### ASCE/SEI 7-05 Snow Load Assessment

**Client:** Excel Homes Job Number: EXLH042314-42 Description: 31217 Calcs.

Design Parameters:	
Eave to ridge Distance, W =	13 ft
Ground Snow Load, pg =	50 psf
Exposure Factor, $C_e =$	1.0
Thermal Factor, $C_t =$	1.1
Importance Factor, Is =	1.0
Framing Type: Tru	isses/Other
Snow Density ( $\gamma$ ):	
$\gamma = 0.13 p_{r} + 14 =$	20.5 pcf
but not more than 30 p	of
Flat-Roof Snow Load (p f):	
$p_f = 0.7C_e C_t IP_g =$	38.5 psf
Rain on Snow Surcharge:	

Sloped Roof Snow Loads:

	а		$C_s$		ps
	(deg)	C <sub>t</sub> = 1.0	C <sub>t</sub> = 1.1	C <sub>t</sub> = 1.2	(psf)
-	45.0	0.63	0.77	1.00	29.6

Ice Dams Along Eves<sup>2</sup>:

P<sub>LW</sub> Length

(ft)

3.5

Eave (psf)

29.6

 $p_{s} = 2 p_{f} =$ 29.6 psf

Minimum Roof Live Load (Lr): (IBC 1607.11.2.1):

$R_1 =$	1.0
$R_2 =$	0.6
F =	12.0
$L_r = 20 R_1 R_2 =$	12.0 psf
$12 \le L_r \le 20$	

Rai

	amax =	0.26 deg
pg <= 20 psf	prss =	0.0 psf
	pf =	38.5 psf

Minimum Values for Low-Slope Roofs:

Applicable to roof slopes less than

Mon	oslope roofs =	15.0 deg
or $a_{\min}$	= 70/W + 0.5 =	5.9 deg
		2.38 deg
	amin =	15.0 deg
p <sub>g</sub> <= 20 psf	$p_f = I_s P_g =$	50.0 psf
p <sub>q</sub> > 20 psf	$p_f = 20I_s =$	20.0 psf
	pfmin =	20.0 psf
	$p_f =$	38.5 psf

**Unbalanced Snow Loads:** 

Applicable to roof slopes betwe	en:		
a <sub>max</sub> =	70.00 deg		
$a_{\min} = 70/W + 0.5 =$	5.88 deg		
a <sub>min</sub> =	2.38 deg		
governing a <sub>min</sub> =	2.38 deg		
Unbalanced Loads:			
S =	1.00 /1	<b>P</b> ww	Ridge
$W = I_u = h_d =$	13.0 ft	(psf)	(psf)
h <sub>d</sub> =	1.31 ft	8.9	56.6

Notes: 1. Higher loads may apply were sliding snow or drifting occurs due to aerodynamic shade from higher protions of the building. 2. Applies only to unventilated roofs with less than R-30, and ventilated roofs with less than R-20. No other loads, except dead loads shall be present on the roof when this uniformly distributed load is applied.

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			oad Analysis	•	)				
		(Two-Sto	ory Building, Flexib	le Diaphragm)					
Client: Excel Hor		<i>M I</i> (	UCTURS		•				
Job Number: EXLH042		qu	HEIGHTS			<i></i>			
Description: 31217 Ca	ICS.								
ding Geometry:		Loading Cor	nditions:						
Ridge Length, B =	46.0 ft	•	Wind Speed =	100 mph					
Gable Width, L =	24.0 ft	Ex	oosure Category:	c					
Module Width =	15.5 ft								
Blocking Height, h <sub>b</sub> =	18.0 in.	Height Abov	e Grade:						
Sidewall/Eve Height, he =	244.0 in.	Storie	s Above Grade =	2					
Roof Slope, a =	12.0 /12 pit	ch Sie	dewall Eave (z) =	21.8 ft					
Roof slope, a =	45.0 deg.		Roof Peak (z) =	34.8 ft					
Sidewall Overhang, L <sub>OH</sub> =	12.0 in.	Mean I	Roof Height (h) =	28.3 ft					
Endwall Overhang, B <sub>OH</sub> =	12.0 in.	F	Foundation Type: F	Raised floor					
smic Design Parameters: Seismic Use Group: I	I AS	SD Adjustment Fa	actor = 0.7				Ground	Other	Roof
Importance Category, I <sub>E</sub> : 1		BC Seismic Desig			Wall Heig	ht, h <sub>w</sub> (in.)	108	96	n/a
Site Class: I		C Seismic Desig		,	Wall Dead W	eight (psf)	5	5	n/a
Response Factor, R: 6		5	SD <sub>S</sub> = 0.54	Floor/L	evel Dead W	eight (psf)	10	10	20
· · · · · · · · · · · · · · · · · · ·			Cs = 0.10		hord Dead W	• • •			10
				;	Seismic Live	Load (psf)	0	0	7.7
nsverse Diaphragm Param					·				
	Floor Wall Heigh			•	HO		ind Pres	sure (MWF)	<u> </u>
	Floor Wall Heigh					Net Wall	1	End Zone Interior	23.2 23.2
	al Roof Projection c. Framing Heigh		ovol			Net Roof		End Zone	0.0
Wisc	Blocking Heigh		6V61		Transverse	NELNUU		Interior	10.7
Ground Floo	r Endwall Weigh				l su	Max. Wal	1	End Zone	12.7
Above Ground Floo	-				Ta			Interior	12.7
	e Endwall Weigh					Max. Roo	of	End Zone	27.0
	-							Interior	16.3
		r			MW	FRS End Z	ione, 2a =	= 6.0	ft
						Wind	Se	smic	
Transverse Lateral I	Forces					Net	Weight		
2nd of 2 Story					End (plf)	176			
		$\nearrow$			Interior (plf)	245			
				Dia	aphragm (plf)		705	49	
				Transverse W	/alls (ibf/wall)		1260	87	
					, ,				
			Total For	ce to Transvers	e Walls (lbf)	10867		2425	
	`	*		Level	OTM (ft-kip)			19.4	
1st of 2 Story		$\wedge$			End (plf)				
	/	$\langle \rangle$			Interior (plf)				
	$\boldsymbol{\leftarrow}$				aphragm (plf)		325	23	
				Transverse W	/alls (lbf/wall)		540	. 37	
			T-4-1 F - ··	ce to Transvers	a Malla (Ita	21142		4400	
			I OTAL FOR		• •			4498 67.6	
Base of 2 Story		*		Level	OTM (ft-kip) End (plf)				
Base of 2 Story		$\land$			Interior (plf)				
		$\sim$ $\rightarrow$	LONTROUS	Di	aphragm (plf)		285	20	
	$\sim$		C	Transverse W			540	37	
(						1			

Transverse Walls (lbf/wall)--54037Total Transverse Force at Base (lbf)28152--5483Total OTM (ft-kip)344.1--73.7

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Client: Excel Homes

## Lateral Load Analysis (ASCE 7-05)

(Two-Story Building, Flexible Diaphragm)

m Parameters:			H	orizontal W	ind Press	ure (MWF
Ground Floor Wall Heig				Net Wall		Enc
Above Ground Floor Wall Heig						Interio
Vertical Roof Project			ina	Net Roof		En
Misc. Framing Heig			trd	Max. Wa		Interio En
Blocking Heig Ground Floor Sidewall Weig			Logitudinal	wax. wa	11	Interio
Above Ground Floor Sidewall Wei			4	Max. Roo	of	En
						Interio
			MV	/FRS End Z	Zone, 2a =	6.
· · · · · · · · · · · · · · · · · · ·			······	Wind	Seis	mic
Longitudinal Lateral Forces				Net	Weight	Net
2nd of 2 Story (Total)	$\wedge$		End Max (pl	) 245		
	$\langle \rangle$	с.	Min (pl	) 106		
$\leq$		CONTRACS	Interior Max (pl	· .		
		e	Min (pl			
			Diaphragm (pl		1435	100
			gitudinal Walls (lbf/wal	1	920	64 2518
	$\checkmark$	Total Force to L	ongitudinal Walls (lb Level OTM (ft-kip			2010
Roof Diaphgram Only			End Max (pl			
	$\langle \rangle$		Min (pl			
			Interior Max (pl	· I		
			Min (pl			
			Diaphragm (pl	D	870	60
		Roof Force to L	ongitudinal Walls (Ib	6) 1674		1449
Ceiling Diaphgram Only	$\wedge$		End Max (pl			
			Min (pl			
			Interior Max (pl			
			Min (pl Diaphragm (pl	· •	 565	 39
			Diaphiagin (pi	"		55
	$\checkmark$	Ceiling Force to L	ongitudinal Walls (Ib			1069
1st of 2 Story	$ \land $		End Zone (pl	f) 223		
	$\sim$ $\rightarrow$	Contracts	Interior (pl	0 223		
		Contra	interior (pr	·		
			Diaphragm (pl	n	503	35
			gitudinal Walls (lbf/wa	· 1	1035	72
		Total Force to L	ongitudinal Walls (Ib			3627
			Level OTM (ft-ki			59.6
Base of 2 Story			End Zone (pl	f) 141		
/	$\langle \rangle$	CONTROLS	Interior (pl	n) 141		
		CONTRACT	intenoi (p	"		
			Diaphragm (pl	n	463	32
		Lon	gitudinal Walls (lbf/wa	1)	1035	72
		Total Longitudi	inal Force at Base (Ib	<b>f)</b> 15186		4542
	¥	2	Total OTM (ft-ki	) 195.0		60.1

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## Lateral Load Analysis (ASCE 7-05) (Two-Story Building, Flexible Diaphragm)

