



Certificate of Design Application

From Designer: Shields Architecture - John Shields
 Date: 7/11/14
 Job Name: Shalom House, 214 Danforth St., Portland, Maine
 Address of Construction: 214 Danforth St., Portland, Maine

2009 International Building Code

Construction project was designed to the building code criteria listed below:

Building Code & Year 2009 Use Group Classification (s) R-2
 Type of Construction Type VB
 Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 IBC Yes - 13R
 Is the Structure mixed use? No If yes, separated or non separated or non separated (section 302.3) _____
 Supervisory alarm System? Yes Geotechnical/Soils report required? (See Section 1802.2) No

Structural Design Calculations

_____ Submitted for all structural members (106.1 - 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use	Loads Shown
Private Rooms	40 psf
Stairs	100 psf
_____	_____
_____	_____

Wind loads (1603.1.4, 1609)

n/a Design option utilized (1609.1.1, 1609.6)
n/a Basic wind speed (1809.3)
n/a Building category and wind importance Factor, I_w (table 1604.5, 1609.5)
n/a Wind exposure category (1609.4)
n/a Internal pressure coefficient (ASCE 7)
n/a Component and cladding pressures (1609.1.1, 1609.6.2.2)
n/a Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

n/a Design option utilized (1614.1)
n/a Seismic use group ("Category")
n/a Spectral response coefficients, S_D & S_{DI} (1615.1)
n/a Site class (1615.1.5)

n/a Live load reduction
n/a Roof live loads (1603.1.2, 1607.11)
46 psf Roof snow loads (1603.7.3, 1608)
60 psf Ground snow load, P_g (1608.2)
46 psf If $P_g > 10$ psf, flat-roof snow load P_f
1.0 If $P_g > 10$ psf, snow exposure factor, C_e
1.0 If $P_g > 10$ psf, snow load importance factor, I_s
1.1 Roof thermal factor, C_t (1608.4)
n/a Sloped roof snowload, P_s (1608.4)
n/a Seismic design category (1616.3)
n/a Basic seismic force resisting system (1617.6.2)
n/a Response modification coefficient, R , and deflection amplification factor C_d (1617.6.2)
n/a Analysis procedure (1616.6, 1617.5)
n/a Design base shear (1617.4, 1617.5.1)

Flood loads (1803.1.6, 1612)

n/a Flood Hazard area (1612.3)
n/a Elevation of structure

Other loads

n/a Concentrated loads (1607.4)
n/a Partition loads (1607.5)
n/a Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610; 1611, 2404)