

3x4 =

		<u> </u>	<u>7-0-0</u> <u>3-6-0</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 IRC2015/TPI2014	CSI. TC 0.14 BC 0.12 WB 0.05 Matrix-MP	DEFL. in (loc) I/defl L/d Vert(LL) -0.00 6-12 >999 240 Vert(CT) -0.01 6-12 >999 180 Horz(CT) 0.00 4 n/a n/a	PLATES GRIP MT20 197/144 Weight: 29 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 WEBS 2x4 SP No.3

REACTIONS. (lb/size) 2=353/0-3-8 (min. 0-1-8), 4=352/0-3-8 (min. 0-1-8) Max Horz 2=39(LC 16) Max Uplift2=-59(LC 12), 4=-59(LC 13)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-319/111, 3-4=-319/111

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

3x4 =

LOAD CASE(S) Standard

BRACING-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.



		⊢ <u>3-6-0</u> 3-6-0	7-0-0 3-6-0	
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 IRC2015/TPI2014	CSI. TC 0.14 BC 0.12 WB 0.05 Matrix-MP	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 6-12 >999 240 Vert(CT) -0.01 6-12 >999 180 Horz(CT) 0.00 4 n/a n/a	PLATES GRIP MT20 197/144 Weight: 29 lb FT = 20%

LUMBER-

 TOP CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 BOT CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 WEBS
 2x4 SP No.3

REACTIONS. (lb/size) 2=353/0-3-8 (min. 0-1-8), 4=352/0-3-8 (min. 0-1-8) Max Horz 2=39(LC 16) Max Uplift2=-59(LC 12), 4=-59(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-319/111, 3-4=-319/111

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

BRACING-

TOP CHORDStructural wood sheathing directly applied or 6-0-0 oc purlins.BOT CHORDRigid 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.



zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=138, 6=138.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Brewster Freedom	
2100309-2100309A	A1	ROOF TRUSS	1	1	lob Poforonco (option	
84 Components, Dunn, NC 2833	34			 		1) 3.400 s Apr 7 2020 MiTek Industries, Inc. Tue Mar 9 15:47:06 2021 Page 1
		6.1.0 10.0.0	12.0.0 14.0.0 17.11.0	ID:UZ	23-8-8	J?dzceao-dxtminXE_QGIXtv872XCw54E2R3L0J0J0N3b_h9zcd8p
		6-1-0 3-11-0	2-0-0 2-0-0 3-11-0		5-9-8	038 1-2-8
			3x4 =			Scale = 1.53.1
	6-fi-3 6-fi-3 1 1 1 1 1	3x4 = 6.00 12 3 2x4 \\ B1 0 12	4 3x4 ≥ 5 ₩1 5 ₩1 8 20 20 20 20 20 20 20 20 20 20 20 20 20	2x4 6 772 W3		0-10-12 0-0-12
		13 12 11	20 21 10 4x6 II	9		
	4x6 =	3x4 = 4x6 3x4	4x6 4x6	3x4 =	4	ж6 =
	L	7-0-0	17-0-0	_	24-0-0	
Plate Offsets (X,Y) [1:0	-0-0,0-1-4], [4:0-2-0,Edge], [7:0-0-0,0-1-0	7-0-0	10-0-0	1	7-0-0	
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 IRC2015/TPI2014	CSI. TC 0.54 BC 0.56 WB 0.37 Matrix-MS	DEFL. in (loc) Vert(LL) -0.14 13-16 Vert(CT) -0.19 13-16 Horz(CT) 0.04 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES GRIP MT20 197/144 Weight: 137 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP No. BOT CHORD 2x4 SP No. 2x4 SP No. 2x4 SP No.	2 or 2x4 SPF No.2 2 or 2x4 SPF No.2 *Except*		BRACING- TOP CHORD Struc BOT CHORD Rigid	tural wood ceiling dire	sheathing directly app actly applied or 10-0-0	vlied or 4-2-15 oc purlins. oc bracing.
WEBS 2x4 SP No. WEDGE	NO.2 3 2x4 SP No.3		MiT	ek recomm ction, in acc	ends that Stabilizers a cordance with Stabilize	and required cross bracing be installed during truss or Installation guide.
REACTIONS. (Ib/size) 1 Max Horz 1 Max Uplift1	=958/0-3-8 (min. 0-1-8), 7=1034/0-3-8 (=-120(LC 13) =-112(LC 12), 7=-138(LC 13)	nin. 0-1-10)				
FORCES. (lb) Max. Con TOP CHORD 1-2=-1619 BOT CHORD 1-13=-254 7-9=-249/ WEBS 5-9=-107/	np./Max. Ten All forces 250 (lb) or less 3/400, 2-3=-1509/456, 5-6=-1499/451, 6-7 1/1373, 12-13=-144/1046, 12-20=-144/10 1363 554, 6-9=-342/211, 3-13=-112/566, 2-13=	except when shown. =-1609/396 46, 11-20=-144/1046, 11-21=-144/1046, -350/214, 3-5=-954/358	10-21=-144/1046, 9-10=-144/10	946,		
NOTES- 1) Unbalanced roof live loa 2) Wind: ASCE 7-10; Vult- zone;C-C for members 3) This truss has been des 4) * This truss has been de with BCDL = 10 Opef	ads have been considered for this design =130mph (3-second gust) Vasd=103mph; and forces & MWFRS for reactions show signed for a 10.0 psf bottom chord live loa ssigned for a live load of 20.0psf on the b	TCDL=6.0psf; BCDL=6.0psf; h=30ft; Ca n; Lumber DOL=1.60 plate grip DOL=1.6 d nonconcurrent with any other live load bttom chord in all areas where a rectang	at. II; Exp B; Enclosed; MWFRS 50 Is. Ie 3-6-0 tall by 2-0-0 wide will fit	(envelope) between th	gable end zone and C le bottom chord and ar	≻C Exterior(2) ny other members,

with BCDL = 10.0psf. 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=112, 7=138. 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 7) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



4) All plates are 2x4 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18, 19, 20, 21, 16, 15, 14, 13, 11, and 1. This connection is for uplift only and does not consider lateral forces.

10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, and 12. This connection is for uplift only and does not consider lateral forces.
- 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



- TOP CHORD 2-3=-817/216, 3-4=-817/216
- BOT CHORD 2-6=-63/641, 4-6=-63/641
- WEBS 3-6=0/338

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 2x4 MT20 unless otherwise indicated.

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

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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral

forces.