Location         Stiffner           Transverse Walls         Wall         Along Length, X         Rx					
Transverse Walls         Wall         Wall         Along Length, X         Rx	65				Governing
	R <sub>x</sub> X	d	R <sub>x</sub> d	R <sub>x</sub> d²	Lateral Loads (lbf)
Bracing 2nd Story Line Length (ft) (in.) (k/in.	) (k)	(ft)	(k)	(ft-k)	Wind Seismic
1 0.0					5616 1213
2 46.0					5616 1213
3					
5					
9					
10					
$\Sigma = 0.0$	0				<u>_</u>
CR <sub>x</sub>		ft			
Location Stiffnes			р <i>а</i>	R <sub>y</sub> d²	Governing
Longitudinal Walls Wall Wall Along Width, Y R <sub>y</sub>		d (fr)	R <sub>y</sub> d		Lateral Loads (lbf)
Bracing 2nd Story         Line         Length         (ft)         (in.)         (k/in.)           A         0.0 <td>) (k)</td> <td>(ft)</td> <td>(k)</td> <td>(ft-k)</td> <td>Wind         Seismic           3223         1259</td>	) (k)	(ft)	(k)	(ft-k)	Wind         Seismic           3223         1259
B 24.0					3223 1259
C 24.0					
D					
E					
F					
G					
Н					
$\Sigma = 0.0$	0.0				
CR <sub>y</sub>	,=	ft			1
Overall J					
Location Stiffnes				•	Governing
Transverse Walls Wall Wall Along Length, X R <sub>x</sub>		d	R <sub>x</sub> d	R <sub>x</sub> d <sup>2</sup>	Lateral Loads (lbf)
Bracing 1st Story Line Length (ft) (in.) (k/in.	) (k)	(ft)	(k)	(ft-k)	Wind Seismic
					10754 2249
2 46.0					10754 2249 10754 2249
2 46.0 3					
2 46.0			·		
2 46.0 3 4					
2 46.0 3 4 5 6 7					
2 46.0 3 4 5 6 7 8					
2 46.0 3 4 5 6 7 8 9					
2 46.0 3 4 5 6 7 8 9 10	0.0				
2 46.0 3 4 5 6 7 8 9 10	0.0	ft			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	.=	ft			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	,= 3s	ft	Ryd	Ryd²	10754 2249
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	.= ss R <sub>x</sub> X		Ryd (k)	Ryd² (k-in.)	10754 2249
$\begin{array}{c ccccc} 2 & 46.0 \\ 3 & 4 \\ 5 & 6 \\ 7 & 8 \\ 9 \\ 10 \end{array} \\ \hline \Sigma \equiv \begin{array}{c} 0.0 \\ CR_x \\ R_y \\ Bracing 1st Story \\ \hline A & 0.0 \end{array}$	,= ss R <sub>x</sub> X	d	-		10754 2249 Governing Lateral Loads (lbf) Wind Seismic 5904 1814
$\begin{array}{c ccccc} 2 & 46.0 \\ 3 & 4 \\ 5 & 6 \\ 7 & 8 \\ 9 \\ 10 \end{array} \\ \hline \Sigma = \begin{array}{c} 0.0 \\ CR_x \\ \hline CR_x \\ Bracing 1st Story \\ \hline Line \\ Bracing 1st Story \\ \hline Line \\ B \\ 24.0 \end{array} \\ \hline \end{array}$	,= ss R <sub>x</sub> X	d	-		10754 2249 Governing Lateral Loads (lbf) Wind Seismic
$\begin{array}{c ccccc} 2 & 46.0 \\ 3 & 4 \\ 5 & 6 \\ 7 & 8 \\ 9 \\ 10 \end{array} \\ \hline \Sigma = \begin{array}{c} 0.0 \\ CR_x \\ \hline CR_x \\ \hline Stiffnes \\ R_y \\ \hline Bracing 1st Story \\ \hline Line \\ R \\ C \\ \hline \end{array} \\ \hline \begin{array}{c} Location \\ F(t) \\ F(t$	,= ss R <sub>x</sub> X	d	-		10754 2249 Governing Lateral Loads (lbf) Wind Seismic 5904 1814
$\begin{array}{c ccccc} 2 & 46.0 \\ 3 & 4 \\ 5 & 6 \\ 7 & 8 \\ 9 \\ 10 \end{array} \\ \hline \Sigma = \begin{array}{c} 0.0 \\ CR_x \\ \hline Stiffnes \\ R_y \\ \hline Bracing 1st Story \\ \hline Line \\ R \\ C \\ D \\ \hline \end{array} \\ \hline \begin{array}{c} Location \\ Kin. \\ \hline (kin.) \\ Kin. \\ \hline \end{array} \\ \hline \end{array} \\ \hline \begin{array}{c} CR_x \\ R_y \\ (kin.) \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array}$	,= ss R <sub>x</sub> X	d	-		10754 2249 Governing Lateral Loads (lbf) Wind Seismic 5904 1814
$\begin{array}{c ccccc} & 2 & 46.0 \\ \hline 3 & 4 & 5 \\ \hline 5 & 6 & 7 \\ \hline 7 & 8 \\ 9 \\ \hline 10 & & & \\ \hline \Sigma = & 0.0 \\ \hline CR_x \\ \hline \\ $	,= ss R <sub>x</sub> X	d	-		10754 2249 Governing Lateral Loads (lbf) Wind Seismic 5904 1814
$\begin{array}{c ccccc} 2 & 46.0 \\ 3 & 4 \\ 5 & 6 \\ 7 & 8 \\ 9 \\ 10 \end{array} \\ \hline \Sigma = \begin{array}{c} 0.0 \\ CR_x \\ 8 \\ 9 \\ 10 \end{array} \\ \hline \Sigma = \begin{array}{c} 0.0 \\ CR_x \\ R_y \\ CR_x \\ $	,= ss R <sub>x</sub> X	d	-		10754 2249 Governing Lateral Loads (lbf) Wind Seismic 5904 1814
$\begin{array}{c ccccc} & 2 & 46.0 \\ \hline 3 & 4 & 5 \\ \hline 5 & 6 & 7 \\ \hline 7 & 8 \\ 9 \\ \hline 10 & & & \\ \hline \Sigma = & 0.0 \\ \hline CR_x \\ \hline \\ $	,= ss R <sub>x</sub> X	d	-		10754 2249 Governing Lateral Loads (lbf) Wind Seismic 5904 1814
$\begin{array}{c ccccc} & 2 & 46.0 \\ \hline 3 & 4 \\ \hline 5 & 6 \\ \hline 7 & 8 \\ \hline 9 \\ \hline 10 \end{array} \\ \hline \Sigma = \begin{array}{c} 0.0 \\ \hline CR_x \\ \hline \\ Bracing 1st Story \\ \hline \\ Bracing 1st Story \\ \hline \\ \hline \\ \\ \\ \hline \\ \\ \\ \\ \hline \\ \\ \\ \\ \\ \hline \\$	,= ss R <sub>x</sub> X	d	-		10754 2249 Governing Lateral Loads (lbf) Wind Seismic 5904 1814
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	,= 355 <i>R<sub>x</sub>X</i> ) (k)	d	-		10754 2249 Governing Lateral Loads (lbf) Wind Seismic 5904 1814
$\begin{array}{c cccc} 2 & 46.0 \\ 3 & 4 \\ 5 & 6 \\ 7 & 8 \\ 9 \\ 10 \end{array} \\ \hline \Sigma = & 0.0 \\ \hline CR_x \\ \hline Bracing 1st Story \\ \hline Line \\ \hline Longitudinal Walls \\ \hline Bracing 1st Story \\ \hline CR \\ \hline CR_y \\ \hline$	(= 355 (k) (k)	d (ft)	-	(k-in.)	107542249GoverningLateral Loads (lbf)WindSeismic5904181459041814
$\begin{array}{c cccc} & 2 & 46.0 \\ \hline 3 & 4 & 5 \\ \hline 5 & 6 & 7 \\ \hline 7 & 8 & 9 \\ \hline 10 & & & \\ \hline \Sigma = & 0.0 \\ \hline CR_x \\ \hline Bracing 1st Story & Line & Length & (ft) & (in.) \\ \hline & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$	(= SS R <sub>x</sub> X ) (k) (k) 0.0 (=	d	-	(k-in.)	10754 2249 Governing Lateral Loads (lbf) Wind Seismic 5904 1814
$\begin{array}{c cccc} & 2 & 46.0 \\ \hline 3 & 4 \\ \hline 5 & 6 \\ \hline 7 & 8 \\ \hline 9 & 10 \end{array} \\ \hline \Sigma = & 0.0 \\ \hline CR_x \\ \hline 8 & 9 \\ \hline 10 \end{array} \\ \hline \Sigma = & 0.0 \\ \hline CR_x \\ \hline CR_$	(= SS R <sub>x</sub> X ) (k) (k) 0.0 (=	d (ft)	-	(k-in.)	107542249GoverningLateral Loads (lbf)WindSeismic5904181459041814
$\begin{array}{c ccccc} & 2 & 46.0 \\ & 3 & 4 & 5 \\ & 5 & 6 & 7 \\ & 7 & 8 & 9 \\ & 9 & 10 & & \\ \hline \end{array} \\ \hline \begin{array}{c ccccccccccccccccccccccccccccccccccc$	(= SS R <sub>x</sub> X ) (k) (k) 0.0 (=	d (ft)	-	(k-in.)	107542249GoverningLateral Loads (lbf)WindSeismic5904181459041814
$\begin{array}{c ccccc} & 2 & 46.0 \\ & 3 & 4 & \\ & 5 & \\ & 6 & \\ & 7 & \\ & 8 & \\ & 9 & \\ & 10 & \\ \hline \end{array} \\ \hline \end{array} \\ \hline \begin{array}{c} & & & \\ & \\ & $	(= SS R <sub>x</sub> X ) (k) (k) 0.0 (=	d (ft)	-	(k-in.)	107542249GoverningLateral Loads (lbf)WindSeismic5904181459041814
$\begin{array}{c ccccc} & 2 & 46.0 \\ & 3 & 4 & 5 \\ & 5 & 6 & 7 \\ & 7 & 8 & 9 \\ & 9 & 10 & & \\ \hline \end{array} \\ \hline \begin{array}{c ccccccccccccccccccccccccccccccccccc$	(= SS R <sub>x</sub> X ) (k) (k) 0.0 (=	d (ft)	-	(k-in.)	107542249GoverningLateral Loads (lbf)WindSeismic5904181459041814
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	(= SS R <sub>x</sub> X ) (k) (k) 0.0 (=	d (ft)	-	(k-in.)	107542249GoverningLateral Loads (lbf)WindSeismic5904181459041814
$\begin{array}{c ccccc} 2 & 46.0 \\ 3 & 4 \\ 5 & 6 \\ 7 & 8 \\ 9 & 10 \end{array}$ $\begin{array}{c ccccccccccccccccccccccccccccccccccc$	(= SS R <sub>x</sub> X ) (k) (k) 0.0 (=	d (ft)	-	(k-in.)	107542249GoverningLateral Loads (lbf)WindSeismic5904181459041814

