BOT CHORD 8-9 WEBS 3-1	x. Comp./Max. Ten All forces 25 =-258/1, 3-4=-100/288, 4-5=-56/28 =-20/861, 7-8=-109/561 1=-410/86 5-11=-711/125 5-9=-2	0 (lb) or less except v 31, 5-6=-732/47, 6-7= 4/606_6-9=-370/126	when shown. -946/65				

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2 except (jt=lb) 11=123.
- 7) 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.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.





4x4 ⋍

	5-4-1	10-4-10	16-8-0		23-2-14	
	5-4-1	5-0-9	6-3-6	I	6-6-14	I
Plate Offsets (X,Y)	[2:0-0-14,0-2-2], [7:0-0-14,0	-2-2]				
LOADING (psf) TCLL 20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	<b>CSI.</b> TC 0.32 BC 0.15	<b>DEFL.</b> in ( Vert(LL) -0.02 10 Vert(CT) -0.05 10	loc) l/defl )-21 >999 )-21 >999	L/d <b>PL/</b> 480 MT 360	ATES GRIP 20 244/190
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.35 Matrix-AS	Horz(CT) 0.00 Wind(LL) 0.01	2 n/a 10 >999	n/a 240 We	ight: 116 lb   FT = 20%
LUMBER- TOP CHORD 2x4 BOT CHORD 2x4	SP No.2 SP 2400F 2.0E		BRACING- TOP CHORD S BOT CHORD R	tructural wood igid ceiling dire	sheathing directly ectly applied.	applied.
WEBS 2x4	SP No.3			MiTak racamm	anda that Stabiliz	are and required areas

3x8 =

Left 2x4 SP No.3 -È 1-6-0, Right 2x4 SP No.3 -È 1-6-0 SLIDER

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in

 $4x4 \ge$ 

4x4 =

accordance with Stabilizer Installation guide.

(lb/size) 2=402/0-3-8 (min. 0-1-8), 12=1157/0-3-8 (min. 0-1-8), 7=525/0-3-8 (min. 0-1-8) REACTIONS. Max Horz 2=-55(LC 6) Max Uplift2=-85(LC 8), 12=-92(LC 8), 7=-95(LC 8)

1.5x4 ||

Max Grav2=442(LC 19), 12=1157(LC 1), 7=550(LC 20)

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

- TOP CHORD 2-3=-379/8, 3-4=-24/392, 4-5=0/353, 5-6=-547/67, 6-7=-630/40
- BOT CHORD 13-14=0/324, 12-13=0/324, 9-10=0/558, 7-9=-16/356
- WEBS 3-12=-602/67, 5-12=-633/70, 5-10=-48/715, 6-10=-343/115

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12,

- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Scale = 1:44.2



	5-4-1	10-4-10	16-8-0		23-2-14			
Plate Offsets (X,Y)	<u> </u>	5-0-9	0-3-0			0-0-14		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.32 BC 0.15 WB 0.35 Matrix-AS	DEFL.         in           Vert(LL)         -0.02           Vert(CT)         -0.05           Horz(CT)         0.00           Wind(LL)         0.01	(loc) l/defl 11-21 >999 11-21 >999 2 n/a 11 >999	L/d 480 360 n/a 240	PLATES MT20 Weight: 116 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S SLIDER Left 2 REACTIONS. (Ib/si Max Max Max	SP No.2 SP 2400F 2.0E SP No.3 2x4 SP No.3 -È 1-6-0, Right 2x4 S ze) 2=406/0-3-8 (min. 0-1-8), 13 Horz 2=-55(LC 6) Uplift2=-89(LC 8), 13=-85(LC 8), 1 Grav 2=443(LC 19), 13=1151(LC	P No.3 -È 1-6-0 3=1151/0-3-8 (min. 0-1 9=-98(LC 8) 1), 9=551(LC 20)	<b>BRACING-</b> TOP CHORD BOT CHORD -8), 9=528/0-3-8 (m	Structural woo Rigid ceiling o MiTek recon bracing be in accordance in. 0-1-8)	od sheathing lirectly appli nmends tha nstalled duri with Stabiliz	g directly applied. ied. t Stabilizers and requ ing truss erection, in zer Installation guide.	uired cross	
FORCES.         (lb)         - Mai           TOP CHORD         3-47           8-97           BOT CHORD         2-14           WEBS         4-13	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       3-4=-375/18, 4-5=-14/383, 5-6=0/344, 6-7=-551/75, 7-8=-626/48, 8-9=-337/0         BOT CHORD       2-14=0/327, 13-14=0/327, 9-11=0/561         WEBS       4-13=-601/66, 6-13=-628/64, 6-11=-47/714, 7-11=-340/114							
NOTES- 1) Unbalanced roof I 2) Wind: ASCE 7-16 eave=4ft; Cat. II; exposed; Lumber 3) This truss has be 4) * This truss has b 6-0-0 between the 5) Provide mechanic 9.	ive loads have been considered for ; Vult=140mph (3-second gust) V Exp B; Enclosed; MWFRS (directi DOL=1.60 plate grip DOL=1.60 en designed for a 10.0 psf bottom een designed for a live load of 20 bottom chord and any other men cal connection (by others) of truss	or this design. asd=111mph; TCDL=6 onal); cantilever left an chord live load noncon .0psf on the bottom cho nbers. to bearing plate capab	.0psf; BCDL=6.0psf; d right exposed ; end current with any oth ord in all areas with a le of withstanding 10	h=20ft; B=45ft d vertical left an er live loads. a clearance gre 0 lb uplift at joi	t; L=24ft; nd right ater than nt(s) 2, 13,			