9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=313(LC 1), 8=313(LC 1)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone:C-C for members and forces & MWFRS for reactions shown: 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) Gable studs spaced at 2-0-0 oc.

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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.

9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



TOP CHORD 2x4 SP No.3 BOT CHORD 2x4 SP No.3 OTHERS 2x4 SP No.3

BRACING-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.

erection, in accordance with Stabilizer Installation guide.

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

REACTIONS. (lb/size) 1=141/8-2-0 (min. 0-1-8), 3=141/8-2-0 (min. 0-1-8), 4=277/8-2-0 (min. 0-1-8) Max Horz 1=29(LC 16) Max Uplift1=-32(LC 12), 3=-38(LC 13), 4=-1(LC 12)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone:C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces

7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 4. This connection is for uplift only and does not consider lateral forces.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



0-<mark>0-8</mark> 0-0-8 4-3-0 Plate Offsets (X,Y)-- [2:0-2-0,Edge] LOADING (psf) SPACING-CSI. PLATES GRIP 2-0-0 DEFL. in (loc) l/defl L/d тс Plate Grip DOL 0.07 TCLL 20.0 1.15 Vert(LL) n/a 999 MT20 244/190 n/a Lumber DOL BC 0.18 TCDL 10.0 1.15 Vert(CT) n/a n/a 999 BCLL 0.0 * Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 3 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-P Weight: 11 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.3 BOT CHORD 2x4 SP No.3

BRACING-TOP CHORD

TOP CHORD Structural wood sheathing directly applied or 4-3-0 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. (Ib/size) 1=120/4-2-0 (min. 0-1-8), 3=120/4-2-0 (min. 0-1-8) Max Horz 1=-13(LC 13) Max Uplift1=-14(LC 12), 3=-14(LC 13)

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.

Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Brewster Freedom		
2100309-2100309A	A2	ROOF TRUSS	5	1	lob Reference (onti		
84 Components, Dunn, NC 28334				ID:LizaEa	72HallbEuCbbC35C	8.400 s Apr 7 2020 MiTe	k Industries, Inc. Tue Mar 9 15:47:08 2021 Page 1
		S-1-0 10-0-0	12-0-0 14-0-0 17-11-0	ID.02gEq	23-8-8	25-2-8 24-0-0	
		3-11-0 3-11-0	2-0-0 2-0-0 3-11-0	Т	5-9-8	0-3-8 1-2-8	Scale = 1:53.1
			4				
	6-6-5 -	3x4 6.00 12 3 2x4 \\ 2	3x4 ≥ 5 ₩1	2x4 6 6 72	11		
	4x6 =	B1 (3) 13 12 3x4 = 4x6	B2 11 20 21 10 4x6 4x6 4x6 3x4 =	9 3x4 =		4x6 =	
		7-0-0	17-0-0		24-0-0		
Plate Offsets (X,Y) [1:0-0-0	0,0-1-4], [4:0-2-0,Edge], [7:0-0-0,0-1-0]	7-0-0	10-0-0	-	7-0-0		
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 IRC2015/TPI2014	CSI. TC 0.54 BC 0.56 WB 0.37 Matrix-MS	DEFL. in (loc) Vert(LL) -0.14 13-16 Vert(CT) -0.19 13-16 Horz(CT) 0.04 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 137 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 o BOT CHORD 2x4 SP No.2 o B2: 2x8 SP No WEBS 2x4 SP No.3	r 2x4 SPF No.2 r 2x4 SPF No.2 *Except* o.2		BRACING- TOP CHORD Struc BOT CHORD Rigio	tural wood ceiling dire ek recomm	sheathing directly a ctly applied or 10-0 ends that Stabilizer	applied or 4-2-15 oc pu)-0 oc bracing. rs and required cross t lizer Installation quide	rlins. pracing be installed during truss
WEDGE						lizer motaliation guide.	
REACTIONS. (Ib/size) 1=9: Max Horz 1=-1 Max Uplift1=-1	58/Mechanical, 7=1034/0-3-8 (min. 0-1- 120(LC 13) 112(LC 12), 7=-138(LC 13)	0)					
FORCES. (lb) Max. Comp./ TOP CHORD 1-2=-1619/40 BOT CHORD 1-13=-254/13 7-9=-249/136 7-9=-249/136 WERS 5-9107/156/	/Max. Ten All forces 250 (lb) or less ex 00, 2-3=-1509/456, 5-6=-1499/451, 6-7=- 373, 12-13=-144/1046, 12-20=-144/1046, 3 6.0-242/211, 3, 13=-112/556, 2, 13=-3	ept when shown. 1609/396 11-20=-144/1046, 11-21=-144/104 50/214_3.5=.954/358	46, 10-21=-144/1046, 9-10=-144/10	946,			
NOTES- 1) Unbalanced roof live loads 2) Wind: ASCE 7-10; Vult=13 zone;C-C for members and 3) This truss has been design 4) * This truss has been design with BCDL = 10.0psf. 5) Refer to girder(s) for truss f	+, 0-9342/211, 3-13=112/300, 2-13=-3 have been considered for this design. 30mph (3-second gust) Vasd=103mph; TO d forces & MWFRS for reactions shown; I hed for a 10.0 psf bottom chord live load r gned for a live load of 20.0psf on the botto to truss connections.	CDL=6.0psf; BCDL=6.0psf; h=30ft; umber DOL=1.60 plate grip DOL= ionconcurrent with any other live lo om chord in all areas where a recta	Cat. II; Exp B; Enclosed; MWFRS 1.60 vads. ingle 3-6-0 tall by 2-0-0 wide will fit	(envelope) between the	gable end zone and	d C-C Exterior(2) d any other members,	

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=112, 7=138.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Brewster Freedom
2100309-2100309A	CGR	Common Girder	1	2	Job Reference (optional)
84 Components, Dunn, NC 28334			•	•	8.400 s Apr 7 2020 MiTek Industries, Inc. Tue Mar 9 15:47:20 2021 Page 2

8.400 s Apr 7 2020 MiTek Industries, Inc. Tue Mar 9 15:47:20 2021 Page 2 ID:UzgEqZ?HqUbEuCbhC35O?dzceao-CDk3JJPm7a3xK2CpOtSCf1p?Si99bkF4bE_jBLzcd8b