### Lateral Load Analysis (ASCE 7-05) (Two-Story Building, Flexible Diaphragm)

× *		(	-	-	ible Diaphra	-g,					
				ation	Stiffness					Gove	erning
Transverse Foundation	Wall	Wall	Along L	ength, X	R <sub>x</sub>	R <sub>x</sub> X	d	R <sub>x</sub> d	R <sub>x</sub> d <sup>2</sup>	Lateral L	oads (ibf).
Bracing 2 Story	Line	Length	(ft)	(in.)	(k/in.)	(k)	(ft)	(k)	(ft-k)	Wind	Seismic
	1		0.0							14258	2742
	2		46.0							14258	2742
	3										
$\boldsymbol{\mathcal{H}}$	4										
	5										
	6										
	7										
	8										
	9										
	10			Σ=	0.0	0					
•				2-	0.0 CR <sub>x</sub> =		ft			L	
			Loc	ation	Stiffness		n			Gove	erning
Longitudinal Foundation	Wall	Wall		Nidth, Y	R <sub>y</sub>	R <sub>x</sub> X	d	R <sub>y</sub> d	R <sub>y</sub> d²		oads (lbf)
Bracing 2 Story	Line	Length	(ft)	(in.)	(k/in.)		(ft)	(k)	(ft-k)	Wind	Seismic
Bracing 2 Story	Line	Length	(11)	(m.)	(K/III.)	(k)	(11)	(K)	(IL-K)	wina	
	٨										0074
	A		0.0					<u> </u>		7593	2271
	В										2271 2271
	B C		0.0							7593	
	B C D		0.0							7593	
	B C D		0.0							7593	
	B C D F		0.0							7593	
	B C D F G		0.0							7593	
	B C D F		0.0						<u></u>	7593	
	B C D F G		0.0							7593	
	B C D E F G H I		0.0	Σ=		0.0				7593	
	B C D E F G H I		0.0		0.0 CRy = Overall J =		ft			7593	

