Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	CAP1	Piggyback	2	1	Job Reference (optional)

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Wed Jul 28 09:30:45 Page: 1 ID:9nYR9t9peBPUMEDCUUTTZizqTae-iuTO5ZeZ85SMbNmB7czuJCOJWWwXmwClxcaeb0ytb7u

Installation guide.

11-11-0



## **REACTIONS** All bearings 10-4-0.

(lb) - Max Horiz 2=-55 (LC 9), 7=-55 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 7, 11 Max Grav All reactions 250 (lb) or less at joint(s) except 2=261 (LC 1),

4=261 (LC 1), 6=368 (LC 1), 7=261 (LC 1), 11=261 (LC 1)

## FORCES NOTES

ų

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 2) and C-C Exterior (2) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 5-11-15, Exterior (2) 5-11-15 to 8-11-15, Interior (1) 8-11-15 to 11-8-3 zone; cantilever left and right exposed ; end vertical left and right exposed; 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.

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

\* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 6) any other members.

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

8) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer. 9)

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

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

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	CAP2	Piggyback	19	1	Job Reference (optional)

5-11-8

Peak Truss Builders LLC, New Hill, user

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11-1-8

5-2-0

16 17 11-11-0

0-9-8

4

3x4 =



0 - 9 - 8

## LUMBER

BCDL

TOP CHORD2x4 SP No.1BOT CHORD2x4 SP No.1OTHERS2x4 SP No.3

## **REACTIONS** All bearings 10-4-0.

(lb) - Max Horiz 2=-55 (LC 9), 7=-55 (LC 9)

10.0

Code

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 7, 11 Max Grav All reactions 250 (lb) or less at joint(s) except 2=261 (LC 1),

4=261 (LC 1), 6=368 (LC 1), 7=261 (LC 1), 11=261 (LC 1)

- 4-201 (E0 1), 0-000 (E0 1), 7-201 (E0 1), 11-201 (E0
- (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.

## FORCES NOTES

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 5-11-15, Exterior (2) 5-11-15 to 8-11-15, Interior (1) 8-11-15 to 11-8-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

BOT CHORD

Matrix-MS

- 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 4-0-0 oc.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit 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) 2, 4, 2, 4.
- 8) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

IBC2015/TPI2014

9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

(loc) l/defl L/d PLATES GRIP n/a 999 MT20 244/190 999 . n/a Horz(CT) 0.00 11 n/a n/a Weight: 40 lb FT = 20%

B1

BRACING TOP CHORD Structural wood sheathi

Structural wood sheathing directly applied or 6-0-0 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.

<sup>1)</sup> Unbalanced roof live loads have been considered for this design.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	T1	Piggyback Base	1	1	Job Reference (optional)

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### Scale = 1:83.6

Plate Offsets (X, Y):	[5:0-4-0,0-2-4],	[7:0-2-8,0-2-1], [11:E	Edge,0-3-8]										
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.28	14-15	>999	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.50	14-15	>999	180			
BCLL	0.0*	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.10	11	n/a	n/a			
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 350 lb	FT = 20%	

LUMBER TOP CHORD BOT CHORD	2x6 SP No.2 *Except* T3,T4:2x4 SP No.1 2x6 SP No.2	BRACING TOP CHORD	Structural wood sheathing except end verticals, and 2	directly applied or 3-3-13 oc purlins, -0-0 oc purlins (4-0-6 max.): 5-7.
WEBS	2x4 SP No.3 *Except* W8:2x4 SP No.2	BOT CHORD	Rigid ceiling directly applie	d or 10-0-0 oc bracing.
REACTIONS	(lb/size) 2=1953/0-3-8, (min. 0-3-3), 11=1892/0-3-8, (min. 0-3-0) Max Horiz 2=199 (LC 10) Max Uplift 2=-198 (LC 11), 11=-168 (LC 11) Max Grav 2=2035 (LC 19), 11=1919 (LC 20)	WEBS	1 Row at midpt MiTek recommends that S installed during truss erect Installation guide.	6-15, 6-14, 8-14, 3-15 tabilizers and required cross bracing be tion, in accordance with Stabilizer
FORCES TOP CHORD	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when s 2-21=-3337/289. 3-21=-3146/320. 3-4=-2586/296. 4-5=-2470/328. 5-2	hown. 2=-2140/331. 6-22=-214	0/331.6-23=-2143/327.	

23-24=-2143/327, 7-24=-2143/327, 7-25=-2521/343, 8-25=-2533/311, 8-9=-3181/380, 9-26=-2803/268, 10-26=-2863/257, 10-11=-1858/199 BOT CHORD 2-27=-202/2902, 17-27=-202/2902, 17-28=-202/2902, 16-28=-202/2902, 15-16=-202/2902, 15-29=-65/2254,

 WEBS
 29-30=-65/2254, 14-30=-65/2254, 13-14=-131/2403, 13-31=-131/2403, 31-32=-131/2403, 12-32=-131/2403

 WEBS
 5-15=-30/923, 6-15=-376/74, 6-14=-383/73, 7-14=-71/984, 8-14=-531/177, 8-12=-58/521, 9-12=-1171/232, 3-15=-849/198, 3-17=0/298, 10-12=-197/2817

### NOTES

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

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=47ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 3-8-15, Interior (1) 3-8-15 to 17-8-13, Exterior (2) 17-8-13 to 22-5-12, Interior (1) 22-5-12 to 29-8-11, Exterior (2) 29-8-11 to 34-5-10, Interior (1) 34-5-10 to 47-3-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 198 lb uplift at joint 2 and 168 lb uplift at joint 11.

6) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	T1A	Piggyback Base	2	1	Job Reference (optional)

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### Scale = 1:83.6

Loading	(nsf)	Spacing	2_0_0	CSI		DEEL	in	(loc)	l/defl	l /d		GRIP
TCLL (roof)	20.0	Plate Grip DOI	1 15	TC	0.66	Vert(LL)	-0.57	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.94	14-15	>607	180		210100
BCLL	0.0*	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.13	11	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS		, ,					Weight: 313 lb	FT = 20%

LUMBER		BRACING			
TOP CHORD	2x6 SP No.2 *Except* T3,T4:2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 3-4-1 oc purlins,		
BOT CHORD	2x4 SP DSS *Except* B1:2x4 SP No.1		except end verticals, and 2-0-0 oc purlins (4-0-7 max.): 5-7.		
WEBS	2x4 SP No.3 *Except* W8:2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.		
WEDGE	Left: 2x4 SP No.3	WEBS	1 Row at midpt 6-15, 6-14, 8-14, 3-15		
REACTIONS (III M M M	o/size) 2=1953/0-3-8, (min. 0-3-3), 11=1892/0-3-8, (min. 0-3-0) ax Horiz 2=201 (LC 10) ax Uplift 2=-198 (LC 11), 11=-168 (LC 11) ax Grav 2=2048 (LC 19), 11=1925 (LC 20)		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.		
FORCES	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when show	/n.			
TOP CHORD	2-21=-3322/285, 3-21=-3125/316, 3-4=-2577/296, 4-5=-2464/328, 5-22=-	2135/331, 6-22=-2135/	331, 6-23=-2135/327,		
	23-24=-2135/327, 7-24=-2135/327, 7-25=-2512/343, 8-25=-2524/311, 8-9	=-3151/378, 9-26=-277	/6/267, 10-26=-2835/256,		
	10-11=-1874/201				
BOT CHORD	2-27=-198/2874, 17-27=-198/2874, 17-28=-198/2874, 16-28=-198/2874,	15-16=-198/2874, 15-2	9=-63/2247,		
	29-30=-63/2247, 14-30=-63/2247, 13-14=-128/2390, 13-31=-128/2390, 3	1-32=-128/2390, 12-32	=-128/2390		

WEBS 5-15=-31/913, 6-15=-373/74, 6-14=-384/74, 7-14=-70/979, 8-14=-524/177, 8-12=-58/503, 9-12=-1164/232, 3-15=-826/195, 3-17=0/313, 10-12=-199/2809

### NOTES

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

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph, TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=47ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 3-8-15, Interior (1) 3-8-15 to 17-8-13, Exterior (2) 17-8-13 to 22-5-12, Interior (1) 22-5-12 to 29-8-11, Exterior (2) 29-8-11 to 34-5-10, Interior (1) 34-5-10 to 47-3-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 198 lb uplift at joint 2 and 168 lb uplift at joint 11.

6) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	T1B	Piggyback Base	4	1	Job Reference (optional)

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### Scale = 1:85.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	тс	0.88	Vert(LL)	-0.56	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.92	14-15	>616	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.13	11	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 307 lb	FT = 20%

LUMBER TOP CHORD BOT CHORD	2x4 SP No.1 *Except* T2,T1:2x6 SP No.2 2x4 SP DSS *Except* B1:2x4 SP No.1	BRACING TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-0-12 max.): 5-7.
WEBS OTHERS	2x4 SP No.3 *Except* W8:2x4 SP No.2 2x4 SP No.3	BOT CHORD WEBS	Rigid ceiling directly applied or 10-0-0 oc bracing.           1 Row at midpt         6-15, 6-14, 8-14, 3-15
WEDGE	Left: 2x4 SP No.3		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection in accordance with Stabilizer
M	ax Horiz $2=194$ (LC 10)		Installation guide.
M	ax Uplift  2=-197 (LC 11), 11=-167 (LC 11) ax Grav   2=2039 (LC 19), 11=1920 (LC 20)		
FORCES TOP CHORD	(Ib) - Max. Comp./Max. Ten All forces 250 (Ib) or less except when shown 2-21=-3303/282, 3-21=-3105/314, 3-4=-2557/294, 4-22=-2457/297, 5-22=- 6-24=-2107/323, 24-25=-2107/323, 7-25=-2107/323, 7-26=-2478/339, 8-26 10-27=-2662/239, 10-11=-1880/195	n. 2444/326, 5-23=-2117/ S=-2491/307, 8-9=-305/	/330, 6-23=-2117/330, 2/375, 9-27=-2605/249,
BOT CHORD	2-28=-198/2857, 17-28=-198/2857, 17-29=-198/2857, 16-29=-198/2857, 1 30-31=-62/2224, 14-31=-62/2224, 13-14=-125/2338, 13-32=-125/2338, 32	5-16=-198/2857, 15-30 -33=-125/2338, 12-33=	=-62/2224, 125/2338
WEBS	5-15=-30/903, 6-15=-362/75, 6-14=-392/75, 7-14=-68/962, 8-14=-483/175, 8-12=-58/428, 10-12=-181/2693	9-12=-1171/233, 3-15	=-828/195, 3-17=0/315,
NOTES			

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

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=47ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 3-8-10, Interior (1) 3-8-10 to 17-8-13, Exterior (2) 17-8-13 to 22-5-7, Interior (1) 22-5-7 to 29-8-11, Exterior (2) 29-8-11 to 34-5-5, Interior (1) 34-5-5 to 47-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 2 and 167 lb uplift at joint 11.

7) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	T1C	Piggyback Base	2	1	Job Reference (optional)

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### Scale = 1:85.3

Plate Offsets (X, Y):	[5:0-4-0,0-2-4],	[7:0-2-8,0-2-1], [11:E	Edge,0-3-8]										
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.27	14-15	>999	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.49	14-15	>999	180			
BCLL	0.0*	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.10	11	n/a	n/a			
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 342 lb	FT = 20%	