NOTES-

7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 938 lb down and 132 lb up at 1-11-4, 938 lb down and 132 lb up at 3-11-4, 938 lb down and 132 lb up at 5-11-4, and 938 lb down and 132 lb up at 7-11-4, and 938 lb down and 132 lb up at 9-11-4 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: 1-2=-60, 2-3=-60, 5-8=-20 Concentrated Loads (lb)

Vert: 4=-938(B) 11=-938(B) 12=-938(B) 13=-938(B) 14=-938(B)



3x4 =

		<u> </u>	<u>7-0-0</u> <u>3-6-0</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 IRC2015/TPI2014	CSI. TC 0.14 BC 0.12 WB 0.05 Matrix-MP	DEFL. in (loc) I/defl L/d Vert(LL) -0.00 6-12 >999 240 Vert(CT) -0.01 6-12 >999 180 Horz(CT) 0.00 4 n/a n/a	PLATES GRIP MT20 197/144 Weight: 29 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 WEBS 2x4 SP No.3

REACTIONS. (lb/size) 2=353/0-3-8 (min. 0-1-8), 4=352/0-3-8 (min. 0-1-8) Max Horz 2=39(LC 16) Max Uplift2=-59(LC 12), 4=-59(LC 13)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-319/111, 3-4=-319/111

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

3x4 =

LOAD CASE(S) Standard

BRACING-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.



		⊢ <u>3-6-0</u> 3-6-0	7-0-0 3-6-0	
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 IRC2015/TPI2014	CSI. TC 0.14 BC 0.12 WB 0.05 Matrix-MP	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 6-12 >999 240 Vert(CT) -0.01 6-12 >999 180 Horz(CT) 0.00 4 n/a n/a	PLATES GRIP MT20 197/144 Weight: 29 lb FT = 20%

LUMBER-

 TOP CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 BOT CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 WEBS
 2x4 SP No.3

REACTIONS. (lb/size) 2=353/0-3-8 (min. 0-1-8), 4=352/0-3-8 (min. 0-1-8) Max Horz 2=39(LC 16) Max Uplift2=-59(LC 12), 4=-59(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-319/111, 3-4=-319/111

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

BRACING-

TOP CHORDStructural wood sheathing directly applied or 6-0-0 oc purlins.BOT CHORDRigid 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.



zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=138, 6=138.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Brewster Freedom	
2100309-2100309A	A1	ROOF TRUSS	1	1	Ich Poforonco (ontion	
84 Components, Dunn, NC 2833	34			 		1) 3.400 s Apr 7 2020 MiTek Industries, Inc. Tue Mar 9 15:47:06 2021 Page 1
		6.1.0 10.0.0	12.0.0 14.0.0 17.11.0	ID:UZ	23-8-8	J?dzceao-dxtminXE_QGIXtv872XCw54E2R3L0J0J0N3b_h9zcd8p
		6-1-0 3-11-0	2-0-0 2-0-0 3-11-0		5-9-8	038 1-2-8
			3x4 =			Scale = 1.53.1
	6-fi-3 6-fi-3 1 1 1 1 1	3x4 = 6.00 12 3 2x4 \\ B1 0 12	4 3x4 ≥ 5 ₩1 5 ₩1 8 20 20 20 20 20 20 20 20 20 20 20 20 20	2x4 6 772 W3		0-10-12 0-0-12
		13 12 11	20 21 10 4x6 II	9		
	4x6 =	3x4 = 4x6 3x4	4x6 4x6	3x4 =	4	ж6 =
	L	7-0-0	17-0-0	_	24-0-0	
Plate Offsets (X,Y) [1:0	-0-0,0-1-4], [4:0-2-0,Edge], [7:0-0-0,0-1-0	7-0-0	10-0-0	1	7-0-0	
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 IRC2015/TPI2014	CSI. TC 0.54 BC 0.56 WB 0.37 Matrix-MS	DEFL. in (loc) Vert(LL) -0.14 13-16 Vert(CT) -0.19 13-16 Horz(CT) 0.04 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES GRIP MT20 197/144 Weight: 137 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP No. BOT CHORD 2x4 SP No. 2x4 SP No. 2x4 SP No.	2 or 2x4 SPF No.2 2 or 2x4 SPF No.2 *Except*		BRACING- TOP CHORD Struc BOT CHORD Rigid	tural wood ceiling dire	sheathing directly app actly applied or 10-0-0	vlied or 4-2-15 oc purlins. oc bracing.
WEBS 2x4 SP No. WEDGE	NO.2 3 2x4 SP No.3		MiT	ek recomm ction, in acc	ends that Stabilizers a cordance with Stabilize	and required cross bracing be installed during truss or Installation guide.
REACTIONS. (Ib/size) 1 Max Horz 1 Max Uplift1	=958/0-3-8 (min. 0-1-8), 7=1034/0-3-8 (=-120(LC 13) =-112(LC 12), 7=-138(LC 13)	nin. 0-1-10)				
FORCES. (lb) Max. Con TOP CHORD 1-2=-1619 BOT CHORD 1-13=-254 7-9=-249/ WEBS 5-9=-107/	np./Max. Ten All forces 250 (lb) or less 3/400, 2-3=-1509/456, 5-6=-1499/451, 6-7 1/1373, 12-13=-144/1046, 12-20=-144/10 1363 554, 6-9=-342/211, 3-13=-112/566, 2-13=	except when shown. =-1609/396 46, 11-20=-144/1046, 11-21=-144/1046, -350/214, 3-5=-954/358	10-21=-144/1046, 9-10=-144/10	946,		
NOTES- 1) Unbalanced roof live loa 2) Wind: ASCE 7-10; Vult- zone;C-C for members 3) This truss has been des 4) * This truss has been de with BCDL = 10 Opef	ads have been considered for this design =130mph (3-second gust) Vasd=103mph; and forces & MWFRS for reactions show signed for a 10.0 psf bottom chord live loa ssigned for a live load of 20.0psf on the b	TCDL=6.0psf; BCDL=6.0psf; h=30ft; Ca n; Lumber DOL=1.60 plate grip DOL=1.6 d nonconcurrent with any other live load bttom chord in all areas where a rectang	at. II; Exp B; Enclosed; MWFRS 50 Is. Ie 3-6-0 tall by 2-0-0 wide will fit	(envelope) between th	gable end zone and C le bottom chord and ar	≻C Exterior(2) ny other members,

with BCDL = 10.0psf. 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=112, 7=138. 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 7) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



4) All plates are 2x4 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18, 19, 20, 21, 16, 15, 14, 13, 11, and 1. This connection is for uplift only and does not consider lateral forces.