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Lateral Load Analysis (ASCE 749) Transverse Lateral Forces Figure End Homes Bible Links II and Figure II and F								
Client: Excel Homes Joh Nunkis: FLAH042314-42 Description: 31217 Calos.       Low FLSE         Itting Geomatry:       Exceling Conditions:       Wind Speed = Social Events in the stand stand stand Registromes in the stand stand stand stand stand stand Registromes in the stand stand stand stand stand stand Registromes in the stand stand stand stand stand Registromes in the stand stand stand stand Registrome in the stand stand stand stand stand Registromes in the stand stand stand stand stand stand Registromes in the stand stand stand stand stand stand Registromes in the stand stand stand stand stand Registromes in the stand stand stand stand stand stand Registrome Feedor, Re 36 Registrome			Lateral Load Analys	sis (ASCE 7-05)				
Job Number: EXLI-042314-42 Bescription: 31217 Cates.       Locing Conditions: Wind Speed + 100 mph Boddle Mith, L = 240 fb Gedle Mith, L = 240 fb Boddle Boddle Boddle Boddle Boddle Boddle Boddle Boddle Bod			(Two-Story Building, Fl	exible Diaphragm)				
Locating Conditions:           Locating Conditions:           Ridge Leorenty:         Locating Conditions:           Ridge Leorenty:         240 ft         Exposure Category:         C           Module Width - 15 55 ft         Exposure Category:         C           Blockking Height h.p. = 240 ft         Exposure Category:         C           Sidewall Uvertang, Leorenty:         130 ft         Height Above Grade = 2           Root Slope, a = 120 / 12 pitch         Sidewall Evertang:         348 ft           Sidewall Uvertang, Leorenty:         120 ft         Foundation Type: Raised floor           Immon Design Parameter:         Sidewall Evertang:         Sidewall Evertang:         C           Bioching Height 1         11 ft         Sidewall Evertang:         10 ft         0 ft           Response Factor, R. 6.5         Side Sidewall Evertang:         10 ft         0 ft         1 ft           Sidewall Evertang:         13.0 ft         Sidewall Evertang:         1.0 ft         1 ft         1 ft           Ground Floor Wall Height 1         1.1 ft         1.1 ft         Sidewall Evertang:         1 ft         1 ft           Mack Faring Rept = 1         1.3 ft         S ft         Sidewall Evertang:         1 ft         1 ft	Client: Excel I	Homes	<i>p</i>					
Description: 31217 Calcs.         Iddig Length, B = 46.0 ft         Ridge Length, B = 46.0 ft         Gable Width = 15.8 ft         Biocking Height, h, = 24.0 ft         Biocking Height, h, = 24.0 ft         Biocking Height, h, = 24.0 ft         Roof Stope, a = 45.0 deg.         Roof Pack (c) = 2.1.0 ft         Roof Stope, a = 45.0 deg.         Roof Pack (c) = 2.3.1 ft         Roof Stope, a = 12.0 ft         Statistic Design Parameters:         Statistic Design Parameters:         Statistic Class: D       IRC Steam Design Cat: C         Mack Class: D       Response Factor, R: 6.5         Colspan= 6.6.4         Concolspan="2">Concolspan= 200 ft         Concolspan="2">Concolspan= 6.0 ft         Concolspan="2">Concolspan= 6.0 ft         Concolspan= 6.0 ft         Concolspan= 6.0 ft         Concolspan=	Job Number: EXLH0	42314-42	I AN PISE					
Iting Geometry:         Leading Conditions:         Wind Speed = 100 mph           Solide Wath L = 24.0 ft         System Category: C         C           Modula Wath 1 = 15.5 ft         System Category: C         C           Booking Height h = 11.6 ft         Sistem Allevel Height h = 12.0 ft         Sistem Allevel Experiment Sistem Category, Ic; 100 IIIS Selemic Design Cat: D         Wind Height h, (n) 10 10 23           Sistem Category, Ic; 100 IIIS Selemic Design Cat: D         Selemic Design Cat: D         Wind Height (ph) 10 10 23           Sistem Category, Ic; 100 IIIS Selemic Design Cat: D         Selemic Design Cat: D         Wind Height (ph) 10 10 23           C = 0.10 Experiment Sistem Category III         RCS Selemic Design Cat: D         Wind Height (ph) 10 10 23           C = 0.10 Experiment Sistem Category III         RCS Selemic Design Cat: D         Wind Height (ph) 10 10 23           C = 0.10 Experiment Sistem Category III         RCS Selemic Design Cat: D         Wind Height (ph) 10 10 23           Make Framing Height Sistem Category IIII         RCS Selemic Design Cat: D         Wind Height Sistem Category IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Description: 31217	Calcs.	Loro proc					
Ridge Langth, 8 = 46.0 ft       Wind Speed = 100 mph         Goldb Width _ L = 24.0 ft       Exposure Category: C         Module Width _ 15.5 ft       Exposure Category: C         Blocks Piedpith, b = 18.0 in       Height Above Grade:         Sidewall Diverting, b = 11.0 in       Height Above Grade:         Roof Slope, a = 112.0 in.       Storles Above Grade:         Bank Display, Dear       12.0 in.         Selemic Langth, B = 12.0 in.       Foundation Type: Raised floor         Selemic Langth Construction       ISO Selemic Design Cat:: D         Selemic Langth, Case: 1.0       ISO Selemic Design Cat:: D         Selemic Langth Construction       IRC Selemic Design Cat:: D         Good Parameters:       Ground Floor Wall Height = 0.0 ft         Ground Floor Wall Height = 0.0 ft       Bootinn Chord Dead Weight (sel) 0.0.0.1.2.1.2.         Insocrase Diaphragm Parameters:       Ground Floor Wall Height = 0.0 ft         Ground Floor Flow Wall Height = 0.0 ft       Bootinn Chord Mall Height = 0.0 ft         Above Ground Floor Endual Weight = 0.0 ft       Booting Floor Mall Height = 1.1 ft Nevel         Bible Above Ground Floor Endual Weight = 0.0 ft       Gable Endual Weight = 0.0 ft         Above Ground Floor Endual Weight = 1.740 lbf       Mark Wall ft End Zone 7.4.         Mack Read Floores       Ground Floor Endual Weight = 0.0 ft								
Ridge Langth, 8 = 46.0 ft       Wind Speed = 100 mph         Goldb Width _ L = 24.0 ft       Exposure Category: C         Module Width _ 15.5 ft       Exposure Category: C         Blocks Piedpith, b = 18.0 in       Height Above Grade:         Sidewall Diverting, b = 11.0 in       Height Above Grade:         Roof Slope, a = 112.0 in.       Storles Above Grade:         Bank Display, Dear       12.0 in.         Selemic Langth, B = 12.0 in.       Foundation Type: Raised floor         Selemic Langth Construction       ISO Selemic Design Cat:: D         Selemic Langth, Case: 1.0       ISO Selemic Design Cat:: D         Selemic Langth Construction       IRC Selemic Design Cat:: D         Good Parameters:       Ground Floor Wall Height = 0.0 ft         Ground Floor Wall Height = 0.0 ft       Bootinn Chord Dead Weight (sel) 0.0.0.1.2.1.2.         Insocrase Diaphragm Parameters:       Ground Floor Wall Height = 0.0 ft         Ground Floor Flow Wall Height = 0.0 ft       Bootinn Chord Mall Height = 0.0 ft         Above Ground Floor Endual Weight = 0.0 ft       Booting Floor Mall Height = 1.1 ft Nevel         Bible Above Ground Floor Endual Weight = 0.0 ft       Gable Endual Weight = 0.0 ft         Above Ground Floor Endual Weight = 1.740 lbf       Mark Wall ft End Zone 7.4.         Mack Read Floores       Ground Floor Endual Weight = 0.0 ft	uilding Geometry:	,	Loading Conditions:					
Gable Wolfs, L =         24.0 ft         Exposure Category:         C           Module Wolfs, T =         18.0 n.         Height Above Grade :         2           Sidewalfker, Height, h., =         24.0 n.         Sidewalfker, Height, h., =         24.0 n.           Rod Slope, a.         44.50 deg.         Rod Plack() =         24.8 ft           Rod Slope, a.         44.50 deg.         Rod Plack() =         24.8 ft           Rod Slope, a.         44.50 deg.         Rod Plack() =         24.8 ft           Sidewalf Overhang, b., =         12.0 in.         Fourhalmin Type: Raised floor           Introduction Category, Ic; 100           IBC Seismic Dasign Cat:: D           Wall Height H., (n) 100 dS           Response Factor, R. 6.5           Side and Meight (sef) 10 0         2.0           Response Factor, R. 6.5         Side and Meight (sef) 10 0         Colspan= Factor, R. 6.5           Ground Floor Mail Height =         9.0 ft           Above Ground Floor Mail Height =         9.0 ft<			-	= 100 mph				
$\begin{tabular}{l l l l l l l l l l l l l l l l l l l $			•	•				
Bit Bording Height, h., =       18.0 in       Height Above Grade       2         SidewallEve Height, h., =       24.0 r., Stores Above Grade       2       18.6         Sidewall Ever Ang, L., =       12.0 /12 pitch       Sidewall Ever (p) =       24.8 f.         Sidewall Overhang, L., =       12.0 in.       Foundation Type: Raised floor         Importance Category, E:       13.0 in.       ASD Adjustment Factor = 0.7         Importance Category, E:       1.0 in.       BSD Adjustment Factor = 0.7         Response Factor, R: 0.5       Statewall Ever Adjustment Factor = 0.7       Wall Height, h., (n., 10.0 k B.)         Response Factor, R: 0.5       Sb_ 0.6 t.       Boot floor Change (p) the response factor, R: 0.5       Statewall Ever Adjustment Factor = 0.7         Response Factor, R: 0.5       Sb_ 0.1 t.       Boot floor Found Ploor Wall Height =       1.0 the response Factor, R: 0.5         Statewall Ever Adjustment Factor = 0.7       Statewall Ever Adjustment Factor = 0.7       Wall Height Adjustment Factor = 0.7         Above Ground Floor Towall Height =       3.0 th       Statewall Ever Adjustment Factor = 0.7       Wall Height Adjustment Factor = 0.7         Above Ground Floor Towall Weight =       3.0 th       Boot floor Found Ploor Wall Height =       1.0 th         Above Ground Floor Towall Weight =       3.0 th       Mac. Wall Height Adjustment Factor =       1.0 t			Exposure outego	<i>.</i> 0				
Sidewall Ever Height, h., =       2440 in.       Shores Above Grade =       2         Roof Stope, a. =       12.0 / 12.pitch       Roof Pack (c) =       3.8 ft         Broof Stope, a. =       12.0 in.       Mean Roof Height (h) =       3.8 ft         Sidewall Everhang, L., =       12.0 in.       Foundation Type: Raised floor         Sidewall Everhang, L., =       12.0 in.       Foundation Type: Raised floor         Sidewall Everhang, L., =       12.0 in.       ASD Adjustment Factor = 0.7         Sidewall Everhang, L., =       12.0 in.       Sidewall Everhang       5.5 ft         Response Factor, R. 5.5       Sidewall Everhang       5.0 ft       Botton Cherol Dead Weight (pf)       10.10 / 22         Response Factor, R. 6.5       Sidewall Everhang       5.0 ft       Sidewall Everhang       -			Usight Above Grades					
Roof Slope, a =       120 /12 pitch       Sidewall Eave (z) =       21.8 ft         Sidewall Overhang, Log =       120 in.       Mean Roof Height (t) =       23.8 ft         Sidewall Overhang, Log =       120 in.       Foundation Type: Raised floor         Sidewall Overhang, Log =       120 in.       Foundation Type: Raised floor         Sidewall Overhang, Log =       120 in.       ASD Adjustment Factor = 0.7         Importance Category, Ic : 1.00       IRC Selemic Design Cat: 0       Wall Height, h.v.(n) 108       06         Response Factor, R: 6.5       SD = 0.54       Elsonic Docid Ploor Wall Height =       0.0 ft         Above Ground Floor Wall Height =       9.0 ft       Net Kain Interface       10       0         Above Ground Floor Wall Height =       1.0 ft       Net Kain Interface       10       10       2         Ground Floor Mall Height =       1.0 ft       Net Kain Interface       10       0       7         Above Ground Floor Mall Height =       1.0 ft       Net Kain Interface       10       10       2         Ground Floor Endwall Weight =       9.0 ft       Max. Wall       End Zone Fa       10       10         Above Ground Floor Endwall Weight =       1.0 ft       100 ft       100 ft       100 ft       100 ft       100 ft       10				- 2				