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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2"

gypsum sheetrock be applied directly to the bottom chord.



Scale = 1:38.7



<b>—</b>	9-10-6		16-3-8		23-0-3		
Plate Offsets	6 (X,Y) [1:0-3-4,0-0-4], [7:0-2-2,0-0-14]		0-3-2			0-0-10	
LOADING (pr TCLL 20 TCDL 10 BCLL 0 BCDL 10	sf)         SPACING-         2-0-0           0.0         Plate Grip DOL         1.15           0.0         Lumber DOL         1.15           0.0 *         Rep Stress Incr         YES           0.0         Code IRC2018/TPI2014	<b>CSI.</b> TC 0.39 BC 0.30 WB 0.28 Matrix-AS	DEFL.         in           Vert(LL)         -0.11         10           Vert(CT)         -0.24         10           Horz(CT)         0.02         002           Wind(LL)         0.02         8	(loc) l/defl 0-13 >999 0-13 >497 1 n/a 8-17 >999	L/d 480 360 n/a 240	<b>PLATES</b> MT20 Weight: 101 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER-       BRACING-         TOP CHORD       2x4 SP No.2       TOP CHORD       Structural wood sheathing directly applied.         BOT CHORD       2x4 SP 2400F 2.0E       BOT CHORD       BOT CHORD       Rigid ceiling directly applied.         WEBS       2x4 SP No.3       Left 2x4 SP No.3 - È 1-6-0, Right 2x4 SP No.3 - È 1-6-0       MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.         REACTIONS.       (lb/size) 1=352/Mechanical, 7=494/0-3-8 (min. 0-1-8), 10=995/0-4-15 (min. 0-1-8)         Max Horz 1=-47(LC 6)       Max Uplift1=-4(LC 8), 7=-21(LC 8), 10=-117(LC 8)         Max Grav 1=383(LC 19), 7=499(LC 20), 10=995(LC 1)       Hitter Stabilizer							
FORCES. (II TOP CHORE BOT CHORE WEBS	FORCES.       (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       1-2=-733/0, 2-3=-409/31, 4-5=-737/68, 5-6=-834/49, 6-7=-546/0         BOT CHORD       1-10=0/439, 7-8=-5/760         WEBS       3-10=-514/145, 4-10=-605/158, 4-8=-71/680, 5-8=-346/117						
<ul> <li>NOTES- <ol> <li>Unbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.</li> <li>Refer to girder(s) for truss to truss connections.</li> </ol> </li> </ul>							

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 10=117.

7) 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.

8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Scale = 1:35.6



	1	5-10-6				13-1-8					20-8-3	
Plate Offsets	(X Y) [	<u>5-10-6</u> 5:0-1-9 0-1-6]				7-3-2					7-6-10	
	<u>(,,,,)</u>											
LOADING (ps	sf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20	.Ó	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.03	7-13	>999	480	MT20	244/190
TCDL 10	.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.07	7-8	>999	360		
BCLL 0	.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10	.0	Code IRC2018/TF	PI2014	Matri	x-AS	Wind(LL)	0.01	7	>999	240	Weight: 98 lb	FT = 20%