10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, and 12. This connection is for uplift only and does not consider lateral forces.
- 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



- TOP CHORD 2-3=-817/216, 3-4=-817/216
- BOT CHORD 2-6=-63/641, 4-6=-63/641
- WEBS 3-6=0/338

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 2x4 MT20 unless otherwise indicated.

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

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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral

forces.

9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=313(LC 1), 8=313(LC 1)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone:C-C for members and forces & MWFRS for reactions shown: 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) Gable studs spaced at 2-0-0 oc.

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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.

9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



TOP CHORD 2x4 SP No.3 BOT CHORD 2x4 SP No.3 OTHERS 2x4 SP No.3

BRACING-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.

erection, in accordance with Stabilizer Installation guide.

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

REACTIONS. (lb/size) 1=141/8-2-0 (min. 0-1-8), 3=141/8-2-0 (min. 0-1-8), 4=277/8-2-0 (min. 0-1-8) Max Horz 1=29(LC 16) Max Uplift1=-32(LC 12), 3=-38(LC 13), 4=-1(LC 12)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone:C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces

7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 4. This connection is for uplift only and does not consider lateral forces.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



0-<mark>0-8</mark> 0-0-8 4-3-0 Plate Offsets (X,Y)-- [2:0-2-0,Edge] LOADING (psf) SPACING-CSI. PLATES GRIP 2-0-0 DEFL. in (loc) l/defl L/d тс Plate Grip DOL 0.07 TCLL 20.0 1.15 Vert(LL) n/a 999 MT20 244/190 n/a Lumber DOL BC 0.18 TCDL 10.0 1.15 Vert(CT) n/a n/a 999 BCLL 0.0 * Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 3 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-P Weight: 11 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.3 BOT CHORD 2x4 SP No.3

BRACING-TOP CHORD

TOP CHORD Structural wood sheathing directly applied or 4-3-0 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. (Ib/size) 1=120/4-2-0 (min. 0-1-8), 3=120/4-2-0 (min. 0-1-8) Max Horz 1=-13(LC 13) Max Uplift1=-14(LC 12), 3=-14(LC 13)

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.

Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Brewster Freedom		
2100309-2100309A	A2	ROOF TRUSS	5	1	lob Reference (onti		
84 Components, Dunn, NC 28334				ID:LizaEa	72HallbEuCbbC35C	8.400 s Apr 7 2020 MiTe	k Industries, Inc. Tue Mar 9 15:47:08 2021 Page 1
		S-1-0 10-0-0	12-0-0 14-0-0 17-11-0	ID.02gEq	23-8-8	25-2-8 24-0-0	
		3-11-0 3-11-0	2-0-0 2-0-0 3-11-0	Т	5-9-8	0-3-8 1-2-8	Scale = 1:53.1
			4				
	6-6-5	3x4 6.00 12 3 2x4 \\ 2	3x4 ≥ 5 ₩1	2x4 6 6 72	11		
	4x6 =	B1 (3) 13 12 3x4 = 4x6	B2 11 20 21 10 4x6 4x6 4x6 3x4 =	9 3x4 =		4x6 =	
		7-0-0	17-0-0		24-0-0		
Plate Offsets (X,Y) [1:0-0-0	0,0-1-4], [4:0-2-0,Edge], [7:0-0-0,0-1-0]	7-0-0	10-0-0	-	7-0-0		
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 IRC2015/TPI2014	CSI. TC 0.54 BC 0.56 WB 0.37 Matrix-MS	DEFL. in (loc) Vert(LL) -0.14 13-16 Vert(CT) -0.19 13-16 Horz(CT) 0.04 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 137 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 o BOT CHORD 2x4 SP No.2 o B2: 2x8 SP No WEBS 2x4 SP No.3	r 2x4 SPF No.2 r 2x4 SPF No.2 *Except* o.2		BRACING- TOP CHORD Struc BOT CHORD Rigio	tural wood ceiling dire ek recomm	sheathing directly a ctly applied or 10-0 ends that Stabilizer	applied or 4-2-15 oc pu)-0 oc bracing. rs and required cross t lizer Installation quide	rlins. pracing be installed during truss
WEDGE						lizer motaliation guide.	
REACTIONS. (Ib/size) 1=9: Max Horz 1=-1 Max Uplift1=-1	58/Mechanical, 7=1034/0-3-8 (min. 0-1- 120(LC 13) 112(LC 12), 7=-138(LC 13)	0)					
FORCES. (lb) Max. Comp./ TOP CHORD 1-2=-1619/40 BOT CHORD 1-13=-254/13 7-9=-249/136 7-9=-249/136 WERS 5-9107/156/	/Max. Ten All forces 250 (lb) or less ex 00, 2-3=-1509/456, 5-6=-1499/451, 6-7=- 373, 12-13=-144/1046, 12-20=-144/1046, 3 6.0-242/211, 3, 13=-112/556, 2, 13=-3	ept when shown. 1609/396 11-20=-144/1046, 11-21=-144/104 50/214_3.5=.954/358	46, 10-21=-144/1046, 9-10=-144/10	946,			
NOTES- 1) Unbalanced roof live loads 2) Wind: ASCE 7-10; Vult=13 zone;C-C for members and 3) This truss has been design 4) * This truss has been design with BCDL = 10.0psf. 5) Refer to girder(s) for truss f	+, 0-9342/211, 3-13=112/300, 2-13=-3 have been considered for this design. 30mph (3-second gust) Vasd=103mph; TO d forces & MWFRS for reactions shown; I hed for a 10.0 psf bottom chord live load r gned for a live load of 20.0psf on the botto to truss connections.	CDL=6.0psf; BCDL=6.0psf; h=30ft; .umber DOL=1.60 plate grip DOL= ionconcurrent with any other live lo om chord in all areas where a recta	Cat. II; Exp B; Enclosed; MWFRS 1.60 vads. ingle 3-6-0 tall by 2-0-0 wide will fit	(envelope) between the	gable end zone and	d C-C Exterior(2) d any other members,	

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=112, 7=138.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Brewster Freedom
2100309-2100309A	CGR	Common Girder	1	2	Job Reference (optional)
84 Components, Dunn, NC 28334			•	•	8.400 s Apr 7 2020 MiTek Industries, Inc. Tue Mar 9 15:47:20 2021 Page 2

8.400 s Apr 7 2020 MiTek Industries, Inc. Tue Mar 9 15:47:20 2021 Page 2 ID:UzgEqZ?HqUbEuCbhC35O?dzceao-CDk3JJPm7a3xK2CpOtSCf1p?Si99bkF4bE_jBLzcd8b