Roof loop, a=         45.0 dig. Bioma Correlation (p = 23.8 ft Foundation Type: Raised floor           Issuine Design Parameters: Besimic Use Group; II: Importance Category, Ic: 1.0 Response Factor, R: 6.5         ASD Adjustment Factor = 0.7 IRC Selamic Design Cat: C SD = 0.64 SD = 0.64 Cs = 0.10         Wall Height, N <sub>v</sub> (n), 108 Oright of 56 Oright of Wall Dead Weight (psf)         Oright of 56 Oright of 77           Insverse Diaphrage Maxwerse Diaphrage function Stee Class: D         IRC Selamic Design Cat: C IRC Selamic Design Cat: C Cs = 0.10         Wall Height of 77         Of the 70           Insverse Diaphrage Maxwerse Diaphrage function Selamic Live Load (psf)         O ft 0         O ft 0         O ft 0         O ft 0           Above Ground Floor Wall Height = Booking Height =         0.0 ft 1.5 ft 0.0 ft         Instance 0.0 ft         Maxwerse Diaphrage Maxwerse Diaphrage function Selamic Live Load (psf)         Instance 0.0 ft           Musc. Framing Height =         1.5 ft 0.0 ft         More Framing Height =         1.6 ft         More Framing Height =         1.6 ft           More Framing Height =         1.5 ft         Corron Floor Mill Weight =         0.0 ft         Max. Red Ten Zone, Za =         6.0 ft           More Framing Height =         1.6 ft         Corron Floor Mill Meight =         1.6 ft         More framing ft           Group fill of 2 Story         End (ph) 33.1 ft         Transverse Walls (bf/wall)         2.2 ft         2.4 ft								
Sidewall Overhang, L <sub>0</sub> = 12.0 in.       Mean Root Height (t) = 23.3 ft         Samic Design Parameters:       Semic Live Group: II       ASD Adjustment Factor = 0.7         Sime Class: D       IRC Selemic Design Cat: D       Wall Height, H <sub>0</sub> , ft       0	•		( )					
Entwall Overhamp, B <sub>0</sub> +       12.0 m.       Foundation Type: Reased from         Istimuc Design Parameters: Importance Catagory, Ig: 100 Site Class: D       ASD Adjustment Factor = 0.7 IBC Selsmic Design Cat: C SD_= 0.10       Importance Catagory, Ig: 100 Site Class: D       Importance Catagory, Ig: 100 Site Class: D </td <td></td> <td>-</td> <td>••</td> <td></td> <td></td> <td></td> <td></td> <td></td>		-	••					
Image: Segure 1: 100 Discrete 1: 100 Disc			• • •					
Steinic Use Group: I: I.O.       ASD Adjustment Factor = 0.7       Cround Other Ro         Importance Category, I:: 1.O.       IBC Selsmic Design Cat:: C       Will Height, Iv, (h)       10       8       9       6       7         Response Factor, R: 6.5       SD <sub>0</sub> = 0.64       Biotom Chord Dead Weight (ps)       5       5       nn         Ste Cless: D       SD <sub>0</sub> = 0.64       Biotom Chord Dead Weight (ps)       6       0       0       7         Inseverse Disphragm Parameters:       Ground Floor Wall Height =       9.0 ft       Above Ground Floor Projection =       13.0 ft       Interior       130       ft         Mile: Framing Height =       1.5 ft       Biotom Chord Dead Weight (ps)       6       10       10       22         Ground Floor Vial Height =       1.9 ft       100 ft       1000 ft       100 ft       100 ft	Endwall Overnang, B <sub>OH</sub>	= 12.0 in.	Foundation Typ	e: Raised floor				
Steinic Use Group: I: IO       ASD Adjustment Factor = 0.7       Cround Other Reports         Importance Category, I:: IO       IBC Selsmic Design Cat:: C       Will Height, In, III, IN, IIII, IN, III, III, IN, IIII, IN, IIII, III, IIII, IIIII, IIIII, IIIII, IIIII, IIIII, IIIII, IIIIII								
Importance Category, i;: 1:00       IBC Seismic Design Cat:: D       Wall Height, (h, f)       108       96       m         Response Factor, R: 0.5       SDs = 0.64       SDs = 0.64       Floor/Level Dead Weight (pst)       10       10       2         Inseverse Diaphragm Parameters:       Ground Floor Mult Height =       9.0 ft       Bottom Chord Dead Weight (pst)       -       -       1         Seismic Devided Weight (pst)       0       0       7       7         Inseverse Diaphragm Parameters:       Ground Floor Mult Height =       9.0 ft       Net Roof       End Zone       10       0       0       7         Make: Framing Height =       1.1 fblovel       Biosting Height =       1.5 ft       1       Interior       19       Max. Wall End Zone       10       10       10       20       0       7         Make: Ground Floor Endwall Weight =       100 bf       Ground Floor Endwall Weight =       100 bf       10       10       10       10       10       10       10       20       0       7       10	-							
Site Class: D       IRC Seismic Design Cat:: C       Wall Dead Weight (ps)       5       5       n         Response Factor, R: 6.5       SD <sub>2</sub> = 0.54       Floor/Level Dead Weight (ps)       0       10       2         Insverse Disphragm Parameters:       Ground Floor Wall Height =       8.0 ft       Bottom Chord Dead Weight (ps)       0       0       0       7         Insverse Disphragm Parameters:       Ground Floor Wall Height =       8.0 ft       1.0 f	Seismic Use Grou		-					Ro
Response Factor, R: 6.5       SD <sub>8</sub> = 0.54 Cs = 0.10       Floor/Level Dead Weight (psf) 10       10       12       2         Intervent Disphragin Parameters:			eismic Design Cat.: D				96	n/
Cs = 0.10       Betom Chord Dead Weight (ps) 1         neverse Diaphragm Parameters:         Ground Floor Wall Height =       9.0 f         Above Ground Floor Wall Height =       8.0 f       8.0 f         Verticel Rodo Projection =       13.0 f       1         Biokning Height =       1.5 f       1       1         Ground Floor Endwall Weight =       1080 bf       1       1         Gable Endwall Weight =       1740 bf       1       1         Work Roof End Zone 14         Max. Wall End Zone 24       1         Gable Endwall Weight =       1740 bf       1         Work Roof End Zone 14         Interior 13       1       1         Max. Wall End Zone 24       0       0         Max. Wall End Zone 26       6       1         Work Roof End Zone 14         Interior 13       1       1         Max. Wall End Zone 26       6       0       1         Work Roof End Zone 14         Interior 13         Max. Wall End Zone 26         Zone 26         Interior 13         Max. Wall End Zone 26 </td <td>Site Clas</td> <td>s:D IRCS</td> <td>eismic Design Cat.: C</td> <td></td> <td>÷</td> <td></td> <td>5</td> <td>n/</td>	Site Clas	s:D IRCS	eismic Design Cat.: C		÷		5	n/
Selsmic Live Load (per)     0     7       Insverse Diaphragm Parameters:       Above Ground Floor Wall Height =     8.0 ft     8.0 ft     11.1 Movel       More, Framing Height =     1.1 Movel     11.1 Movel     11.1 Movel       Blocking Height =     1.5 ft     10.6 ft     11.6 ft       Above Ground Floor Endwall Weight =     1080 lbf     10.6 ft     10.6 ft       Above Ground Floor Endwall Weight =     1740 lbf     10.6 ft     10.6 ft       Transverse Lateral Forces     Wind     End (ph)     28.4 ft     10.6 ft       Above Ground Floor Endwall Weight =     1740 lbf     1740 lbf     10.6 ft     10.6 ft       Transverse Lateral Forces     End (ph)     28.4 ft     -     -       Interior 12     Transverse Valis (lbft)     28.6 ft     -     -       Ist of 2 Story     End (ph)     28.4 ft     -     -       Ist of 2 Story     End (ph)     28.4 ft     -     -       Ist of 2 Story     End (ph)     28.4 ft     -     -       Ist of 2 Story     End (ph)     28.5 ft     -     -       Ist of 2 Story     End (ph)     12.6 ft     -     -       Ist of 2 Story     End (ph)     12.6 ft     -     -       Ist of 2 Story<	Response Factor, I	R: 6.5	SD <sub>s</sub> = 0.54	Floor/Level Dea	id Weight (psf)	10	10	2
Insverse Diaphragn Parameter:       Stoud Floor Wall Height =       9.0 ft         Above Ground Floor Wall Height =       8.0 ft       8.0 ft         Wetical Roof Projection =       13.0 ft       11.1 Mievel         Misc. Framing Height =       11.1 Mievel       15.6 ft         Ground Floor Endwall Weight =       1080 lbf         Above Ground Floor Endwall Weight =       1080 lbf         Gable Endwall Weight =       1740 lbf             WFRS End Zone, 2a =       6.0 ft             Tensverse Lateral Forces       Wind North Meight Net         Interior       13.0 ft         Max. Wall End Zone       10.0 ft         Max. Wall End Zone       10.0 ft         Max. Wall End Zone       10.0 ft             Max. Wall End Zone       10.0 ft             Max. Wall End Zone       10.0 ft             Max. Wall End Zone       10.0 ft             Max. Wall Meight =       1740 lbf             Max. Wall End Zone       10.0 ft             Max. Max Max End Zone       10.0 ft             Max. Max			Cs = 0.10	Bottom Chord Dea	id Weight (psf)			1
Ground Floor Wall Height =9.0 ftAbove Ground Floor Wall Height =13.0 ftMisc. Framing Height =11.1 ft/RevelBiocking Height =1080 bfGround Floor Endwall Weight =1080 bfAbove Ground Floor Endwall Weight =1080 bfGable Endwall Weight =1740 bfMWFRS End Zone, 121080 bfMWFRS End Zone, 121080 bfMWFRS End Zone, 121080 bfGable Endwall Weight =1740 bfMWFRS End Zone, 246.0 ftTransverse Lateral Forces1010 ftTransverse Lateral Forces1010 ftTotal Force to Transverse Walls (bf/wall)-Total Force to Transverse Walls (bf/wall)-Total Force to Transverse Walls (bf/wall)-Total Force to Transverse Walls (bf/wall)-Fist of 2 Story(ont Muth Diaphragm (ph)For a fist of 2 Story(ont Muth Diaphragm (ph)Fist of 2 Story(ont Muth Diaphragm (ph)Fist of 2 StoryEnd (ph)Fist of 2 Story(ont Muth Diaphragm (ph)Fist of 2 Story(ont Muth Diaphragm (ph)Fist of 2 StoryEnd (ph)Fist of 2 StoryEnd (ph)Fist of 2 StoryEnd (ph)Fist of 2 Story(ont Muth Diaphragm (ph)Fist of 2 StoryEnd (ph)Fist of 2 StoryEnd (ph)Fist of 2 StoryEnd (ph)Fist of 2 StoryEnd (ph)Fist of 2 Story(ont Muth Chub Diaphragm (ph)Fist of 2 Story(ont Muth Chub Diaphragm (ph)Fis				Seismic I	Live Load (psf)	0	0	7.
Ground Floor Wall Height =       9.0 ft         Above Ground Floor Wall Height =       9.0 ft         Misc. Framing Height =       11.1 ft/level         Biocking Height =       1.1 ft/level         Biocking Height =       1.0 ft         Above Ground Floor Endwall Weight =       1080 lbf         Ground Floor Endwall Weight =       1080 lbf         Gable Endwall Weight =       1080 lbf         Gable Endwall Weight =       1740 lbf         Transverse Lateral Forces       Wind       Net Weight Net         Transverse Lateral Forces       Wind       Net Weight Net         Iterior (pit)       231 1       1260 871         Total Force to Transverse Walls (lbf/wall)       1260 371         Total Force to Transverse Walls (lbf/								
Above Ground Floor Wall Height =       13.0 ft         Misc. Framing Height =       1.1 ft/level         Blocking Height =       1.5 ft         Ground Floor Endwall Weight =       1080 lbf         Above Ground Floor Endwall Weight =       960 lbf         Gable Endwall Weight =       1740 lbf         WWFRS End Zone, 2a =       6.0 ft         MWFRS End Zone, 2a =       6.0 ft         Max. Roof       End Zone, 2a =         MWFRS End Zone, 2a =       6.0 ft         MWFRS End Zone, 2a =       6.0 ft         MWFRS End Zone, 2a =       6.0 ft         Mot for for a ft       11.1 ft/level         Interior       11.1 ft/level         Interior       11.1 ft/level         MWFRS End Zone, 2a =       6.0 ft         MWFRS End Zone, 2a =       6.0 ft         MWFRS End Zone, 2a =       6.0 ft         Transverse Lateral Forces       End (ph)         Interior (ph)       11.1 ft/level         Interior (ph)       11.1 ft/level         Ist of 2 Story       End (ph)       128.0 ft/level         Ist of 2 Story       End (ph)       128.0 ft/level       -         Ist of 2 Story       End (ph)       1.2 ft/level       -         Ist of 2 St	nsverse Diaphragm Pa	rameters:						
Vertical Roof Projection =       13.0 ft         Mas: Framing Height =       1.1 ft/level         Blocking Height =       1.5 ft         Ground Floor Endwall Weight =       1980 lbf         Above Ground Floor Endwall Weight =       1740 lbf         WHRS End Zone, Zae       0.0 ft         Interior       11 ft/level         Babe Endwall Weight =       1740 lbf         Transverse Lateral Forces       Not Roof         Interior       11 ft/level         Interior       11 ft/level         Interior       11 ft/level         Interior       12 ft/level         MWRS End Zone, Zae       0.0 ft         Interior       11 ft/level         Interior	Grou	nd Floor Wall Height =	9.0 ft		Horizontal W	/ind Press	ure (MWF	RS)
Misc. Framing Height = Blocking Height = Ground Floor Endwall Weight = Gable Endwall Weight = Babe Endwall Weight = 1740 lbf       1.5 ft 960 lbf       Net Roof       End Zone       18 10         Max. Roof       End Zone       13       Interior       13         Mwres Endwall Weight = Gable Endwall Weight =       1740 lbf       Wind       Soismic Netroir       Max. Roof       End Zone       14         MWRS End Zone, 2a =       6.0 ft         Transverse Lateral Forces       Interior       11       Net       Soismic Net         Interior       13       -       -       -       -         Interior       11       1260       87       -       -         Interior       11       1260       87       -       -         Interior       CMTRU       Diaphragm (pf)       -       1260       87         Ist of 2 Story       End (ph)       188       -       -       -         Ist of 2 Story       End (ph)       188       -       -       -         Ist of 2 Story       End (ph)       1255       -       2425       23         Ist of 2 Story       End (ph)       188       -       -       -         Ist of 2 Story       End (ph)       188	Above Grou	nd Floor Wall Height =	8.0 ft		Net Wall		End Zone	24