LUMBER		BRACING					
TOP CHORD	2x4 SP No.1 *Except* T2,T1:2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals,				
BOT CHORD	2x6 SP No.2		and 2-0-0 oc purlins (4-0-11 max.): 5-7.				
LUMBER TOP CHORD 2x4 SP No.1 *Except* T2,T1:2x6 SP No.2 BOT CHORD 2x6 SP No.2 WEBS 2x4 SP No.3 *Except* W8:2x4 SP No.2 REACTIONS (Ib/size) 2=1941/0-3-8, (min. 0-3-3), 11=1880/ Mechanical, (min. 0-1-8 Max Horiz 2=202 (LC 10) Max Uplift 2=-197 (LC 11), 11=-167 (LC 11) Max Grav 2=2025 (LC 19), 11=1914 (LC 20) FORCES TOP CHORD (Ib) - Max. Comp./Max. Ten All forces 250 (Ib) or less except whe 2-21=-3317/286, 3-21=-3126/318, 3-4=-2565/294, 4-22=-2465/296 6-24=-2115/323, 24-25=-2115/323, 7-25=-2487/3	2x4 SP No.3 *Except* W8:2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.				
REACTIONS	(lb/size) 2=1941/0-3-8 (min 0-3-3) 11=1880/ Mechanical (min 0-1-8)	WEBS	1 Row at midpt 6-15, 6-14, 8-14, 3-15				
	Max Horiz 2=202 (LC 10) Max Uplift 2=-197 (LC 11), 11=-167 (LC 11) Max Grav 2=2025 (LC 19), 11=1914 (LC 20)		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.				
FORCES TOP CHORD	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown 2-21=-3317/286, 3-21=-3126/318, 3-4=-2565/294, 4-22=-2465/296, 5-22=- 6-24=-2115/323, 24-25=-2115/323, 7-25=-2115/323, 7-26=-2487/339, 8-26 10-27=-2687/241, 10-11=-1862/193	ı. 2450/326, 5-23=-2122 =-2500/307, 8-9=-308	2/330, 6-23=-2122/330, 0/376, 9-27=-2630/251,				
BOT CHORD	2-28=-202/2884, 17-28=-202/2884, 17-29=-202/2884, 16-29=-202/2884, 1	5-16=-202/2884, 15-30	)=-64/2231,				

 BOT CHORD
 2220-202/2004, 17-29-202/2004, 10-29-202/2004, 10-29-202/2004, 10-30-202/200

### NOTES

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

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=47ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 3-8-10, Interior (1) 3-8-10 to 17-8-13, Exterior (2) 17-8-13 to 22-5-7, Interior (1) 22-5-7 to 29-8-11, Exterior (2) 29-8-11 to 34-5-5, Interior (1) 34-5-5 to 47-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 2 and 167 lb uplift at joint 11.

7) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	T1GE	Piggyback Base Supported Gable	1	1	Job Reference (optional)

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Wed Jul 28 09:30:49 Page: 1 ID:gif6Yu5kc9gsJ8dWKow0Rrzs97d-bgjvxxh4CKzo3\_3yMR2qT2Y257KKhj2KsEYsknytb7q



## Scale = 1:83.2

Plate	Offsets (X,	Y): [2:0-2-8,0-0-7],	, [12:0-2-8,0-2-1], [18	:0-2-8,0-2-1]									
Load TCLI TCD BCLI BCD	<b>ling</b> _ (roof) L L L	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IBC2015/TPI2014	<b>CSI</b> TC BC WB Matrix-MS	0.06 0.03 0.12	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 29	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 394 lb	<b>GRIP</b> 244/190 FT = 20%
LUN TOP BOT WEE OTH SLIE	IBER CHORD CHORD S IERS DER	2x4 SP No.1 2x4 SP No.1 2x4 SP No.3 2x4 SP No.3 Left 2x4 SP No.3	1-10-1			BRACIN TOP CH BOT CH WEBS	<b>G</b> ORD ORD	Structur except e Rigid ce 1 Row a	al wood end ver eiling dir at midpt	l sheath ticals, ai ectly ap	ing dir nd 2-0- plied c	rectly applied or 6 -0 oc purlins (6-0 or 10-0-0 oc brac 18-39, 17-40, 13-44, 12-45,	6-0-0 oc purlins, -0 max.): 12-18. ing. 16-41, 15-42, 14-43, 11-46, 10-48, 19-37,
REA	ACTIONS A (Ib) - M M	Il bearings 47-2-0. 1ax Horiz 2=203 (L 1ax Uplift All uplift 37, 40, 4 1ax Grav All reaction 35, 36, 3 54, 55	C 10), 55=203 (LC 1) 100 (lb) or less at joir 1, 42, 43, 44, 46, 48, ons 250 (lb) or less a 7, 39, 40, 41, 42, 43,	0) tt(s) 2, 30, 31, 32, 33, 3 49, 50, 51, 52, 53, 54, t joint(s) 2, 29, 30, 31, 44, 45, 46, 48, 49, 50,	4, 35, 36, 55 32, 33, 34, 51, 52, 53,							20-30	
FOR Top	CHORD	(lb) - Max. Con 11-12=-216/28 18-59=-192/26	np./Max. Ten All for 8, 12-13=-192/263, 1 3, 18-19=-216/288	ces 250 (lb) or less exc 3-14=-191/263, 14-15=	ept when show -191/263, 15-	wn. 16=-191/263	, 16-17=-19	1/263, 17	-59=-19	91/263,			
NOT 1) 2)	ES Unbalance Wind: ASC and C-C C to 47-0-4 z	d roof live loads ha E 7-10; Vult=115mj orner (3) -1-0-0 to 3 one; cantilever left	ve been considered f ph (3-second gust) Vi 3-8-11, Exterior (2) 3- and right exposed ; e	or this design. asd=91mph; TCDL=6.0 8-11 to 17-8-13, Corne nd vertical left and righ	psf; BCDL=6.0 r (3) 17-8-13 to t exposed;C-C	0psf; h=30ft; o 22-5-7, Ext c for member	B=20ft; L=4 erior (2) 22- rs and forces	7ft; eave 5-7 to 29 s & MWF	=2ft; Ca -8-11, C RS for ı	it. II; Ex Corner (S reaction	p B; Er 3) 29-8 s show	nclosed; MWFRS 3-11 to 34-5-5, Ex vn; Lumber DOL=	6 (directional) terior (2) 34-5-5 =1.60 plate grip
3) 4) 5) 6) 7) 8)	Truss desi qualified bu Provide ad All plates a Gable requ Gable stud * This truss	igned for wind loads uilding designer as lequate drainage to are 2x4 MT20 unles uires continuous bot is spaced at 2-0-0 c s has been designe nambers	s in the plane of the t per ANSI/TPI 1. prevent water pondir s otherwise indicated ttom chord bearing. c. d for a live load of 20	russ only. For studs ex ng. .0psf on the bottom ch	posed to wind ord in all areas	(normal to t	he face), see stangle 3-06	e Standar -00 tall by	rd Indus / 2-00-0	try Gab	le End will fit I	I Details as applic	cable, or consult
9)	Provide me 35, 34, 33,	echanical connectio 32, 31, 30, 2.	on (by others) of truss	to bearing plate capab	le of withstand	ding 100 lb u	plift at joint(s	s) 2, 40, 4	1, 42, 4	43, 44, 4	16, 48,	49, 50, 51, 52, 5	3, 54, 37, 36,
10)	This truce i	is designed in acco	rdance with the 2015	International Building	Codo soction C	206 1 and r	oforoncod st	andard A	NICI/TD	11			