NOTES-

7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 938 lb down and 132 lb up at 1-11-4, 938 lb down and 132 lb up at 3-11-4, 938 lb down and 132 lb up at 5-11-4, and 938 lb down and 132 lb up at 7-11-4, and 938 lb down and 132 lb up at 9-11-4 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: 1-2=-60, 2-3=-60, 5-8=-20 Concentrated Loads (lb)

Vert: 4=-938(B) 11=-938(B) 12=-938(B) 13=-938(B) 14=-938(B)



zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=138, 6=138.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Brewster Freedom	
2100309-2100309A	A1	ROOF TRUSS	1	1	lob Poforonco (option	
84 Components, Dunn, NC 2833	34			 		1) 3.400 s Apr 7 2020 MiTek Industries, Inc. Tue Mar 9 15:47:06 2021 Page 1
		6.1.0 10.0.0	12.0.0 14.0.0 17.11.0	ID:UZ	23-8-8	J?dzceao-dxtminXE_QGIXtv872XCw54E2R3LUJUJUN3D_N9ZCd8p 25-2-8 24-00
		6-1-0 3-11-0	2-0-0 2-0-0 3-11-0		5-9-8	038 1-2-8
			3x4 =			Scale = 1.53.1
	6-fi-3 6-fi-3 1 1 1 1 1	3x4 = 6.00 12 3 2x4 \\ B1 0 12	4 3x4 ≥ 5 ₩1 5 ₩1 8 20 20 20 20 20 20 20 20 20 20 20 20 20	2x4 6 772 W3		0-10-12 0-0-12
		13 12 11	20 21 10 4x6 II	9		
	4x6 =	3x4 = 4x6 3x4	4x6 4x6	3x4 =	4	ж6 =
	L	7-0-0	17-0-0	_	24-0-0	
Plate Offsets (X,Y) [1:0	-0-0,0-1-4], [4:0-2-0,Edge], [7:0-0-0,0-1-0	7-0-0	10-0-0	1	7-0-0	
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 IRC2015/TPI2014	CSI. TC 0.54 BC 0.56 WB 0.37 Matrix-MS	DEFL. in (loc) Vert(LL) -0.14 13-16 Vert(CT) -0.19 13-16 Horz(CT) 0.04 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES GRIP MT20 197/144 Weight: 137 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP No. BOT CHORD 2x4 SP No. 2x4 SP No. 2x4 SP No.	2 or 2x4 SPF No.2 2 or 2x4 SPF No.2 *Except*		BRACING- TOP CHORD Struc BOT CHORD Rigid	tural wood ceiling dire	sheathing directly app actly applied or 10-0-0	vlied or 4-2-15 oc purlins. oc bracing.
WEBS 2x4 SP No. WEDGE	NO.2 3 2x4 SP No.3		MiT	ek recomm ction, in acc	ends that Stabilizers a cordance with Stabilize	and required cross bracing be installed during truss or Installation guide.
REACTIONS. (Ib/size) 1 Max Horz 1 Max Uplift1	=958/0-3-8 (min. 0-1-8), 7=1034/0-3-8 (=-120(LC 13) =-112(LC 12), 7=-138(LC 13)	nin. 0-1-10)				
FORCES. (lb) Max. Con TOP CHORD 1-2=-1619 BOT CHORD 1-13=-254 7-9=-249/ WEBS 5-9=-107/	np./Max. Ten All forces 250 (lb) or less 3/400, 2-3=-1509/456, 5-6=-1499/451, 6-7 1/1373, 12-13=-144/1046, 12-20=-144/10 1363 554, 6-9=-342/211, 3-13=-112/566, 2-13=	except when shown. =-1609/396 46, 11-20=-144/1046, 11-21=-144/1046, -350/214, 3-5=-954/358	10-21=-144/1046, 9-10=-144/10	946,		
NOTES- 1) Unbalanced roof live loa 2) Wind: ASCE 7-10; Vult- zone;C-C for members 3) This truss has been des 4) * This truss has been de with BCDL = 10 Opef	ads have been considered for this design =130mph (3-second gust) Vasd=103mph; and forces & MWFRS for reactions show signed for a 10.0 psf bottom chord live loa ssigned for a live load of 20.0psf on the b	TCDL=6.0psf; BCDL=6.0psf; h=30ft; Ca n; Lumber DOL=1.60 plate grip DOL=1.6 d nonconcurrent with any other live load bttom chord in all areas where a rectang	at. II; Exp B; Enclosed; MWFRS 50 Is. Ie 3-6-0 tall by 2-0-0 wide will fit	(envelope) between th	gable end zone and C le bottom chord and ar	≻C Exterior(2) ny other members,

with BCDL = 10.0psf. 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=112, 7=138. 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 7) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



4) All plates are 2x4 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18, 19, 20, 21, 16, 15, 14, 13, 11, and 1. This connection is for uplift only and does not consider lateral forces.

10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, and 12. This connection is for uplift only and does not consider lateral forces.
- 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



- TOP CHORD 2-3=-817/216, 3-4=-817/216
- BOT CHORD 2-6=-63/641, 4-6=-63/641
- WEBS 3-6=0/338

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 2x4 MT20 unless otherwise indicated.

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

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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral

forces.

9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=313(LC 1), 8=313(LC 1)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone:C-C for members and forces & MWFRS for reactions shown: 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) Gable studs spaced at 2-0-0 oc.

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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.

9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



3x4 =

		<u> </u>	<u>7-0-0</u> <u>3-6-0</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 IRC2015/TPI2014	CSI. TC 0.14 BC 0.12 WB 0.05 Matrix-MP	DEFL. in (loc) I/defl L/d Vert(LL) -0.00 6-12 >999 240 Vert(CT) -0.01 6-12 >999 180 Horz(CT) 0.00 4 n/a n/a	PLATES GRIP MT20 197/144 Weight: 29 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 WEBS 2x4 SP No.3

REACTIONS. (lb/size) 2=353/0-3-8 (min. 0-1-8), 4=352/0-3-8 (min. 0-1-8) Max Horz 2=39(LC 16) Max Uplift2=-59(LC 12), 4=-59(LC 13)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-319/111, 3-4=-319/111

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

3x4 =

LOAD CASE(S) Standard

BRACING-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.