Blocking Height = Above Ground Floor Endwall Weight = Gable Endwall Weight = 1740 lbf       1.5 ft 1080 lbf 960 lbf 1740 lbf         Imax. Wall       End Zone       1.1 Heritor         Imax. Roof       End Zone       1.1 Heritor       1.1 Heritor         Imax. Mail       End Zone       1.1 Heritor       1.1 Heritor       1.1 Heritor         Imax. Mail       End Zone       1.1 Heritor       1.1 Heritor       1.1 Heritor       1.1 Heritor         Imax. Mail       End Zone       1.1 Heritor       <	Ver	tical Roof Projection =	13.0 ft				Interior	19
Dorb Ground Hoss Rudening Hegen       1740 lbf         Max. Roof       End 20ne         MWFRS End Zone, 2a =       6.0 ft         Transverse Lateral Forces       Interior         Interior       End (plf)         331       -         Interior       1280         Interior       1188         Interior       1191         Interior       1191 <t< td=""><td>N</td><td>lisc. Framing Height =</td><td>1.1 ft/level</td><td>, e</td><td>; Net Roof</td><td></td><td>End Zone</td><td>16</td></t<>	N	lisc. Framing Height =	1.1 ft/level	, e	; Net Roof		End Zone	16
Dorb Ground Hoss Rutural Weight =       1740 lbf         Max. Roof       End 20ne, 14         Imax. Roof       Ind 20ne, 14         Imax. Roof       Imax. Roof         Imax. Roof       Imax. Roof </td <td></td> <td>Blocking Height =</td> <td>1.5 ft</td> <td></td> <td></td> <td></td> <td>Interior</td> <td>13</td>		Blocking Height =	1.5 ft				Interior	13
Bable Endwall Weight =       1740 lbf         Max. Roof       End 20ne, 14         Imax. Roof       Ind 20ne, 14         Imax. Roof       Imax. Roof	Ground F	loor Endwall Weight =	1080 lbf		Max. Wa		End Zone	13
Interior       12         MWFRS End Zone, 2a =       6.0 ft         Transverse Lateral Forces       End (pif)         2nd of 2 Story       End (pif)         Interior       1260         1       Transverse Walls (lbf/wall)         1       1260         1       128         1       128         1       128         1       128         1       128         1	Above Ground F	loor Endwall Weight =	960 lbf		:		Interior	11
MWFRS End Zone, 2a =     6.0 ft       Transverse Lateral Forces     End (pit)     331     -       Zud of 2 Story     End (pit)     331     -     -       Interior (pit)     2d     -     -       Total Forces     Wind     Selamic       Ist of 2 Story     End (pit)     237     -       Ist of 2 Story     Interior (pit)     188     -       Ist of 2 Story     End (pit)     237     -       Ist of 2 Story     Interior (pit)     188     -       Base of 2 Story     End (pit)     21490     -       Herd (pit)     181     -     67.6       Transverse Walls (bf/wall)     -     540     37       Total Force to Transverse Walls (bf/wall)     -     540     37       Total Force to Transverse Walls (bf/wall)     -     67.6       End (pit)     161     -     -       Interior (pit)     128     -     -       Diaphragm (pit)     -     540     37	G	able Endwall Weight =	1740 lbf		Max. Roc	of	End Zone	14
Image: constraint of the second sec								12
Transverse Lateral Forces         Net         Weight         Net           2nd of 2 Story         End (pl)         331             Interior (pl)         264              Interior (pl)         264              Interior (pl)         264              Interior (pl)         264              Interior (pl)         12550          2425            Ist of 2 Story         End (pl)         12550          2425           Ist of 2 Story         End (pl)         1287             Ist of 2 Story         End (pl)         188					MWFRS End 2	Zone, 2a =	6.0	ft
Transverse Lateral Forces         Net         Weight         Net           2nd of 2 Story         End (pif)         331             Interior (pif)         264              Interior (pif)         264              Interior (pif)         264              Interior (pif)          1260         87           Transverse Walls (lbf/wall)          1260         87           Ist of 2 Story         End (pif)         237             Ist of 2 Story         End (pif)         188             Ist of 2 Story         End (pif)         18             Ist of 2 Story         End (pif)         118             Interior (								
2nd of 2 Story       End (pif)       331           Interior (pif)       284           (MTUL)       Diaphragm (pif)        705       49         1260       87         Transverse Walls (lbf/wall)        1260       87         1st of 2 Story       End (pif)       237           End (pif)       237         19.4         1st of 2 Story       End (pif)       237           (ONTRUS)       Diaphragm (pif)        19.4         1st of 2 Story       End (pif)       237           (ONTRUS)       Diaphragm (pif)        325       23         Transverse Walls (lbf/wall)        540       37         Total Force to Transverse Walls (lbf/wall)        67.6         Ease of 2 Story       End (pif)       184           Interior (pif)       188         -         Interior (pif)       181         -         Interior (pif)       181         -         Interior								
Interior (pf) Diaphragm (pf)264 (MTUUDiaphragm (pf) Transverse Walls (lbf)70549126087126087Total Force to Transverse Walls (lbf)100.419.41st of 2 StoryEnd (pfi)237End (pfi)237Interior (pfi)188Ist of 2 StoryEnd (pfi)237Interior (pfi)188Interior (pfi)188Interior (pfi)188Interior (pfi)188Base of 2 StoryEnd (pfi)161Interior (pfi)128Interior (pfi)128Base of 2 StoryEnd (pfi)161Interior (pfi)128Interior (pfi)128Interior (pfi)128Interior (pfi)128Interior (pfi)128Interior (pfi)128Interior (pfi)128Interior (pfi)128Interior (pfi)128Interior (pfi)128 <th>_</th> <th></th> <th>· · · · · · · · · · · · · · · · · · ·</th> <th>. *</th> <th></th> <th></th> <th></th> <th></th>	_		· · · · · · · · · · · · · · · · · · ·	. *				
Image: constraint of the second se		al Forces			Net		Net	
Ist of 2 Story       Total Force to Transverse Walls (lbf)       1250        2425         Level OTM (ft-kip)       100.4        19.4         Ist of 2 Story       End (ph)       237           (on TRUES       Diaphragm (ph)        325       23         Transverse Walls (lbf/wall)        540       37         Total Force to Transverse Walls (lbf/wall)        67.6         Base of 2 Story       End (ph)       161           Interior (ph)       188         67.6         Base of 2 Story       End (ph)       161            Interior (ph)       188             Diaphragm (ph)        540       37          67.6         Base of 2 Story       End (ph)       161             67.6         Transverse Walls (lbf/wall)        540       37        540       37         Total Transverse Force at Base (lbf)       27588        5483        73.7 </td <td></td> <td>al Forces</td> <td></td> <td></td> <td>(plf) 331</td> <td>Weight </td> <td>Net </td> <td></td>		al Forces			(plf) 331	Weight 	Net 	
Ist of 2 Story       Total Force to Transverse Walls (lbf)       12550        2425         Level OTM (ft-kip)       100.4        19.4         Ist of 2 Story       End (ph)       237           (oNTRULS       Diaphragm (ph)        540       37         Total Force to Transverse Walls (lbf/wall)        540       37         Total Force to Transverse Walls (lbf/wall)        67.6         Base of 2 Story       End (ph)       161           Interior (ph)       188         67.6         Base of 2 Story       End (ph)       161            Interior (ph)       128             Diaphragm (ph)        285       20        540       37         Transverse Walls (lbf/wall)        540       37		al Forces		Interior	Net           (plf)         331           (plf)         264	Weight  	Net  	
Level OTM (ft-kip)         100.4          19.4           1st of 2 Story         End (pl)         237             Interior (pl)         188              Diaphragm (pl)          540         37           Transverse Walls (lbf)         21490          4498           Level OTM (ft-kip)         31.6          67.6           Base of 2 Story         End (pl)         128             Interior (pl)         188           67.6           Base of 2 Story         End (pl)         161             Interior (pl)         128           67.6           Transverse Walls (lbf)         118           67.6           Transverse Walls (lbf)         128           67.6           Transverse Walls (lbf)         128              Diaphragm (pli)          285         20         37           Transverse Walls (lbf/wall)          540         37           Total Transverse Force at Base (lbf) <td< td=""><td></td><td>al Forces</td><td>(ONTRULS</td><td>Interior</td><td>Net           (plf)         331           (plf)         264</td><td>Weight  </td><td>Net  </td><td></td></td<>		al Forces	(ONTRULS	Interior	Net           (plf)         331           (plf)         264	Weight  	Net  	
Level OTM (ft-kip)         100.4          19.4           1st of 2 Story         End (pl)         237             Interior (pl)         188              Diaphragm (pl)          540         37           Transverse Walls (lbf)         21490          4498           Level OTM (ft-kip)         31.6          67.6           Base of 2 Story         End (pl)         128             Interior (pl)         188           67.6           Base of 2 Story         End (pl)         161             Interior (pl)         128           67.6           Transverse Walls (lbf)         118           67.6           Transverse Walls (lbf)         128           67.6           Transverse Walls (lbf)         128              Diaphragm (pli)          285         20         37           Transverse Walls (lbf/wall)          540         37           Total Transverse Force at Base (lbf) <td< td=""><td></td><td>al Forces</td><td>CONTRULS</td><td>Interior Diaphragm</td><td>Net           (plf)         331           (plf)         264           (plf)        </td><td>Weight   705</td><td>Net   49</td><td></td></td<>		al Forces	CONTRULS	Interior Diaphragm	Net           (plf)         331           (plf)         264           (plf)	Weight   705	Net   49	
Ist of 2 Story       End (pf)       237           Interior (pf)       188            Diaphragm (pf)        325       23         Transverse Walls (lbf)       21490        4498         Level OTM (ft-kip)       331.6        67.6         Base of 2 Story       End (pf)       161           Interior (pf)       128            Diaphragm (pf)        285       20         Transverse Walls (lbf)       128           Diaphragm (pf)        540       37         Transverse Walls (lbf)       128           Diaphragm (pf)        540       37         Transverse Walls (lbf)       128           Diaphragm (pf)        540       37         Total Transverse Force at Base (lbf)       27588        5483         Total OTM (ft-kip)       362.3        73.7         PFS Corporation         Northeast Region       2.5         R Wenner - 1       7.5       7.5		al Forces		Interior Diaphragm Transverse Walls (lbf/	Net           (pif)         331           (pif)         264           (pif)            wall)	Weight   705	Net   49	
Interior (pif)       188           Image: Construct Stress Walls (bif)       Diaphragm (pif)        325       23         Image: Construct Stress Walls (bif)       1490        4498         Image: Construct Stress Walls (bif)       21490        4498         Image: Construct Stress Walls (bif)       21490        4498         Image: Construct Stress Walls (bif)       21490        4498         Image: Construct Stress Walls (bif)       161           Image: Construct Stress Walls (bif)       161           Image: Construct Stress Walls (bif)       128           Image: Construct Stress Walls (bif)       128           Image: Construct Stress Walls (bif)       128           Image: Construct Stress Walls (bif)       27588        5483         Total Transverse Force at Base (bif)       27588        5483         Total OTM (ft-kip)       362.3        73.7         PFS Corporation       APPROVED       Z. 5       Z. 5         R Wenner - 1       R       R       R       Z. 5 <td></td> <td>al Forces</td> <td></td> <td>Interior Diaphragm Transverse Walls (lbf/v Force to Transverse Walls</td> <td>Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550</td> <td>Weight   705</td> <td>Net  49 87</td> <td></td>		al Forces		Interior Diaphragm Transverse Walls (lbf/v Force to Transverse Walls	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550	Weight   705	Net  49 87	