10) This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	Т2	Piggyback Base	9	1	Job Reference (optional)

 Job Reference (optional)

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 Page: 1

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Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	T2A	Piggyback Base	1	1	Job Reference (optional)

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LUMBER		BRACING				
TOP CHORD	2x4 SP No.1 *Except* T3:2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied, except end ve			
BOT CHORD	2x6 SP No.2		and 2-0-0 oc purlins (6-	0-0 max.): 5-7.		
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly app	blied or 10-0-0 oc bracing.		
WEDGE	Left: 2x4 SP No.3	WEBS	1 Row at midpt	8-9, 5-10, 7-9, 18-19, 6-10		
REACTIONS ( M	lb/size) 2=1367/0-3-8, (min. 0-2-2), 9=1305/0-3-8, (min. 0-2-1) Max Horiz 2=289 (LC 10) Max Uplift 2=-132 (LC 11), 9=-130 (LC 11)		MiTek recommends that installed during truss en Installation guide.	at Stabilizers and required cross bracing be rection, in accordance with Stabilizer		
Ν	Max Grav   2=1367 (LC 1), 9=1320 (LC 19)					
FORCES	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when s	hown.	0/407 0 00- 044/400			

TOP CHORD 2-26=-2051/141, 3-26=-1814/189, 3-4=-1734/244, 4-27=-1608/246, 5-27=-1587/274, 5-28=-838/197, 6-28=-841/196, 6-29=-842/196, 29-30=-840/196, 7-30=-838/197

 BOT CHORD
 2-17=-334/1663, 16-17=-239/1663, 15-16=-257/1619, 14-15=-169/1017, 13-14=-169/1017, 12-13=-169/1017, 11-12=-169/1017, 10-31=-102/347, 31-32=-102/347, 9-32=-102/347

 WEBS
 3-15=-528/232, 15-18=-88/762, 5-18=-86/769, 5-19=-328/108, 10-19=-342/107, 7-10=-87/1058, 7-9=-1204/164,

6-10=-423/120

# NOTES

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

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 2-3-6, Interior (1) 2-3-6 to 17-8-13, Exterior (2) 17-8-13 to 22-4-7, Interior (1) 22-4-7 to 29-8-11, Exterior (2) 29-8-11 to 32-7-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Provide adequate drainage to prevent water ponding.
 All plates are 2x4 MT20 unless otherwise indicated.

5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 132 lb uplift at joint 2 and 130 lb uplift at joint 9.

7) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	T2GE	Piggyback Base Supported Gable	1	1	Job Reference (optional)

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Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 12-18.

19-22

20-21, 18-23, 17-24, 16-25, 15-26, 14-27, 13-28, 12-29, 11-31, 10-32,

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

1 Row at midpt



BRACING TOP CHORD

BOT CHORD

WEBS

11	IM	RF	P
	J 141		-11

LUWIDER	
TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
	Left Ov4 CD Ne 2

UTHERS	2X4 SF NU.3
SLIDER	Left 2x4 SP No.3 1-10-1

**REACTIONS** All bearings 32-9-8.

(lb) - Max Horiz 2=291 (LC 10), 40=291 (LC 10) Max Uplift All uplift 100 (lb) or less at joint(s) 2, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31, 32, 33, 34, 35, 36, 37, 39, 40 Max Grav All reactions 250 (lb) or less at joint(s) 2, 21, 22, 23, 24, 25, 26,

27, 28, 29, 31, 32, 33, 34, 35, 36, 37, 39, 40

(Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. RD 3-4=-307/288, 4-5=-268/255

FORCES TOP CHORD

NOTES

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

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=33ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -1-0-0 to 2-3-6, Exterior (2) 2-3-6 to 17-8-13, Corner (3) 17-8-13 to 21-0-3, Exterior (2) 21-0-3 to 29-8-11, Corner (3) 29-8-11 to 32-7-12 zone; cantilever left and right exposed; end vertical left and right exposed; 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) Provide adequate drainage to prevent water ponding.

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

6) Gable requires continuous bottom chord bearing.

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

8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit 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) 21, 2, 23, 24, 25, 26, 27, 28, 29, 31, 32, 33, 34, 35, 36, 37, 39, 22, 2.

10) This truss is designed in accordance with the 2015 International Building Code section 2306.1 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.



3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 1, 109 lb uplift at joint 8 and 58 lb uplift at joint 13.

5) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type		Otv	Plv	Fllir	naton Cr	awl V5	Roof		
Q-2101675-1	T3GE	Common Supporte	d Gable	1	1						
Peak Truss Builders LLC. New	Hill. user		Run: 8.4	3 S Feb 3 202	21 Print: 8.4	Job 30 S Feb	Referer 3 2021 M	nce (opt liTek Indu	ional) istries.	Inc. Wed Jul 28 09	:30:52 Page:
· , · , · ,	,			ID:(	)gS?bb9tQi	18PvVU6L\	VB8uzs97	Y-?F01	ZzkyVF	LNwRoX2acX5gA	/ILHOu3QnYCnWL6ytb7
	1	12-0-8						25_7	-0		26-7-0
	1	12-9-8		1				12-9	-8		1-0-0
				3×4 -							
				3x4 - 8							
				<u>م</u>		3x4 👟					
			7	/	<sup>₹</sup> 2 9	) 10					
			T		P						
		, <u>12</u> 6					11				
		5 T1					$\mathbb{N}$	<u> </u>			
o			ете		ете			_B_			
-9-6 -6		4			310		TE		<u>13</u>	13	
			315			3	515	0.74		PA -	
	3							314			4
	2	315									15
4										312	16
								B <sub>B2</sub>			
U	<sup>⊠</sup> 30 29	28 27	26 25 24	*******	23	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	22 22	21 ×		20 19	18 √
	3x6 <b>II</b>		3x4=								3x5 <b>n</b>
Scale = 1:48.1	<u>k</u>			25-7-0							ł
Plate Offsets (X, Y): [8:0-2	2-0,Edge], [16:Edge,0-4-9	1									I
	(nsf) Snacing	2-0-0	CSI		DEFI		(loc)	l/defl	l /d	PLATES	GRIP
TCLL (roof)	20.0 Plate Grip DO	L 1.15	TC	0.26	Vert(LL)	0.08	28-29	>999	240	MT20	244/190
TCDL BCLL	10.0 Lumber DOL 0.0* Rep Stress Inc	r 1.15 Sr YES	BC WB	0.32	Vert(CT) Horz(CT)	-0.11 0.01	28-29 16	>731 n/a	180 n/a		
BCDL	10.0 Code	IBC2015/TPI2014	Matrix-MS		( )					Weight: 160 lb	FT = 20%
LUMBER				BRACING	i						
TOP CHORD 2x4 SP	No.1			TOP CHO	RD	Structu	iral wood	d sheath	ning di	rectly applied or	6-0-0 oc purlins,
WEBS 2x4 SP	No.3			вот сно	RD	Rigid c	eiling dir	rectly ap	plied	or 10-0-0 oc bra	cing.
OTHERS 2x4 SP SLIDER Right 2x	No.3 4 SP No.3 0-9-15					MiTek	recomm	ends th	at Sta	bilizers and requ	uired cross bracing be with Stabilizer
REACTIONS All bearing	s 19-11-0. except 31=0-3-	8				Installa	ation gui	de.	5100010	n, in accordance	
(lb) - Max Horiz Max Uplift	31=-158 (LC 9) All uplift 100 (lb) or less a	at joint(s) 19, 20, 21, 22, 26	except								
May Grav	18=-101 (LC 11), 27=-18	7 (LC 11)									
	26 except 16=268 (LC 19	ess at joint(3) 10, 10, 20, 21 9), 24=279 (LC 19), 27=587	, LC 19),								
FORCES (lb) -	ы = 305 (LC 1), 32=268 ( Max. Comp./Max. Ten 4	LC 19) All forces 250 (lb) or less ex	cept when show	n.							
WEBS 5-27=	295/126		,								
NOTES 1) Unbalanced roof live	loads have been conside	ered for this design.									
2) Wind: ASCE 7-10; V and C-C Corper (3)	ult=115mph (3-second gu	st) Vasd=91mph; TCDL=6.0	0psf; BCDL=6.0p	psf; h=30ft; E	8=20ft; L=2	26ft; eave	e=2ft; Ca	at. II; Ex	p B; E	nclosed; MWFR	S (directional)
				h_9_8 Hyteri	ס_ס_15 (2) r	-8 to 26-	/ - 11 / 1000				osed · end
vertical left and right	exposed;C-C for membe	rs and forces & MWFRS for	reactions show	5-9-8, Exterio n; Lumber D	or (2) 15-9 OL=1.60 p	blate grip	DOL=1.	60			osed ; end

4)

5)

All plates are 2x4 MT20 unless otherwise indicated. Gable studs spaced at 2-0-0 oc. \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. Deside use begins are the trust interval of them to be a section of the trust tending 400 lb weith the interval of 20.0psf on the 20.0psf. 6)

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26, 22, 21, 20, 19 except (jt=lb) 27=187, 18=100. This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1. 7)

8)



3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 5 and 76 lb uplift at joint 9.

5) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	Т5	Monopitch	6	1	Job Reference (optional)

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10-10-12

5-6-12







Scale = 1:29

## Plate Offsets (X, Y): [2:0-3-4,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.01	6-9	>999	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.03	6-9	>999	180			
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a			
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 40 lb	FT = 20%	

LUMBER TOP CHORD BOT CHORD WEBS	2x4 SP No.1 2x4 SP No.1 2x4 SP No.3	BRACING TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (Ib	/size) 2=229/0-3-8, (min. 0-1-8), 5=182/ Mechanical, (min. 0-1-8), 6=509/0-3-8, (min. 0-1-8) ax Horiz 2=82 (LC 10)		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
Ma	ax Uplift 2=-39 (LC 11), 5=-15 (LC 11), 6=-54 (LC 11) (lb) - Max Comp /Max Ten - All forces 250 (lb) or less except when show	n	

FORCES 3-6=-367/119

WEBS NOTES

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 1) and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 10-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

\* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 2) any other members.

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

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 5, 39 lb uplift at joint 2 and 54 lb uplift at joint 6. 4)

5) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	T5GE	Monopitch Supported Gable	1	1	Job Reference (optional)

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

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

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

except end verticals.

Installation guide.





Scale = 1:26.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MS							Weight: 45 lb	FT = 20%

10-10-12

BRACING

TOP CHORD

BOT CHORD

## LUMBER

TOP CHORD 2x4 SP No.1 2x4 SP No.1 BOT CHORD 2x4 SP No.3 WFBS OTHERS 2x4 SP No.3

REACTIONS All bearings 10-10-12.

(lb) - Max Horiz 2=82 (LC 10), 11=82 (LC 10)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 7, 8, 9, 10, 11

Max Grav All reactions 250 (lb) or less at joint(s) 2, 7, 8, 9, 11 except

10=395 (LC 1)

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

WEBS 3-10=-258/110

NOTES

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 1) and C-C Corner (3) -1-0-0 to 2-0-0, Exterior (2) 2-0-0 to 10-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) 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.

All plates are 2x4 MT20 unless otherwise indicated. 3)

Gable requires continuous bottom chord bearing. 4)

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

6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit 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) 2, 7, 8, 9, 10, 2. 7

This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1. 8)

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	Т6	Common	3	1	Job Reference (optional)

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Wed Jul 28 09:30:53 Page: 1 ID:Vs0NpxAVB?Q?134gg31Qh6zs97X-TRyQnlkaGZTEYbNjbH7mdujhglhcdYZwnsW3tYytb7m





Scale = 1:28.5

## Plate Offsets (X, Y): [5:Edge,0-3-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	0.00	6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	6	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MR							Weight: 26 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 5-11-8 oc purlins,
BOT CHORD	2x4 SP No.1		except end verticals.
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (Ib Ma Ma	o/size) 5=298/0-3-8, (min. 0-1-8), 7=215/ Mechanical, (min. 0-1-8) ax Horiz 7=-55 (LC 9) ax Uplift 5=-58 (LC 11), 7=-17 (LC 11)		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
FORCES	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when sh	own.	
TOP CHORD	3-5=-256/88		

#### NOTES

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

2-8-11

3-0-1

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 2) and C-C Exterior (2) 0-3-4 to 5-9-12, Interior (1) 5-9-12 to 6-11-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

\* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 3) any other members.