		3-6-0 3-6-0	7-0-0 3-6-0	
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 IRC2015/TPI2014	CSI. TC 0.14 BC 0.12 WB 0.05 Matrix-MP	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 6-12 >999 240 Vert(CT) -0.01 6-12 >999 180 Horz(CT) 0.00 4 n/a n/a	PLATES GRIP MT20 197/144 Weight: 29 lb FT = 20%

LUMBER-

 TOP CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 BOT CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 WEBS
 2x4 SP No.3

REACTIONS. (lb/size) 2=353/0-3-8 (min. 0-1-8), 4=352/0-3-8 (min. 0-1-8) Max Horz 2=39(LC 16) Max Uplift2=-59(LC 12), 4=-59(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-319/111, 3-4=-319/111

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

BRACING-

TOP CHORDStructural wood sheathing directly applied or 6-0-0 oc purlins.BOT CHORDRigid 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.



TOP CHORD 2x4 SP No.3 BOT CHORD 2x4 SP No.3 OTHERS 2x4 SP No.3

BRACING-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.

erection, in accordance with Stabilizer Installation guide.

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

REACTIONS. (lb/size) 1=141/8-2-0 (min. 0-1-8), 3=141/8-2-0 (min. 0-1-8), 4=277/8-2-0 (min. 0-1-8) Max Horz 1=29(LC 16) Max Uplift1=-32(LC 12), 3=-38(LC 13), 4=-1(LC 12)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone:C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces

7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 4. This connection is for uplift only and does not consider lateral forces.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



0-<mark>0-8</mark> 0-0-8 4-3-0 Plate Offsets (X,Y)-- [2:0-2-0,Edge] LOADING (psf) SPACING-CSI. PLATES GRIP 2-0-0 DEFL. in (loc) l/defl L/d тс Plate Grip DOL 0.07 TCLL 20.0 1.15 Vert(LL) n/a 999 MT20 244/190 n/a Lumber DOL BC 0.18 TCDL 10.0 1.15 Vert(CT) n/a n/a 999 BCLL 0.0 * Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 3 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-P Weight: 11 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.3 BOT CHORD 2x4 SP No.3

BRACING-TOP CHORD

TOP CHORD Structural wood sheathing directly applied or 4-3-0 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. (Ib/size) 1=120/4-2-0 (min. 0-1-8), 3=120/4-2-0 (min. 0-1-8) Max Horz 1=-13(LC 13) Max Uplift1=-14(LC 12), 3=-14(LC 13)

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.

Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Brewster Freedom		
2100309-2100309A	A2	ROOF TRUSS	5	1	lob Reference (onti		
84 Components, Dunn, NC 28334					72HallbEuCbbC35C	8.400 s Apr 7 2020 MiTe	k Industries, Inc. Tue Mar 9 15:47:08 2021 Page 1
		ô-1-0 10-0-0	12-0-0 14-0-0 17-11-0	ID.02gEq	23-8-8	25-2-8 24-0-0	
	L. L	6-1-0 3-11-0	2-0-0 2-0-0 3-11-0	I	5-9-8	0-3-8 1-2-8	Scale = 1:53.1
	-1-3 6-6-5	3x4 6.00 12 3 2x4 \\ 2	3x4 ≥ 5 ₩1	2x4 6 12 12	11		
	4x6 =	B1 0 13 12 3x4 = 4x6	B2 B2 0 11 20 4x6 4x6 4x6 4x6 4x6 4x6 4x6	9 3x4 =		4x6 =	
		7-0-0	17-0-0		24-0-0		
Plate Offsets (X,Y) [1:0-0-	-0.0-1-4], [4:0-2-0,Edge], [7:0-0-0,0-1-0]	7-0-0	10-0-0		7-0-0		
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 IRC2015/TPI2014	CSI. TC 0.54 BC 0.56 WB 0.37 Matrix-MS	DEFL. in (loc) Vert(LL) -0.14 13-16 Vert(CT) -0.19 13-16 Horz(CT) 0.04 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 137 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 0 BOT CHORD 2x4 SP No.2 0 B2: 2x8 SP No.2 WEBS 2x4 SP No.3	or 2x4 SPF No.2 or 2x4 SPF No.2 *Except* o.2		BRACING- TOP CHORD Struc BOT CHORD Rigic MiT ere	ctural wood I ceiling dire ek recomm ction, in acc	sheathing directly a ctly applied or 10-0 ends that Stabilize ordance with Stabi	applied or 4-2-15 oc pu)-0 oc bracing. rs and required cross b lizer Installation quide.	rlins. pracing be installed during truss
WEDGE Left: 2x4 SP No 3 Right: 2x	4 SP No 3			,		0	
REACTIONS. (Ib/size) 1=9 Max Horz 1=- Max Uplift1=-	958/Mechanical, 7=1034/0-3-8 (min. 0-1- 120(LC 13) 112(LC 12), 7=-138(LC 13)	0)					
FORCES. (lb) - Max. Comp. TOP CHORD 1-2=-1619/4 BOT CHORD 1-13=-254/1 7-9=-249/13 -249/13 WERD 5 0.07/25	/Max. Ten All forces 250 (lb) or less ex. 00, 2-3=-1509/456, 5-6=-1499/451, 6-7=- 373, 12-13=-144/1046, 12-20=-144/1046, 63	cept when shown. 1609/396 11-20=-144/1046, 11-21=-144/104	16, 10-21=-144/1046, 9-10=-144/10)46,			
vvLD3 5-9=-107/55	H, 0-3342/211, 3-13=-112/300, 2-13=-3	JUIZ 14, J-J=-9J4/JJ0					
NOTES- 1) Unbalanced roof live load: 2) Wind: ASCE 7-10; Vult=13 zone;C-C for members an 3) This truss has been desig 4) * This truss has been desig with BCDL = 10.0psf. 5) Refer to girder(s) for truss	s have been considered for this design. 30mph (3-second gust) Vasd=103mph; Tr d forces & MWFRS for reactions shown; ned for a 10.0 psf bottom chord live load igned for a live load of 20.0psf on the bott to truss connections.	CDL=6.0psf; BCDL=6.0psf; h=30ft; umber DOL=1.60 plate grip DOL= nonconcurrent with any other live lo om chord in all areas where a recta	Cat. II; Exp B; Enclosed; MWFRS 1.60 pads. ngle 3-6-0 tall by 2-0-0 wide will fit	(envelope) between th	gable end zone and	d C-C Exterior(2) I any other members,	