## LUMBER-

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP 2400F 2.0E

 WEBS
 2x4 SP No.3

 SLIDER
 Right 2x4 SP No.3 -È 1-6-0

BRACING-TOP CHORD BOT CHORD

verticals. Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Structural wood sheathing directly applied, except end

REACTIONS. (Ib/size) 5=532/Mechanical, 8=1040/0-4-15 (min. 0-1-8), 10=71/Mechanical Max Horz 10=-75(LC 6) Max Uplift5=-37(LC 8), 8=-94(LC 8), 10=-28(LC 20) Max Grav 5=532(LC 1), 8=1040(LC 1), 10=144(LC 19)

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

TOP CHORD 2-3=-9/324, 3-4=-676/74, 4-5=-895/96

BOT CHORD 6-7=-50/805, 5-6=-124/387

WEBS 2-8=-335/112, 3-8=-766/95, 3-7=-6/550, 4-7=-353/121

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 8, 10.

7) 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.

8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 6.

7) 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.

8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 6.
- 7) 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.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



		5-4-0 5-4-0		<u>10-8-0</u> 5-4-0	
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0         *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI.         E           TC         0.28         V           BC         0.11         V           WB         0.12         H           Matrix-AS         V	DEFL.         in           Vert(LL)         -0.01           Vert(CT)         -0.02           Horz(CT)         0.00           Wind(LL)         0.00	(loc) l/defl L/d 9-10 >999 480 9-10 >999 360 8 n/a n/a 9 >999 240	PLATES         GRIP           MT20         244/190           Weight: 64 lb         FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S	SP No.2 SP 2400F 2.0E SP No.3	E T E	<b>3RACING-</b> TOP CHORD BOT CHORD	Structural wood sheathin verticals. Rigid ceiling directly appl MiTek recommends tha bracing be installed dur accordance with Stabili	g directly applied, except end ied. It Stabilizers and required cross ing truss erection, in zer Installation guide.

REACTIONS. (Ib/size) 10=536/0-3-8 (min. 0-1-8), 8=536/0-3-8 (min. 0-1-8) Max Horz 10=-93(LC 6) Max Uplift10=-101(LC 8), 8=-101(LC 8)

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

TOP CHORD 3-4=-383/40, 4-5=-383/40

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BOT CHORD 9-10=0/352, 8-9=0/337
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WEBS 3-10=-439/66, 5-8=-439/66

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=101, 8=101.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0*SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014CSI. TC 0.28 BC 0.11 WB 0.12 Matrix-ASDEFL.in(loc)I/deflL/d MT20PLATES 244/190GRIP MT20LUMBER- TOP CHORD 2x4 SP 2400F 2.0E WEBS 2x4 SP No.30.0 * 2x4 SP No.3SPACING- TC 0.28 MATIONDEFL.in(loc)I/deflL/d LocPLATES MT20GRIP 244/190LUMBER- TOP CHORD 2x4 SP 2400F 2.0E WEBS 2x4 SP No.30.0 * 2x4 SP No.3SPACING- TOP CHORD Structural wood sheathing directly applied, except end verticals. BOT CHORDStructural wood sheathing directly applied, except end verticals. BOT CHORD			<u>5-4-0</u> 5-4-0				<u> </u>		
LUMBER-       BRACING-         TOP CHORD 2x4 SP No.2       TOP CHORD 2x4 SP 2400F 2.0E         BOT CHORD 2x4 SP 2400F 2.0E       TOP CHORD 2x4 SP No.3         WEBS 2x4 SP No.3       BOT CHORD Rigid ceiling directly applied.	LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0         *           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI.DEFL.TC0.28Vert(LLBC0.11Vert(CTWB0.12Horz(CMatrix-ASWind(L	in -0.01 ) -0.02 () 0.00 -) 0.00	(loc) 8-9 8-9 7 8	l/defl >999 >999 n/a >999	L/d 480 360 n/a 240	PLATES MT20 Weight: 61 lb	<b>GRIP</b> 244/190 FT = 20%
Milek recommends that Stabilizers and required cross	LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S	P No.2 P 2400F 2.0E P No.3	BRACII TOP C BOT C	i <b>g-</b> Iord Iord	Structu vertica Rigid o MiTe	ural woo ls. ceiling di k recom	d sheathin irectly appl imends tha	g directly applied, e ied. t Stabilizers and ree	xcept end

accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 9=548/0-3-8 (min. 0-1-8), 7=403/Mechanical Max Horz 9=90(LC 7) Max Uplift9=-107(LC 8), 7=-26(LC 8)