Image: construction of the system       Image:	2nd of 2 Story	al Forces		Interior Diaphragm Transverse Walls (lbf/\ Force to Transverse Walls Level OTM (ft-	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4	Weight  705 1260 	Net  49 87 2425	
Transverse Walls (lbf/wall)54037Total Force to Transverse Walls (lbf)214904498Level OTM (ft-kip)331.667.6End (plf)161Interior (plf)128Diaphragm (plf)-28520Transverse Walls (lbf/wall)54037Diaphragm (plf)28520Transverse Walls (lbf/wall)54037Total Transverse Force at Base (lbf)275885483Total OTM (ft-kip)362.373.7PFS CorporationNortheast RegionAPPROVEDR Wenner - 177	2nd of 2 Story	al Forces		Interior Diaphragm Transverse Walls (lbf/ Force to Transverse Walls Level OTM (ft- End	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237	Weight  705 1260 	Net  49 87 2425 19.4	
Transverse Walls (lbf/wall)54037Total Force to Transverse Walls (lbf)214904498Level OTM (ft-kip)331.667.6End (plf)161Interior (plf)128Diaphragm (plf)-28520Transverse Walls (lbf/wall)54037Diaphragm (plf)28520Transverse Walls (lbf/wall)54037Total Transverse Force at Base (lbf)275885483Total OTM (ft-kip)362.373.7PFS CorporationNortheast RegionAPPROVEDR Wenner - 177	2nd of 2 Story	al Forces	Total	Interior Diaphragm Transverse Walls (lbf/ Force to Transverse Walls Level OTM (ft- End	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188	Weight 705 1260	Net  49 87 2425 19.4  	
Level OTM (ft-kip)331.667.6Base of 2 StoryEnd (plf)161Interior (plf)128Diaphragm (plf)28520Transverse Walls (lbf/wall)54037Total Transverse Force at Base (lbf)275885483Total OTM (ft-kip)362.373.7PFS CorporationNortheast RegionAPPROVEDR Wenner - 17.5	2nd of 2 Story	al Forces	Total	Interior Diaphragm Transverse Walls (lbf/ Force to Transverse Walls Level OTM (ft- End Interior Diaphragm	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)	Weight  705 1260   325	Net  49 87 2425 19.4  23	
Level OTM (ft-kip)331.667.6Base of 2 StoryEnd (plf)161Interior (plf)128Diaphragm (plf)28520Transverse Walls (lbf/wall)54037Total Transverse Force at Base (lbf)275885483Total OTM (ft-kip)362.373.7PFS CorporationNortheast RegionAPPROVEDR Wenner - 17.5	2nd of 2 Story	al Forces	Total	Interior Diaphragm Transverse Walls (lbf/ Force to Transverse Walls Level OTM (ft- End Interior Diaphragm	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)	Weight  705 1260   325	Net  49 87 2425 19.4  23	
Base of 2 Story       End (pl)       161           Interior (pl)       128           Diaphragm (pl)        540       37         Transverse Walls (lbf/wall)        540       37         Total Transverse Force at Base (lbf)       27588        5483         Total OTM (ft-kip)       362.3        73.7         PFS Corporation         Northeast Region       27.5         APPROVED       7.5         R Wenner - 1       27.5	2nd of 2 Story	al Forces	CONTRUIS	Interior Diaphragm Transverse Walls (lbfA Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbfA	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)            wall)	Weight  705 1260   325	Net  49 87 2425 19.4  23 37	
Interior (pl)       128           Diaphragm (pl)        285       20         Transverse Walls (lbf/wall)        540       37         Total Transverse Force at Base (lbf)       27588        5483         Total OTM (ft-kip)       362.3        73.7         PFS Corporation       Northeast Region       27.5       27.5         APPROVED       R Wenner - 1       27.5       27.5	2nd of 2 Story	al Forces	CONTRUIS	Interior Diaphragm Transverse Walls (lbfA Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbfA Force to Transverse Walls	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)            wall)            (bif)         21490	Weight  705 1260   325	Net  49 87 2425 19.4  23 37 4498	
Diaphragm (pl)        285       20         Transverse Walls (lbf/wall)        540       37         Total Transverse Force at Base (lbf)       27588        5483         Total OTM (ft-kip)       362.3        73.7         PFS Corporation       Northeast Region       27.5       27.5         R Wenner - 1       27.5        27.5	2nd of 2 Story 1st of 2 Story	al Forces	CONTRUIS	Interior Diaphragm Transverse Walls (lbf/ Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/ Force to Transverse Walls Level OTM (ft-	Net           (pif)         331           (pif)         264           (pif)            (uhf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)            wall)            (ibf)         21490           kip)         331.6	Weight  705 1260   325	Net  49 87 2425 19.4  23 37 4498 67.6	
Transverse Walls (lbf/wall)        540       37         Total Transverse Force at Base (lbf)       27588        5483         Total OTM (ft-kip)       362.3        73.7         PFS Corporation       Northeast Region       27.5        72.5         R Wenner - 1        1	2nd of 2 Story 1st of 2 Story	al Forces	CONTRUIS	Interior Diaphragm Transverse Walls (lbf/ Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/ Force to Transverse Walls Level OTM (ft- End	Net           (pif)         331           (pif)         264           (pif)            (uhf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)            wall)            (ibf)         21490           kip)         331.6           (pif)         161	Weight  705 1260   325	Net  49 87 2425 19.4  23 37 4498 67.6	
Total Transverse Force at Base (lbf)       27588        5483         Total OTM (ft-kip)       362.3        73.7         PFS Corporation       Northeast Region       27.5         APPROVED       27.5         R Wenner - 1       27.5	2nd of 2 Story 1st of 2 Story	al Forces	CONTRUIS	Interior Diaphragm Transverse Walls (lbfA Force to Transverse Walls Level OTM (ft- End Interior Transverse Walls (lbfA Force to Transverse Walls Level OTM (ft- End Interior	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)         188           (pif)            (lbf)         21490           kip)         331.6           (pif)         161           (pif)         128	Weight 705 1260 325 540	Net  49 87 2425 19.4  23 37 4498 67.6  	
Total OTM (ft-kip)     362.3      73.7       PFS Corporation     Northeast Region     2.5       APPROVED     2.5       R Wenner - 1	2nd of 2 Story 1st of 2 Story	al Forces	CONTRUIS	Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)            (lbf)         21490           kip)         331.6           (pif)         161           (pif)         128           (pif)	Weight 705 1260 325 540 285	Net  49 87 2425 19.4  23 37 4498 67.6  20	
Total OTM (ft-kip)     362.3      73.7       PFS Corporation     Northeast Region     2.5       APPROVED     2.5       R Wenner - 1	2nd of 2 Story 1st of 2 Story	al Forces	CONTRUIS	Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)            (lbf)         21490           kip)         331.6           (pif)         161           (pif)         128           (pif)	Weight 705 1260 325 540 285	Net  49 87 2425 19.4  23 37 4498 67.6  20	
PFS Corporation Northeast Region APPROVED R Wenner - 1	2nd of 2 Story 1st of 2 Story	al Forces	Total I (ON TRUES Total I	Interior Diaphragm Transverse Walls (lbfA Force to Transverse Walls ( Level OTM (ft- End Diaphragm Transverse Walls (lbfA Force to Transverse Walls (lbfA End Interior Diaphragm Transverse Walls (lbfA	Net           (pif)         331           (pif)         264           (pif)            wall)            (bf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)         188           (pif)         21490           kip)         331.6           (pif)         161           (pif)         128           (pif)	Weight 705 1260 325 540 285 540 285 540	Net  49 87 2425 19.4  23 37 4498 67.6  20 37	
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Northeast RegionZ.5APPROVEDZ.5R Wenner - 1	2nd of 2 Story 1st of 2 Story	al Forces	Total I (ON TRUES Total I	Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Transverse Force at Base	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)         188           (pif)         331.6           (pif)         161           (pif)         128           (pif)            wall)	Weight 705 1260 325 540 285 540 285 540	Net  49 87 2425 19.4  23 37 4498 67.6  20 37 5483	
Northeast RegionZ.5APPROVEDZ.5R Wenner - 1	2nd of 2 Story 1st of 2 Story		Total I CONTRUIS Total I Total	Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Transverse Force at Base	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)         188           (pif)         331.6           (pif)         161           (pif)         128           (pif)            wall)	Weight 705 1260 325 540 285 540 285 540	Net  49 87 2425 19.4  23 37 4498 67.6  20 37 5483	
APPROVED R Wenner - 1	2nd of 2 Story 1st of 2 Story		Total I CONTRUIS Total I Total	Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Transverse Force at Base	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)         188           (pif)         331.6           (pif)         161           (pif)         128           (pif)            wall)	Weight 705 1260 325 540 285 540 285 540	Net  49 87 2425 19.4  23 37 4498 67.6  20 37 5483	
APPROVED R Wenner - 1	2nd of 2 Story 1st of 2 Story	PFS Corpo	Total I (ON/TRUES Total I Total	Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Transverse Force at Base	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)         188           (pif)         331.6           (pif)         161           (pif)         128           (pif)            wall)	Weight 705 1260 325 540 285 540 285 540	Net  49 87 2425 19.4  23 37 4498 67.6  20 37 5483	
R Wenner - 1	2nd of 2 Story 1st of 2 Story	PFS Corpo	Total I (ON/TRUES Total I Total	Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Transverse Force at Base	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)         188           (pif)         331.6           (pif)         161           (pif)         128           (pif)            wall)	Weight 705 1260 325 540 285 540 285 540 285 540	Net  49 87 2425 19.4  23 37 4498 67.6  20 37 5483 73.7	
	2nd of 2 Story 1st of 2 Story	PFS Corpo Northeast	Total I (ON/TRULS Total I Total Total	Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Transverse Force at Base	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)         188           (pif)         331.6           (pif)         161           (pif)         128           (pif)            wall)	Weight 705 1260 325 540 285 540 285 540 285 540	Net  49 87 2425 19.4  23 37 4498 67.6  20 37 5483 73.7	
	2nd of 2 Story 1st of 2 Story	PFS Corpo Northeast APPROV	Total I CONTRUIS Total I Total Total Pration Region VED	Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Transverse Force at Base	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)         188           (pif)         331.6           (pif)         161           (pif)         128           (pif)            wall)	Weight 705 1260 325 540 285 540 285 540 285 540	Net  49 87 2425 19.4  23 37 4498 67.6  20 37 5483 73.7	
3/13/14	2nd of 2 Story 1st of 2 Story	PFS Corpo Northeast APPROV	Total I CONTRUIS Total I Total Total Pration Region VED	Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Transverse Force at Base	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)         188           (pif)         331.6           (pif)         161           (pif)         128           (pif)            wall)	Weight 705 1260 325 540 285 540 285 540 285 540	Net  49 87 2425 19.4  23 37 4498 67.6  20 37 5483 73.7	
	2nd of 2 Story 1st of 2 Story	PFS Corpo Northeast APPRO R Wenne	Total I CONTRUES Total I Total I Total Total Pration Region VED Pr - 1	Interior Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Diaphragm Transverse Walls (lbf/A Force to Transverse Walls Level OTM (ft- End Interior Diaphragm Transverse Walls (lbf/A Transverse Force at Base	Net           (pif)         331           (pif)         264           (pif)            wall)            (lbf)         12550           kip)         100.4           (pif)         237           (pif)         188           (pif)         188           (pif)         331.6           (pif)         161           (pif)         128           (pif)            wall)	Weight 705 1260 325 540 285 540 285 540 285 540	Net  49 87 2425 19.4  23 37 4498 67.6  20 37 5483 73.7	