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=112, 7=138.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Brewster Freedom
2100309-2100309A	CGR	Common Girder	1	2	Job Reference (optional)
84 Components, Dunn, NC 28334			•	•	8.400 s Apr 7 2020 MiTek Industries, Inc. Tue Mar 9 15:47:20 2021 Page 2

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NOTES-

7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 938 lb down and 132 lb up at 1-11-4, 938 lb down and 132 lb up at 3-11-4, 938 lb down and 132 lb up at 5-11-4, and 938 lb down and 132 lb up at 7-11-4, and 938 lb down and 132 lb up at 9-11-4 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: 1-2=-60, 2-3=-60, 5-8=-20 Concentrated Loads (lb)

Vert: 4=-938(B) 11=-938(B) 12=-938(B) 13=-938(B) 14=-938(B)



zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=138, 6=138.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Brewster Freedom	
2100309-2100309A	A1	ROOF TRUSS	1	1	lob Potoronco (ontional	n.
84 Components, Dunn, NC 2833	34			 	JOD Reference (optional 8.	.) .400 s Apr 7 2020 MiTek Industries, Inc. Tue Mar 9 15:47:06 2021 Page 1
		6-1-0 10-0.0	. 12-0-0 . 14-0-0	ID:UZ	23-8-8	25-2-8 24-00
		6-1-0 3-11-0	2-0-0 2-0-0 3-11-0		5-9-8	$\frac{2140}{0.3812.8}$
			3x4 =			Scale = 1.55.1
	6-11-3 6-6-6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3x4 = 6.00 12 3 2x4 \\ 2 B1 v 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$\begin{array}{c} 4 \\ 3x4 > 5 \\ 5 \\ \hline \\$	2x4 6 772 W3	"	0.00 0.00
		13 12	11 ²⁰ 21 10 4x6	9		
	4x6 =	$3x4 \equiv 4x6 \parallel$	x4 = 4x6 4x6	3x4 =	4x	= 6
	L	7-0-0	17-0-0		24-0-0	
Plate Offsets (X,Y) [1:0-	-0-0,0-1-4], [4:0-2-0,Edge], [7:0-0-0,0-1-0	7-0-0 '	10-0-0	1	7-0-0	
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 IRC2015/TPI2014	CSI. TC 0.54 BC 0.56 WB 0.37 Matrix-MS	DEFL. in (loc) Vert(LL) -0.14 13-16 Vert(CT) -0.19 13-16 Horz(CT) 0.04 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES GRIP MT20 197/144 Weight: 137 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP No BOT CHORD 2x4 SP No BOT CHORD 2x4 SP No	2 or 2x4 SPF No.2 2 or 2x4 SPF No.2 *Except*		BRACING- TOP CHORD Struc BOT CHORD Right	tural wood ceiling dire	sheathing directly applied or 10-0-0 c	ied or 4-2-15 oc purlins. cc bracing.
WEBS 2x4 SP No.3 WEDGE	NU.2 3 2×4 SP No 3		MiT	ek recomm ction, in acc	ends that Stabilizers an cordance with Stabilizer	nd required cross bracing be installed during truss r Installation guide.
REACTIONS. (Ib/size) 1 Max Horz 1 Max Uplift1	=958/0-3-8 (min. 0-1-8), 7=1034/0-3-8 =-120(LC 13) =-112(LC 12), 7=-138(LC 13)	min. 0-1-10)				
FORCES. (lb) Max. Com TOP CHORD 1-2=-1619 BOT CHORD 1-13=-254 7-9=-249/ WEBS 5-9=-107/3	np./Max. Ten All forces 250 (lb) or less 3/400, 2-3=-1509/456, 5-6=-1499/451, 6- 1/1373, 12-13=-144/1046, 12-20=-144/10 1363 554, 6-9=-342/211, 3-13=-112/566, 2-13	except when shown. /=-1609/396 46, 11-20=-144/1046, 11-21=-144/1046 350/214, 3-5=-954/358	6, 10-21=-144/1046, 9-10=-144/10	946,		
NOTES- 1) Unbalanced roof live loa 2) Wind: ASCE 7-10; Vult- zone;C-C for members a 3) This truss has been des 4) * This truss has been de with BCDL = 10.0pcf	ads have been considered for this desigr =130mph (3-second gust) Vasd=103mph and forces & MWFRS for reactions show signed for a 10.0 psf bottom chord live lo ssigned for a live load of 20.0psf on the b	TCDL=6.0psf; BCDL=6.0psf; h=30ft; C n; Lumber DOL=1.60 plate grip DOL=1 Id nonconcurrent with any other live loa ottom chord in all areas where a rectan	Cat. II; Exp B; Enclosed; MWFRS .60 ads. gle 3-6-0 tall by 2-0-0 wide will fit	(envelope) between th	gable end zone and C- e bottom chord and an	·C Exterior(2) y other members,

with BCDL = 10.0psf. 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=112, 7=138. 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 7) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