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

 TOP CHORD
 3-4=-404/50, 4-5=-406/51

 BOT CHORD
 8-9=-5/353, 7-8=-14/391

WEBS 3-9=-456/74, 5-7=-371/41

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 9=107.
- 7) 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.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



		3-8-0	<u> </u>		3-4-0		
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0         *           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI.DEFL.TC0.28Vert(LLBC0.05Vert(CWB0.07Horz(CMatrix-ASWind(L	in ) -0.00 Г) -0.01 T) -0.00 L) 0.00	(loc) l/d 6-7 >9 6-7 >9 5 r 7 >9	efl L/d 99 480 99 360 1/a n/a 99 240	PLATES MT20 Weight: 39 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S	SP No.2 SP 2400F 2.0E SP No.3	BRACI TOP C BOT C	<b>NG-</b> HORD HORD	Structural verticals. Rigid ceilir MiTek re bracing b	wood sheathin g directly appl commends tha e installed dur	g directly applied, e ied. It Stabilizers and rec ing truss erection, ir	except end

accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 7=408/0-3-8 (min. 0-1-8), 5=250/0-1-8 (min. 0-1-8) Max Horz 7=78(LC 7) Max Uplift7=-99(LC 8), 5=-12(LC 8)

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

TOP CHORD 2-3=-252/25, 2-7=-379/115

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- 8) 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.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



	8-0-0 8-0-0					
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.43 BC 0.25 WB 0.30 Matrix-AS	DEFL.         in           Vert(LL)         -0.05           Vert(CT)         -0.10           Horz(CT)         0.01           Wind(LL)         0.01	(loc) l/defl L/d 8-9 >999 480 8-9 >999 360 8 n/a n/a 9 >999 240	PLATES         GRIP           MT20         244/190           Weight: 92 lb         FT = 20%	
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S	SP No.2 SP 2400F 2.0E SP No.3		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing verticals. Rigid ceiling directly appli MiTek recommends that bracing be installed duri	g directly applied, except end ed. Stabilizers and required cross ng truss erection, in	

REACTIONS. (Ib/size) 10=750/0-3-8 (min. 0-1-8), 8=750/0-3-8 (min. 0-1-8) Max Horz 10=-119(LC 6) Max Uplift10=-118(LC 8), 8=-118(LC 8)

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

TOP CHORD 3-4=-663/75, 4-5=-663/75, 2-10=-305/93, 6-8=-305/93

BOT CHORD 9-10=0/651, 8-9=0/651

WEBS 4-9=0/365, 3-10=-661/119, 5-8=-661/119

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=118, 8=118.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



8-0-0           8-0-0           Plate Offsets (X Y) [5:Edge 0-1-12] [6:0-2-7 0-1-7]					<u> </u>					—		
			27,017]	1		1						
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.Ó	Plate Grip DOL	1.15	тс	0.67	Vert(LL)	-0.05	<b>`</b> 7-Ŕ	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.10	7-8	>999	360		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	x-AS	Wind(LL)	0.01	7	>999	240	Weight: 82 lb	FT = 20%
LUMBER	<b>}-</b>					BRACING						

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP 2400F 2.0E 2x4 SP No.3 WEBS

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

#### REACTIONS. (lb/size) 8=718/0-3-8 (min. 0-1-8), 6=580/0-1-8 (min. 0-1-8) Max Horz 8=126(LC 7) Max Uplift8=-118(LC 8), 6=-41(LC 8)

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

- TOP CHORD 3-4=-611/81, 4-5=-658/72, 5-6=-515/77, 2-8=-314/99
- BOT CHORD 7-8=-20/597

WEBS 4-7=0/288, 5-7=0/322, 3-8=-588/110

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 8=118.
- 8) 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.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



		8-0-0 8-0-0			14-0-0 6-0-0		4
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.47 BC 0.22 WB 0.22 Matrix-AS	<b>DEFL.</b> in Vert(LL) -0.06 Vert(CT) -0.12 Horz(CT) 0.01 Wind(LL) 0.01	(loc) l/defl 8-9 >999 8-9 >999 7 n/a 8 >999	L/d 480 360 n/a 240	PLATES C MT20 2 Weight: 81 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S	P No.2 P 2400F 2.0E P No.3		BRACING- TOP CHORD BOT CHORD	Structural woo verticals. Rigid ceiling d MiTek recon	od sheathing irectly appli mends that	g directly applied, ex ed. t Stabilizers and requ	ccept end

bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 9=679/0-3-8 (min. 0-1-8), 7=539/0-1-8 (min. 0-1-8) Max Horz 9=135(LC 7) Max Uplift9=-115(LC 8), 7=-38(LC 8)