Approval limited to Factory Built Portion

6.0 ft

# Lateral Load Analysis (ASCE 7-05)

(Two-Story Building, Flexible Diaphragm)

Client:	Excel Homes
Job Number:	EXLH042314-42
Description:	31217 Calcs.

#### **Diaphragm Parameters:**

Ground Floor Wall Height =	9.0 ft
Above Ground Floor Wall Height =	8.0 ft
Vertical Roof Projection =	13.0 ft
Misc. Framing Height =	1.1 ft/level
Blocking Height =	1.5 ft
Ground Floor Sidewall Weight =	2070 lbm
Above Ground Floor Sidewall Weight =	1840 lbm

Horizontal Wind Pressure (MWFRS)					
	Net Wall	End	21.9		
		interior	14.5		
nal	Net Roof	End	1		
Logitudinal		Interior			
gitı	Max. Wall	End	13.9		
Ĕ		Interior	11.6		
	Max. Roof	End			
		Interior			

MWFRS End Zone, 2a =

				Seis	mic
Longitudinal Lateral Forces		Net	Weight	Net	
2nd of 2 Story (Total)		End Max (plf)	231	-	
		Min (plf)	100		
	$\boldsymbol{\leftarrow}$	Interior Max (plf)	255		
		Min (plf)	153		
		Diaphragm (plf)		1435	100
		Longitudinal Walls (lbf/wall)		920	64
		Total Force to Longitudinal Walls (lbf)	4403		2518
		Level OTM (ft-kip)	35.2		20.1
Roof Diaphgram Only		End Max (plf)	66		
		Min (plf)	0		
	$\leq$	Interior Max (plf)	94		
		Min (plf)	44		
	Diaphragm (plf)			870	60
	$\bigvee$	Roof Force to Longitudinal Walls (lbf)	1111		1449
Ceiling Diaphgram Only		End Max (plf)	165		
		Min (plf)	100		
	$\leq 1$	Interior Max (plf)	160		
		Min (plf)	110		
		Diaphragm (plf)		565	39
		Ceiling Force to Longitudinal Walls (lbf)	3292		1069
1st of 2 Story		End Zone (plf)	210		
	$\langle \rangle$	Interior (plf)	139		
		Diaphragm (plf)		503	35
		Longitudinal Walls (Ibf/wall)		1035	72
		Total Force to Longitudinal Walls (lbf)	8176		3627
		Level OTM (ft-kip)	122.8		59.6
Base of 2 Story		End Zone (plf)	132		
	$\langle \rangle$				
	$\angle$	Interior (plf)	88		
		Diaphragm (plf)		463	32
		Longitudinal Walls (lbf/wall)		1035	72
		Total Longitudinal Force at Base (lbf)	10552		4542
	¥	Total OTM (ft-kip)	134.5		60.1

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#### (Two-Story Building, Flexible Diaphragm) Stiffness Location Governing $R_x d^2$ **Transverse Walls** Wall Wall R<sub>x</sub> R<sub>x</sub>X R<sub>x</sub>d Lateral Loads (lbf) Along Length, X d **Bracing 2nd Story** Line Length (k/in.) (ft) (ft-k) Wind (ft) (in.) (k) (k) Seismic 0.0 6449 1213 1 2 46.0 6449 1213 3 4 5 6 7 8 9 10 Σ= 0.0 0 CR<sub>x</sub> = ft Location Stiffness Governing Longitudinal Walls Wall Along Width, Y $R_{x}X$ R<sub>v</sub>d $R_y d^2$ Wall R, d Lateral Loads (lbf) **Bracing 2nd Story** Line Length (ft) (k/in.) (ft) (ft-k) Wind (in.) (k) (k) Seismic Α 0.0 2338 1259 в 24.0 2338 1259 С D Е F G н I .1 Σ= 0.0 0.0 CR<sub>v</sub> = ft \_\_\_ Overall J = ---Location Stiffness Governing $R_x d^2$ **Transverse Walls** Wall Wall $R_x X$ R<sub>x</sub>d Along Length, X R<sub>x</sub> d Lateral Loads (lbf) **Bracing 1st Story** Line Length (k/in.) (ft) (k) (ft-k) Wind Seismic (ft) (in.) (k) 0.0 11046 2249 1 2 46.0 11046 2249 3 4 5 6 7 8 9 10 Σ= 0.0 0.0 CR<sub>x</sub> = --ft Stiffness Location Governing $R_y d^2$ **Longitudinal Walls** Wall Along Width, Y R<sub>x</sub>X Ryd Wall Ry d Lateral Loads (lbf) **Bracing 1st Story** Line Length (ft) (k/in.) (k) (ft) (k) (k-in.) Wind Seismic (in.) А 0.0 4383 1814 В 4383 24.0 1814 С D Е F G Н P C orporation Σ= 0.0 0.0 CR<sub>y</sub> = Northeast Region ft Overall J = ---2.7 **APPROVED**

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Lateral Load Analysis (ASCE 7-05)

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			Story Bui		<b>s (ASCE</b> ible Diaphr Stiffness					l com	erning
Transverse Foundation	Wall	Wall				R <sub>x</sub> X	d	R <sub>x</sub> d	R <sub>x</sub> d <sup>2</sup>		oads (lbf)
				ength, X	R <sub>x</sub>						• •
Bracing 2 Story	Line	Length	(ft) 0.0	(in.)	(k/in.)	(k)	(ft)	(k)	(ft-k)	Wind 14181	Selsmic 2742
	1		0.0 46.0							14181	2742
	2 3		40.0							14101	2/42
				(							
	4										
	5										
	6 7										
	8										
	9										
	10										
				Σ=	0.0	0					
					CR <sub>x</sub> =		ft				
			Loc	ation	Stiffness					Gove	erning
Longitudinal Foundation	Wall	Wall	Nall Along Width, Y		Ry	R <sub>x</sub> X	d	Ryd	R <sub>y</sub> d²	Lateral L	oads (lbf)
Bracing 2 Story	Line	Length	(ft)	(in.)	(k/in.)	(k)	(ft)	(k)	(ft-k)	Wind	Seismic
	A		0.0							5672	2271
	в		24.0							5672	2271
	С										
$\langle \langle \rangle$	D										
	Е	•									
	_										
	F									1	
	F G										
	F										
	F G										
	F G										
	F G H I			Σ =	0.0 CR <sub>y</sub> =	0.0	ft				

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