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

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 7 and 58 lb uplift at joint 5. 5)

6) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	T6GE	Common Supported Gable	1	1	Job Reference (optional)

 Run: 8.43 S
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 ID:Vs0NpxAVB?Q?134gg31Qh6zs97X-xdWo\_elD0sb4Alyw9
 ID:Vs0NpxAVB?Q?134gg31Qh6zs97X-xdWo\_elD0sb4Alyw9
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3x5 и

Scale = 1:25.5

### Plate Offsets (X, Y): [5:Edge,0-4-9]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MP							Weight: 29 lb	FT = 20%

#### LUMBER

 TOP CHORD
 2x4 SP No.1

 BOT CHORD
 2x4 SP No.1

 WEBS
 2x4 SP No.3

 OTHERS
 2x4 SP No.3

 SLIDER
 Right 2x4 SP No.3 -- 1-0-11

REACTIONS All bearings 5-11-8.

(lb) - Max Horiz 10=-51 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 5, 7, 9, 10, 11

Max Grav All reactions 250 (lb) or less at joint(s) 5, 7, 8, 9, 10, 11

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

FORCES

NOTES

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

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) 0-1-12 to 5-11-8, Exterior (2) 5-11-8 to 6-11-8 zone; cantilever left and right exposed ; end vertical left and right exposed; 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 live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit 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) 10, 5, 9, 7, 5.

8) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

5-11-8

Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing. MiTek recommends that Stabilizers and required cross bracing be

installed during truss election, in accordance with Stabilizer Installation guide.



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

## NOTES

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60

2) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 3 and 51 lb uplift at joint 2.

4) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

5) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

6) 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 (lb/ft)

Vert: 1-2=-60, 3-4=-20

Concentrated Loads (Ib)

Vert: 3=-203 (B), 6=-195 (B), 7=-195 (B)

lab	Truce		Trues Tures					ton Cro			1
0 2101675 1	Tiuss				Qiy	Piy	Ening	lon Cra	wi v5-R00i		
Q-2101075-1	V1		Valley		1	1	Job F	Referenc	e (optional	)	
Peak Truss Builder	s LLC, New Hill, user	↓   	1 3x4s 11 2 3 17	4	13-10-2 13-10-2 13-10-2	1 Print: 8.4: D:v?qnEnlji	30 S Feb 3 MYX?tNuetc	2021 MiT	ek Industries vt-xdWo_elD	, Inc. Wed Jul 28 09 00sb4Alyw9?e?A5Fn 14-4-1 0-5-15	30:54 Page: 1 W817Mz030WGdP_ytb7I
Scale = 1:39.3		)-3 <u>-8</u> 16	ST1 4 u 15	ST2	13 14-4-1	6 ST4 12	7 ST5 11		8 \$16 10	9 3x4 \	
Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.53	<b>)EFL</b> /ert(LL)	in n/a	(loc) -	l/defl L/c n/a 999	MT20	<b>GRIP</b> 244/190
TCDL BCLL BCDL	10.0 0.0* 10.0	Lumber DOL Rep Stress Incr Code	1.15 YES IBC2015/TPI2014	BC WB Matrix-S	0.11 N 0.14 H	′ert(TL) loriz(TL)	n/a 0.00	- 9	n/a 999 n/a n/a	9 a Weight: 90 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS REACTIONS A (lb) - M M	2x4 SP No.1 2x4 SP No.1 2x4 SP No.3 2x4 SP No.3 Il bearings 14-4-1. 1ax Horiz 16=-230 1ax Uplift All uplift 1ax Grav All reaction	(LC 7) 100 (Ib) or less at joi ons 250 (Ib) or less a	nt(s) 9, 10, 11, 12, 13, 1 at joint(s) 9, 10, 11, 12, ′	4, 15, 16 13, 14, 15,	BRACING TOP CHOI BOT CHOI WEBS	RD RD	Structura except e Rigid cei 1 Row at MiTek re installed Installati	al wood and vertice ling dire t midpt ecomme l during ion guide	sheathing c cals. ctly applied nds that St truss erecti e.	directly applied or d or 10-0-0 oc bra 1-16 abilizers and requion, in accordance	6-0-0 oc purlins, cing. iired cross bracing be with Stabilizer
FORCES TOP CHORD BOT CHORD NOTES 1) Wind: ASC and C-C E MWFRS fc 2) All plates a	16 (Ib) - Max. Con 7-18=-263/272 15-16=-266/26 E 7-10; Vult=115m xterior (2) 0-1-12 to or reactions shown; are 2x4 MT20 unles	np./Max. Ten All fo , 8-18=-270/254, 8-5 8, 14-15=-266/268, ph (3-second gust) V 3-1-12, Interior (1) 3 Lumber DOL=1.60 g s otherwise indicated	rces 250 (lb) or less exc =-302/307 13-14=-266/268, 12-13= /asd=91mph; TCDL=6.0 3-1-12 to 13-10-0 zone; Jate grip DOL=1.60 d.	cept when show =-266/268, 11-12 Dpsf; BCDL=6.0 cantilever left a	n. 2=-266/268, <sup>-</sup> psf; h=30ft; B nd right expo	0-11=-26 =20ft; L=2 sed ; end	6/268, 9-10 20ft; eave= vertical lef	0=-266/: 4ft; Cat. t and rig	268 II; Exp B; ht exposed	Enclosed; MWFR d;C-C for member	S (directional) s and forces &

3)

Gable requires continuous bottom chord bearing. \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 4) any other members.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 15, 14, 13, 12, 11, 10, 9. This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1. 5)

6)



Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 1) and C-C Exterior (2) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 11-6-9 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Gable requires continuous bottom chord bearing. 2)

\* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 3) any other members, with BCDL = 10.0psf.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 6, 5. 4)

5) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

Job	Truss		Truss Type		Qty	F	Ply	Elling	ton Cr	awl V5-	Roof		
Q-2101675-1	V3		Valley		1	1	1	Job R	Referer	nce (opt	ional)		
Peak Truss Builders LLC, I	New Hill, user			Run: 8.43	S Feb 32	021 Prin	nt: 8.430 \$	S Feb 3:	2021 M	iTek Indu	istries,	Inc. Wed Jul 28 09:	30:55 Page: 1
						ID:tMI	IEvP1Hso	cLA3QrzF	RpbiGG	zs8sw-P	q4AB_ı	mrnAjxnvX6ji9EjJo0	0fYM55SXDEA?AyRytb7k
			I								9-9	9-3	
			<u>,</u>		9-3	<u>3-4</u>						-	
					9-3	5-4					0-5	-15	
											00	10	
			2x4 II										
	_	0-3- <u>8</u>	7 2x4 II	2x4 II 2 ST1 5T1 6 2x4 II		27	2x4   3 5 5 2x4	-			4 2x4 \$		
Scale = 1:32.5			<u> </u>		ç	9-9-3						+	
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IBC2015/TPI2014	CSI TC BC WB Matrix-S	0.25 0.07 0.06	DEFL Vert(L Vert(T Horiz(	- _L) [L) (TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 46 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S OTHERS 2x4 S REACTIONS All bear (lb) - Max Ho Max Up Max Gra	SP No.1 SP No.1 SP No.3 SP No.3 SP No.3 ings 9-9-3. riz 7=-153 (I ift All uplift All uplift All reacti 1), 6=29	LC 7) 100 (Ib) or less at joir ons 250 (Ib) or less a 1 (LC 17)	nt(s) 5, 6, 7 tt joint(s) 4, 7 except 5=	-284 (LC	BRACIN TOP CH	<b>G</b> ORD ORD	S e R I i i	Structura except er Rigid ceil MiTek re Installed	Il wood nd vert ling dir comm during on guid	l sheath icals. ectly ap ends th g truss o de.	ning di oplied at Sta erectio	rectly applied or or 10-0-0 oc brac bilizers and requ n, in accordance	6-0-0 oc purlins, cing. ired cross bracing be with Stabilizer
FORCES (Ib	) - Max. Con	np./Max. Ten All fo	rces 250 (lb) or less exc	cept when showr	ı.								

NOTES

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-1-12 to 4-4-11, Interior (1) 4-4-11 to 9-3-2 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 1)

2) Gable requires continuous bottom chord bearing.

\* This trus's has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 3) any other members, with  $\breve{BCDL} = 10.0psf$ .

4)

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 6, 5. This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1. 5)

Job	Truss		Truss Type		Qty	Ply	Ellin	gton Cr	awl V5-	Roof		1
Q-2101675-	1 V4		Valley		1	1	Jak	- Dofora	00 /0	ionell		
Peak Truss Build	ers LLC, New Hill, user		,	Run: 8.4	3 S Feb 3 2021	Print: 8.43	30 S Feb 3	Referen 3 2021 Mi	ice (opt	ustries,	Inc. Wed Jul 28 09:	30:56 Page: 1
			<u></u>		ا <u>6-11</u> ، 6-11،	D:oxHidfR` - <u>14</u> -14	YOZA7gub	Y40DCn	xzs8th-t0	0eYPKn	TYUroP36IHPgTF\	VLB3yjPqvqMTqlkUtytb7j
		0-3- <u>8</u>	2x4 II V1 5 2x4 II 2x4 II			7 2x4 II ST1 4 2x4 II	6		2x4	3		
Scale = 1:28.2			<u>}</u>		7-	5-13						
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IBC2015/TPI2014	CSI TC BC WB Matrix-P	0.21 V 0.06 V 0.05 H	EFL ert(LL) ert(TL) oriz(TL)	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: 31 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS REACTIONS	2x4 SP No.1 2x4 SP No.1 2x4 SP No.3 2x4 SP No.3 (Ib/size) 3=78/7-5 5=123/7- Max Horiz 5=-115 (I Max Uplift 4=-76 (L Max Gray 3=93 (I C	5-13, (min. 0-1-8), 4=: -5-13, (min. 0-1-8) LC 7) C 11), 5=-12 (LC 7) 2 16), 4=346 (LC 1)	346/7-5-13, (min. 0-1-8) 5=125 (LC 17)	),	BRACING TOP CHOR BOT CHOR	:D :D	Structur except of Rigid ce MiTek r installe Installa	al wood end vert eiling dir ecomm d during tion guid	I sheath icals. ectly ap ends th g truss o de.	ning dir oplied o aat Sta erectio	rectly applied or i or 10-0-0 oc brac bilizers and requ n, in accordance	6-0-0 oc purlins, sing. ired cross bracing be with Stabilizer
FORCES WEBS NOTES 1) Wind: AS and C-C MWFRS 2) Gable red 3) * This tru any other	(lb) - Max. Cor 2-4=-259/128 CCE 7-10; Vult=115m Exterior (2) 0-1-12 to for reactions shown; quires continuous bo ss has been designed members.	ph (3-second gust) V ph (3-sec	rces 250 (lb) or less exc asd=91mph; TCDL=6.0 -4-11 to 6-11-11 zone; c late grip DOL=1.60 0.0psf on the bottom cho	ept when show 0psf; BCDL=6.0 cantilever left ar ord in all areas	n. psf; h=30ft; B= nd right expos where a recta	=20ft; L=2 ed ; end v ngle 3-06	20ft; eave vertical le -00 tall by	=4ft; Ca ft and rig / 2-00-0	it. II; Ex ght exp 0 wide	p B; E osed;C will fit	nclosed; MWFR C-C for members between the bott	S (directional) and forces & com chord and

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 5 and 76 lb uplift at joint 4.
 5) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	V5	Valley	1	1	Job Reference (optional)

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Scale = 1:23.8

					_								
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	тс	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999			
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a			
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%	

# LUMBER

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

**REACTIONS** (lb/size) 3=87/5-2-6, (min. 0-1-8), 4=233/5-2-6, (min. 0-1-8), 5=44/5-2-6, (min. 0-1-8)

Max Horiz 5=-76 (LC 7)

Max Uplift 4=-51 (LC 11), 5=-9 (LC 7)

Max Grav 3=89 (LC 16), 4=233 (LC 1), 5=47 (LC 17)

5-0-10

0-348

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

#### NOTES

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 1) and C-C Exterior (2) 0-1-12 to 4-4-11, Interior (1) 4-4-11 to 4-8-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

\* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 3) any other members.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 5 and 51 lb uplift at joint 4. 4)

This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1. 5)

LOAD CASE(S) Standard BRACING TOP CHORD BOT CHORD

5-2-6

Structural wood sheathing directly applied or 5-2-13 oc purlins, except end verticals.