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

TOP CHORD 3-4=-532/73, 4-5=-534/73, 2-9=-270/78

# BOT CHORD 8-9=-43/549, 7-8=-10/305

WEBS 4-8=0/252, 5-7=-570/78, 3-9=-580/144

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 9=115.
- 8) 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.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



	<u> </u>		<u>    22-0-12                             </u>		<u> </u>	—
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.29 BC 0.51 WB 0.41 Matrix-AS	DEFL.         in         (ld           Vert(LL)         -0.19         11-           Vert(CT)         -0.38         11-           Horz(CT)         0.07         Wind(LL)         0.14	oc) I/defl L/d 14 >999 480 14 >999 360 10 n/a n/a 14 >999 240	PLATES GRII MT20 244/ Weight: 184 lb FT	<b>5</b> 190 - = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x6 S WEBS 2x4 S	SP 2400F 2.0E SP No.1 SP No.3		BRACING- TOP CHORD Sti BOT CHORD Rig	ructural wood sheathing gid ceiling directly appli diTek recommends that	g directly applied. ed. I Stabilizers and required	cross

accordance with Stabilizer Installation guide.

## REACTIONS. (lb/size) 2=1449/0-3-8 (min. 0-1-11), 10=1330/Mechanical Max Horz 2=84(LC 7) Max Uplift2=-169(LC 8), 10=-101(LC 8)

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

 TORCES: (ib) - Max. Comp. Max. Tell. - All folces 250 (ib) of less except when shown.

 TOP CHORD
 2-3=-3134/295, 3-4=-2734/198, 4-5=-2687/213, 5-6=-2741/275, 6-7=-2754/283, 7-8=-2700/221, 8-9=-2748/206, 9-10=-3163/312

 BOT CHORD
 2-14=-233/2913, 13-14=-75/1902, 12-13=-75/1902, 11-12=-75/1902, 10-11=-252/2943

 WEBS
 5-14=-365/132, 7-11=-361/130, 3-14=-412/133, 6-14=-50/970, 6-11=-61/986, 9-11=-431/144

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=169, 10=101.

7) 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.

8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



10-0-0 10-0-0							20-0-0 10-0-0		
Plate Offsets (X,Y)-	<u>- [1:0-0-14,0-1-12], [5:0-0-14,0-1-1</u>	4], [7:0-4-0,0-3-0]							
LOADING (psf) TCLL 20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	<b>CSI.</b> TC 0.26 BC 0.35	<b>DEFL.</b> Vert(LL) Vert(CT)	in -0.09 -0.19	(loc) 7-11 7-11	l/defl >999 >999	L/d 480 360	PLATES MT20	<b>GRIP</b> 244/190
BCDL 0.0 *	Code IRC2018/TPI2014	Matrix-AS	Wind(LL)	0.03	5 7	n/a >999	n/a 240	Weight: 86 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x4 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SP No.3		MiTek recommends that Stabilizers and required cross
SLIDER	Left 2x4 SP No.3 -È 1-6-0, Right 2x4 SP No.3 -È 1-6-0		bracing be installed during truss erection, in
			accordance with Stabilizer Installation guide.
REACTIONS.	(lb/size) 1=800/0-3-8 (min. 0-1-8), 5=800/0-3-8 (min. 0-1-8)		· · · · · · · · · · · · · · · · · · ·
	Max Horz 1=41(LC 7)		
	Max Uplift1=-62(LC 8), 5=-62(LC 8)		

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

- TOP CHORD 1-2=-1651/181, 2-3=-1267/110, 3-4=-1267/110, 4-5=-1651/181
- BOT CHORD 1-8=-206/794, 7-8=-131/1529, 6-7=-131/1529, 5-6=-206/794
- WEBS 2-7=-438/117, 3-7=0/519, 4-7=-438/117