Job	Truss	Truss Type	Qty	Ply	Brewster Freedom		
2100309-2100309A	A2	ROOF TRUSS	5	1	lob Reference (onti		
84 Components, Dunn, NC 28334					72HallbEuCbbC35C	8.400 s Apr 7 2020 MiTe	k Industries, Inc. Tue Mar 9 15:47:08 2021 Page 1
		ô-1-0 10-0-0	12-0-0 14-0-0 17-11-0	ID.02gEq	23-8-8	25-2-8 24-0-0	
	L. L	6-1-0 3-11-0	2-0-0 2-0-0 3-11-0	I	5-9-8	0-3-8 1-2-8	Scale = 1:53.1
	-1-3 6-6-5	3x4 6.00 12 3 2x4 \\ 2	3x4 ≥ 5 ₩1	2x4 6 12	11		
	4x6 =	B1 0 13 12 3x4 = 4x6	B2 B2 0 11 20 4x6 4x6 4x6 4x6 4x6 4x6 4x6	9 3x4 =		4x6 =	
		7-0-0	17-0-0		24-0-0		
Plate Offsets (X,Y) [1:0-0-	-0.0-1-4], [4:0-2-0,Edge], [7:0-0-0,0-1-0]	7-0-0	10-0-0		7-0-0		
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 IRC2015/TPI2014	CSI. TC 0.54 BC 0.56 WB 0.37 Matrix-MS	DEFL. in (loc) Vert(LL) -0.14 13-16 Vert(CT) -0.19 13-16 Horz(CT) 0.04 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 137 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 0 BOT CHORD 2x4 SP No.2 0 B2: 2x8 SP No.2 WEBS 2x4 SP No.3	or 2x4 SPF No.2 or 2x4 SPF No.2 *Except* o.2		BRACING- TOP CHORD Struc BOT CHORD Rigic MiT ere	ctural wood I ceiling dire ek recomm ction, in acc	sheathing directly a ctly applied or 10-0 ends that Stabilize ordance with Stabi	applied or 4-2-15 oc pu)-0 oc bracing. rs and required cross b lizer Installation quide.	rlins. pracing be installed during truss
WEDGE Left: 2x4 SP No 3 Right: 2x	4 SP No 3			,		0	
REACTIONS. (Ib/size) 1=9 Max Horz 1=- Max Uplift1=-	958/Mechanical, 7=1034/0-3-8 (min. 0-1- 120(LC 13) 112(LC 12), 7=-138(LC 13)	0)					
FORCES. (lb) - Max. Comp. TOP CHORD 1-2=-1619/4 BOT CHORD 1-13=-254/1 7-9=-249/13 -249/13 WERD 5 0.07/25	/Max. Ten All forces 250 (lb) or less ex. 00, 2-3=-1509/456, 5-6=-1499/451, 6-7=- 373, 12-13=-144/1046, 12-20=-144/1046, 63	cept when shown. 1609/396 11-20=-144/1046, 11-21=-144/104	16, 10-21=-144/1046, 9-10=-144/10)46,			
vvLD3 5-9=-107/55	H, 0-3342/211, 3-13=-112/300, 2-13=-3	JUIZ 14, J-J=-9J4/JJ0					
NOTES- 1) Unbalanced roof live load: 2) Wind: ASCE 7-10; Vult=13 zone;C-C for members an 3) This truss has been desig 4) * This truss has been desig with BCDL = 10.0psf. 5) Refer to girder(s) for truss	s have been considered for this design. 30mph (3-second gust) Vasd=103mph; Tr d forces & MWFRS for reactions shown; ned for a 10.0 psf bottom chord live load igned for a live load of 20.0psf on the bott to truss connections.	CDL=6.0psf; BCDL=6.0psf; h=30ft; umber DOL=1.60 plate grip DOL= nonconcurrent with any other live lo om chord in all areas where a recta	Cat. II; Exp B; Enclosed; MWFRS 1.60 pads. ngle 3-6-0 tall by 2-0-0 wide will fit	(envelope) between th	gable end zone and	d C-C Exterior(2) I any other members,	

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=112, 7=138.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



4) All plates are 2x4 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18, 19, 20, 21, 16, 15, 14, 13, 11, and 1. This connection is for uplift only and does not consider lateral forces.

10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, and 12. This connection is for uplift only and does not consider lateral forces.
- 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



- TOP CHORD 2-3=-817/216, 3-4=-817/216
- BOT CHORD 2-6=-63/641, 4-6=-63/641
- WEBS 3-6=0/338

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 2x4 MT20 unless otherwise indicated.

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

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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral

forces.

9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=313(LC 1), 8=313(LC 1)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone:C-C for members and forces & MWFRS for reactions shown: 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) Gable studs spaced at 2-0-0 oc.

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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.

9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Brewster Freedom
2100309-2100309A	CGR	Common Girder	1	2	Job Reference (optional)
84 Components, Dunn, NC 28334			•	•	8.400 s Apr 7 2020 MiTek Industries, Inc. Tue Mar 9 15:47:20 2021 Page 2

8.400 s Apr 7 2020 MiTek Industries, Inc. Tue Mar 9 15:47:20 2021 Page 2 ID:UzgEqZ?HqUbEuCbhC35O?dzceao-CDk3JJPm7a3xK2CpOtSCf1p?Si99bkF4bE_jBLzcd8b

NOTES-

7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 938 lb down and 132 lb up at 1-11-4, 938 lb down and 132 lb up at 3-11-4, 938 lb down and 132 lb up at 5-11-4, and 938 lb down and 132 lb up at 7-11-4, and 938 lb down and 132 lb up at 9-11-4 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: 1-2=-60, 2-3=-60, 5-8=-20 Concentrated Loads (lb)

Vert: 4=-938(B) 11=-938(B) 12=-938(B) 13=-938(B) 14=-938(B)



3x4 =

		<u> </u>	<u>7-0-0</u> 3-6-0	
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 IRC2015/TPI2014	CSI. TC 0.14 BC 0.12 WB 0.05 Matrix-MP	DEFL. in (loc) I/defl L/d Vert(LL) -0.00 6-12 >999 240 Vert(CT) -0.01 6-12 >999 180 Horz(CT) 0.00 4 n/a n/a	PLATES GRIP MT20 197/144 Weight: 29 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 WEBS 2x4 SP No.3

REACTIONS. (lb/size) 2=353/0-3-8 (min. 0-1-8), 4=352/0-3-8 (min. 0-1-8) Max Horz 2=39(LC 16) Max Uplift2=-59(LC 12), 4=-59(LC 13)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-319/111, 3-4=-319/111

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 4.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

3x4 =

LOAD CASE(S) Standard

BRACING-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.



TOP CHORD 2x4 SP No.3 BOT CHORD 2x4 SP No.3 OTHERS 2x4 SP No.3

BRACING-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.

erection, in accordance with Stabilizer Installation guide.

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

REACTIONS. (lb/size) 1=141/8-2-0 (min. 0-1-8), 3=141/8-2-0 (min. 0-1-8), 4=277/8-2-0 (min. 0-1-8) Max Horz 1=29(LC 16) Max Uplift1=-32(LC 12), 3=-38(LC 13), 4=-1(LC 12)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone:C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces

7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 4. This connection is for uplift only and does not consider lateral forces.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



	0-0-8 0-0-8		4-3-0 4-2-8	
Plate Offsets (X,Y) [2:0	-2-0,Edge]			
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 IRC2015/TPI2014	CSI. TC 0.07 BC 0.18 WB 0.00 Matrix-P	DEFL. in (loc) I/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a	PLATES GRIP MT20 244/190 Weight: 11 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.3 BOT CHORD 2x4 SP No.3 BRACING-TOP CHORD

G-

TOP CHORD Structural wood sheathing directly applied or 4-3-0 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. (Ib/size) 1=120/4-2-0 (min. 0-1-8), 3=120/4-2-0 (min. 0-1-8) Max Horz 1=-13(LC 13) Max Uplift1=-14(LC 12), 3=-14(LC 13)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.