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.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	V6	Valley	1	1	Job Reference (optional)

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Wed Jul 28 09:30:56 Page: 1 ID:Jr1LRd\_Gfh39HSQU2p33wezs8vZ-t0eYPKnTYUroP36IHPgTFWLEzyjFqvOMTqlkUtytb7j







2-10-15



ocale - 1.20.0					1				1				
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(TL)	n/a	-	n/a	999			
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a			
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%	

LUMBER		BRACING	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 2-11-6 oc purlins,
BOT CHORD	2x4 SP No.1		except end verticals.
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.3		MiTek recommends that Stabilizers and required cross bracing be
REACTIONS (I	b/size) 3=46/2-10-15, (min. 0-1-8), 4=116/2-10-15, (min. 0-1-8),		installed during truss erection, in accordance with Stabilizer
	5=18/2-10-15, (min. 0-1-8)		Installation guide.
N	/lax Horiz 5=-38 (LC 7)		
N	/lax Uplift 4=-25 (LC 11), 5=-5 (LC 7)		
N	lax Grav 3=47 (LC 16), 4=116 (LC 1), 5=19 (LC 17)		
FORCES	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown	I.	

## NOTES

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; cat. II; Exp B; Enclosed; MWFRS (directional) 1) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 5 and 25 lb uplift at joint 4. This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1. 4)

5)

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	V7	Valley	1	1	Job Reference (optional)

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Scale = 1:29.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999			
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	4	n/a	n/a			
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MP							Weight: 35 lb	FT = 20%	

# LUMBER

LUMBER TOP CHORD	2x4 SP No.1	BRACING TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins,
WEBS OTHERS	2x4 SP No.1 2x4 SP No.3 2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. MiTek recommends that Stabilizers and required cross bracing be
REACTIONS (	lb/size) 1=124/8-3-6, (min. 0-1-8), 4=121/8-3-6, (min. 0-1-8), 5=406/8-3-6, (min. 0-1-8)		installed during truss erection, in accordance with Stabilizer Installation guide.
Ν	/lax Horiz 1=131 (LC 8)		
N	/ax Uplift 4=-14 (LC 8), 5=-82 (LC 11)		
Ν	/lax Grav 1=132 (LC 17), 4=124 (LC 16), 5=406 (LC 1)		
FORCES WEBS	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when sh 2-5=-287/131	own.	

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 1) and C-C Exterior (2) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 8-2-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2)

 

 Gable requires continuous bottom chord bearing.

 \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and

 3) any other members.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 4 and 82 lb uplift at joint 5. 4)

This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1. 5)



Max Horiz 1=92 (LC 8)

Max Uplift 4=-10 (LC 8), 5=-56 (LC 11)

Max Grav 1=95 (LC 17), 4=89 (LC 16), 5=291 (LC 1)

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

NOTES

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-7 to 2-11-15, Interior (1) 2-11-15 to 5-10-10 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 4 and 56 lb uplift at joint 5.

5) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	V9	Valley	1	1	Job Reference (optional)

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Scale = 1:17.9			-		3-	8-8			$\downarrow$			
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	тс	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MP							Weight: 13 lb	FT = 20%
					BRACIN	6						

2x4 💋

LUWDER		DRACING	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 3-8-8 oc purlins,
BOT CHORD	2x4 SP No.1		except end verticals.
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (	lb/size) 1=142/3-8-8, (min. 0-1-8), 3=142/3-8-8, (min. 0-1-8) Max Horiz 1=54 (LC 8) Max Uplift 1=-6 (LC 11), 3=-19 (LC 11)		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
FORCES	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when sh	nown.	

NOTES

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 1) and C-C Exterior (2) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 3-7-3 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2)

Gable requires continuous bottom chord bearing. \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 3) any other members.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 3 and 6 lb uplift at joint 1.

This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1. 5)

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	V10	Valley	1	1	Job Reference (optional)

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2x4 🛛

2-4-13



3 □





2x4 II

Scale = 1:18.6					5-11	-14					$\rightarrow$		
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IBC2015/TPI2014	CSI TC BC WB Matrix-MR	0.09 0.04 0.04	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 23 lb	<b>GRIP</b> 244/190 FT = 20%	
			;		BRACIN	G			· · ·				

EQUIDEIX		Diatonito	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 5-11-14 oc purlins,
BOT CHORD	2x4 SP No.1		except end verticals.
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.3		MiTek recommends that Stabilizers and required cross bracing be
REACTIONS (	lb/size) 4=92/5-11-14, (min. 0-1-8), 5=271/5-11-14, (min. 0-1-8),		installed during truss erection, in accordance with Stabilizer
	6=92/5-11-14, (min. 0-1-8)		Installation guide.
Ν	Max Horiz 6=59 (LC 8)		
Ν	Max Uplift 4=-5 (LC 11), 5=-38 (LC 11)		
FORCES	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when sho	wn.	

## FORCES NOTES

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-1-12 to 2-11-15, Interior (1) 2-11-15 to 5-10-2 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & 1) MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 4 and 38 lb uplift at joint 5.

5) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Ellington Crawl V5-Roof
Q-2101675-1	V11	Valley	1	1	Job Reference (optional)

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2







3x4 =

2x4 II

4-2-5

Scale = 1:15.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IBC2015/TPI2014	Matrix-MP		. ,					Weight: 12 lb	FT = 20%

LUMBER           TOP CHORD         2x4 SP No.1           BOT CHORD         2x4 SP No.1           WEBS         2x4 SP No.3	BRACING TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 4-2-5 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (Ib/size) 1=162/4-2-5, (min. 0-1-8), 3=162/4-2-5, (min. 0-1-8) Max Horiz 1=24 (LC 8) Max Uplift 1=-13 (LC 11), 3=-16 (LC 11)		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
FORCES         (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when sho           TOP CHORD         1-6=-368/87           BOT CHORD         1-3=-117/350	wn.	

NOTES

Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-1-0 to 3-1-0, Interior (1) 3-1-0 to 4-1-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 3 and 13 lb uplift at joint 1.

5) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.