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Scale = 1:55.9



	l	11-3-4		22-0-12		33-4-0	
		11-3-4		10-9-9		11-3-4	-
LOADING TCLL TCDL BCLL BCDL	6 (psf) 20.0 10.0 0.0 * 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	<b>CSI.</b> TC 0.26 BC 0.48 WB 0.41 Matrix-AS	DEFL.         in         (lo           Vert(LL)         -0.19         10-1           Vert(CT)         -0.38         10-1           Horz(CT)         0.07         Wind(LL)         0.14	c) I/defl L/d 13 >999 480 13 >999 360 9 n/a n/a 13 >999 240	PLATES         GRIP           MT20         244/190           Weight: 181 lb         FT = 20	0%
LUMBER TOP CHO BOT CHO WEBS	- DRD 2x4 S DRD 2x6 S 2x4 S	P 2400F 2.0E P No.1 P No.3		BRACING- TOP CHORD Stru BOT CHORD Rig M br	uctural wood sheathing id ceiling directly appli iTek recommends tha racing be installed duri ccordance with Stabiliz	g directly applied. ied. t Stabilizers and required cros ing truss erection, in zer Installation quide.	s

REACTIONS. (lb/size) 1=1333/Mechanical, 9=1333/Mechanical Max Horz 1=74(LC 7) Max Uplift1=-103(LC 8), 9=-103(LC 8)

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

- TOP CHORD 1-2=-3172/317, 2-3=-2756/211, 3-4=-2708/226, 4-5=-2762/288, 5-6=-2762/288, 6-7=-2708/226, 7-8=-2756/211, 8-9=-3172/317
- BOT CHORD 1-13=-256/2951, 12-13=-81/1913, 11-12=-81/1913, 10-11=-81/1913, 0.40-256/2951
- 9-10=-256/2951

   WEBS
   4-13=-361/130, 6-10=-361/130, 2-13=-431/144, 5-13=-59/985, 5-10=-59/985, 8-10=-431/144

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=103, 9=103.
- 7) 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.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



 TOP CHORD
 2x4 SP 2400F 2.0E

 BOT CHORD
 2x4 SP No.2

 OTHERS
 2x4 SP No.3

 TOP CHORD
 Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=127/8-3-8 (min. 0-1-8), 3=127/8-3-8 (min. 0-1-8), 4=269/8-3-8 (min. 0-1-8) Max Horz 1=-13(LC 6) Max Uplift1=-19(LC 8), 3=-19(LC 8), 4=-2(LC 8)

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

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.

7) 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.



2x4 ⋍

 $2x4 \ge$ 

0-0-1 0-0-1 Plate Offsets (X X)-	2 2 [2:0.3.0 Edge]		4-5-0 4-4-4					
	[2.0-0-0,Euge]							
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.01	Vert(LL) n	/a -	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) n	/a -	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.0	0 3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 10 lb	FT = 20%
LUMBER-			BRACING-		-			

TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 4-5-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=101/4-3-8 (min. 0-1-8), 3=101/4-3-8 (min. 0-1-8) Max Horz 1=5(LC 7) Max Uplift1=-8(LC 8), 3=-8(LC 8)

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

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) 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.



			<u>11-11-4</u> 11-11-4						<u>12-</u> 0-0 0-0-12
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.17 BC 0.25 WB 0.06	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL     10.0     Code IRC2018/1PI2014     Matrix-S       LUMBER- TOP CHORD     2x4 SP 2400F 2.0E       BOT CHORD     2x4 SP No.2				D D	Structu Rigid c	ural woo ceiling di	d sheathin rectly appl	g directly applied or ied or 10-0-0 oc bra	6-0-0 oc purlins.
OTHERS 2x4 S	SP No.3	1 0) 2-475/44 40 0 (	- 0 4 0) 4-400/44	1 40 0	MiTe braci accol	k recom ng be in rdance v	mends tha stalled dur with Stabili	at Stabilizers and re- ing truss erection, i zer Installation guid	quired cross n e.

REACTIONS. (Ib/size) 1=175/11-10-8 (min. 0-1-8), 3=175/11-10-8 (min. 0-1-8), 4=460/11-10-8 (min. 0-1-8) Max Horz 1=-21(LC 6) Max Uplift1=-21(LC 8), 3=-21(LC 8), 4=-20(LC 8) Max Grav 1=180(LC 19), 3=180(LC 20), 4=460(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-4=-318/84

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
 7) 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.



