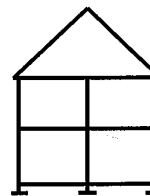


**ASCE/SEI 7-05 Design Criteria Summary**

**Client:** Excel Homes  
**Job Number:** EXLH042314-42  
**Description:** 31217 Calcs.  
**Location(s):** State of ME  
**Substructure:**



**Plan Dimensions:**

Ridge Length, B = 46.00 ft  
Gable Width, L = 24.00 ft  
Module Width, L<sub>m</sub> = 15.50 ft

**Vertical Dimensions:**

Stories Above Grade, n = 2  
Max. Blocking Height, h<sub>b</sub> = 18 in.  
Sidewall/Eave Height, h<sub>e</sub> = 244 in.  
Min. Mean Roof Height, h = 15 ft

**Roof Configuration:**

Framing Type: Cape Truss  
Roof Slope, a = 12.00 /12 pitch  
Sidewall Overhang, L<sub>OH</sub> = 12 in.  
Endwall Overhang, B<sub>OH</sub> = 12 in.  
Roof Cavity Insulation, R = 30

**Uniformly Distributed Design Loads:**

*Ground Floor*

Floor Live, L = 40 psf  
Floor Dead, D = 10 psf  
Wall Dead Load, D<sub>w</sub> = 5 psf  
Wall Height, h<sub>w</sub> = 108 in.

*Roof*

Top Chord Load = 56.6 psf  
Top Chord Dead Load = 10 psf  
Loft Live Load, L = 40 psf  
Bottom Chord Dead Load = 10 psf

*Other Floors (above ground)*

Floor Live, L = 40 psf  
Floor Dead, D = 10 psf  
Wall Dead Load, D<sub>w</sub> = 5 psf  
Wall Height, h<sub>w</sub> = 96 in.

**Misc. Design Parameters:**

Occupancy Category: II (IBC Table 1604.5)

**Roof/Snow Load:**

Ground Snow Load, P<sub>g</sub> = 50.0 psf  
Ground Snow Load NY<sup>1</sup>, P<sub>gNY</sub> = 67.7 psf  
Min. Design Load, L<sub>r</sub> = 12.0 psf  
Flat-Roof Snow Load, P<sub>f</sub> = 38.5 psf  
Sloped Roof Snow Load = 29.6 psf  
Max. Unbalanced Load, P<sub>ub</sub> = 56.6 psf  
Snow Exposure Factor, C<sub>e</sub> = 1.0  
Snow Load Importance Factor, I<sub>s</sub> = 1.00  
Thermal Factor, C<sub>t</sub> = 1.1

**Seismic Loads:**

Seismic Importance Factor, I<sub>E</sub> = 1.00  
Mapped Coefficients: S<sub>S</sub> = 0.62 g  
S<sub>1</sub> = 0.15 g  
Response Coefficients: S<sub>DS</sub> = 0.53 g  
S<sub>D1</sub> = 0.22 g

Site Class = D  
IBC Design Category = D  
IRC Design Category = C

**Basic Seismic-Force-Resisting System:**

A13 Light-frame walls with wood shear panels  
Response Modification Factor R = 6.5  
Design Base Shear C<sub>S</sub> = 0.08 W  
Analysis Procedure:  
A13 Light-frame walls with wood shear panels

**Wind Loads:**

Basic Wind Speed = 100 mph  
Wind Exposure = C  
Wind Importance Factor, I<sub>w</sub> = 1.00  
Internal Pressure Coefficient = +/- 0.18  
Mean Roof Height = 28.3 ft

**Flood Loads:**

Site Specific flood loads have not been assessed in this analysis. For Buildings located in flood hazard areas, as established in Section 1612.3 of the IBC, floods loads must be considered as required by Section 1612 of the IBC. Furthermore, when required, the design information required by IBC section 1603.1.6 must be provided on the construction documents.

**Components and Cladding Loads:**

Component	End Zone (psf)	Interior Zone (psf)
Window	+24.8 / -33.2	+24.8 / -26.9
Door	+23.9 / -31.4	+23.9 / -26
Roof Cladding	+22.7 / -29	+22.7 / -24.8
Overhang	-42.1	-42.1

**NOTES:**

1. Equivalent ground snow load at a thermal factor of 1.0 for use with the NYBC/NYRC ground snow load map.

**PFS Corporation**  
**Northeast Region**  
**APPROVED**  
**R Wenner - 1**  
**5/15/14**  
**Approval limited to**  
**Factory Built Portion**