0-0 <u>-</u> 12 0-0-12			<u>8-0-0</u> 7-11-4				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	<b>CSI.</b> TC 0.08 BC 0.09 WB 0.03 Matrix B	DEFL. in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	(loc) l/defl - n/a - n/a 3 n/a	L/d 999 999 n/a	PLATES MT20	<b>GRIP</b> 244/190
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S OTHERS 2x4 S	P 2400F 2.0E P No.2 P No.3	Wat IA-1	BRACING- TOP CHORD BOT CHORD	Structural woo Rigid ceiling d MiTek recom bracing be in accordance	d sheathing irectly appli mends that stalled duri with Stabiliz	g directly applied o ed or 10-0-0 oc bra t Stabilizers and re ng truss erection, i er Installation guid	r 6-0-0 oc purlins. acing. quired cross n e.

REACTIONS. (lb/size) 1=119/7-10-8 (min. 0-1-8), 3=119/7-10-8 (min. 0-1-8), 4=252/7-10-8 (min. 0-1-8) Max Horz 1=13(LC 7) Max Uplift1=-18(LC 8), 3=-18(LC 8), 4=-2(LC 8)

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

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.

7) 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.



0-0 <u>12</u> 0-0-12			17-9-0 17-8-4		
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.10 BC 0.13 WB 0.06 Matrix-S	<b>DEFL.</b> in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	(loc) l/defl L/d - n/a 999 - n/a 999 5 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 58 lb         FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S OTHERS 2x4 S	SP 2400F 2.0E SP No.2 SP No.3		BRACING- TOP CHORD BOT CHORD	Structural wood sheathin Rigid ceiling directly appli MiTek recommends tha bracing be installed dur accordance with Stabiliz	g directly applied or 6-0-0 oc purlins. ed or 10-0-0 oc bracing. t Stabilizers and required cross ing truss erection, in zer Installation guide.

**REACTIONS.** All bearings 17-7-8.

(lb) - Max Horz 1=-33(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 9, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=270(LC 1),

9=378(LC 19), 6=378(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 2-9=-285/97, 4-6=-285/97

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 9, 6.

7) 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.


LOADING (psf)SPACING- Plate Grip DOL2-0-0CSI.DEFL.in (loc)l/deflL/dPLATESGRIPTCLL20.0Plate Grip DOL1.15TC0.24Vert(LL)n/a-n/a999MT20244/190	13-8-4	13-8-4			
TCDL     10.0     Lumber DOL     1.15     BC     0.34     Vert(CT)     n/a     -     n/a     999       BCLL     0.0 *     Rep Stress Incr     YES     WB     0.08     Horz(CT)     0.00     3     n/a     n/a       BCDL     10.0     Code IRC2018/TPI2014     Matrix-S     Weight: 41 lb     FT = 2	DEFL.     in     (loc)     l/defl     L/d       24     Vert(LL)     n/a     -     n/a     999       34     Vert(CT)     n/a     -     n/a     999       08     Horz(CT)     0.00     3     n/a     n/a       Weight: 41 lb     FT = 2	DEFL. i Vert(LL) n/ Vert(CT) n/ Horz(CT) 0.0	<b>CSI.</b> TC 0.24 BC 0.34 WB 0.08 Matrix-S	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0
LUMBER-   BRACING-     TOP CHORD 2x4 SP 2400F 2.0E   TOP CHORD     BOT CHORD 2x4 SP No.2   TOP CHORD     OTHERS   2x4 SP No.3     BOT CHORD   Structural wood sheathing directly applied or 6-0-0 oc processor     BOT CHORD   Structural wood sheathing directly applied or 10-0-0 oc bracing.     BOT CHORD   MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation quide.	BRACING- TOP CHORD BOT CHORD BOT CHORD MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation quide	BRACING- TOP CHORD BOT CHORD		SP 2400F 2.0E SP No.2 SP No.3	LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S OTHERS 2x4 S

REACTIONS. (lb/size) 1=205/13-7-8 (min. 0-1-8), 3=205/13-7-8 (min. 0-1-8), 4=539/13-7-8 (min. 0-1-8) Max Horz 1=-24(LC 6) Max Uplift1=-25(LC 8), 3=-25(LC 8), 4=-23(LC 8) Max Grav 1=211(LC 19), 3=211(LC 20), 4=539(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-4=-373/98

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
7) 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.



			9-8-4 9-8-4					9-9-0 0-0-12
LOADING     (psf)       TCLL     20.0       TCDL     10.0       BCLL     0.0     *       BCDL     10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	<b>CSI.</b> TC 0.10 BC 0.15 WB 0.05 Matrix-S	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT) (	in (loc) n/a - n/a - ).00 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 28 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S OTHERS 2x4 S	BRACING- TOP CHORE BOT CHORE	) Struc ) Rigid	tural woo ceiling di	d sheathin rectly appl	ig directly applied o lied or 10-0-0 oc bra	r 6-0-0 oc purlins. acing.		
				bra	cing be in ordance \	stalled dur with Stabili	ing truss erection, i zer Installation guid	n le.

REACTIONS. (lb/size) 1=136/9-7-8 (min. 0-1-8), 3=136/9-7-8 (min. 0-1-8), 4=357/9-7-8 (min. 0-1-8) Max Horz 1=-16(LC 6) Max Uplift1=-17(LC 8), 3=-17(LC 8), 4=-15(LC 8)

Max Grav1=140(LC 19), 3=140(LC 20), 4=357(LC 1)

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

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.

7) 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.



2x4 ⋍

2x4 🗢

0-0-12 0-0-12 Plate Offsets (X,Y)	[2:0-3-0,Edge]		5-9-0 5-8-4					
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYES	<b>CSI.</b> TC 0.03 BC 0.19 WB 0.00	<b>DEFL.</b> ir Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		-	-	-	Weight: 14 lb	FT = 20%
LUMBER-			BRACING-					

TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP No.2

BRACING-	
TOP CHORD	
BOT CHORD	

Structural wood sheathing directly applied or 5-9-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=155/5-7-8 (min. 0-1-8), 3=155/5-7-8 (min. 0-1-8) Max Horz 1=-8(LC 6) Max Uplift1=-12(LC 8), 3=-12(LC 8)

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

### NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) 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.



			<u>9-2-4</u> 9-2-4		<u>9-3</u> -0 0-0-12
LOADING     (psf)       TCLL     20.0       TCDL     10.0       BCLL     0.0 *       BCDL     10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	<b>CSI.</b> TC 0.09 BC 0.13 WB 0.05 Matrix-S	DEFL. in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	(loc) l/defl L/d - n/a 999 - n/a 999 3 n/a n/a	PLATES     GRIP       MT20     244/190       Weight: 27 lb     FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S OTHERS 2x4 S	SP 2400F 2.0E SP No.2 SP No.3	·	BRACING- TOP CHORD BOT CHORD	Structural wood sheathin Rigid ceiling directly appli	g directly applied or 6-0-0 oc purlins. ed or 10-0-0 oc bracing. t Stabilizers and required cross
			0) 4 005/0 4 0 4 1	bracing be installed duri accordance with Stabiliz	ing truss erection, in zer Installation guide.

REACTIONS. (lb/size) 1=127/9-1-8 (min. 0-1-8), 3=127/9-1-8 (min. 0-1-8), 4=335/9-1-8 (min. 0-1-8) Max Horz 1=-15(LC 6) Max Uplift1=-16(LC 8), 3=-16(LC 8), 4=-14(LC 8)

Max Grav 1=131(LC 19), 3=131(LC 20), 4=335(LC 1)

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

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.

7) 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.

Job	Truss	Truss Type	Qty Ply Whittenton Bldrs/Miller				
27070A	V10	Valley	1	1			
					Job Reference (optional)		
C&R Building Supply, Autryville NC			.430 s Ja	an 20 202	21 MiTek Industries, Inc. Fri Jan 13 10:05:39 2023 Page 1		
		ID:4z	XVbv?CfC	TRFBI3Y\	VZEk4yKdbQ-KrW9E0AMr0K8qCaex8an7mU95SuA31fjkJh6ztzvpaw		
L		2-7-8			5-3-0		
		2-7-8			2-7-8		
					Scale = 1:9.7		



2x4 ⋍

2x4 🗢

F	<u> </u>									<u>5-3-</u> 0 0-0-12	
Plate Offsets (X,Y)	[2:0-3-0,Edge]										
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	<b>SPACING-</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/T	2-0-0 1.15 1.15 YES PI2014	CSI. TC BC WB Matri	0.02 0.14 0.00 x-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 13 lb	<b>GRIP</b> 244/190 FT = 20%

# LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP No.2

BRACING-	
TOP CHORD	
BOT CHORD	

Structural wood sheathing directly applied or 5-3-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

0-Ö-4

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=135/5-1-8 (min. 0-1-8), 3=135/5-1-8 (min. 0-1-8) Max Horz 1=-7(LC 6) Max Uplift1=-10(LC 8), 3=-10(LC 8)

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

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) 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.