



Certificate of Design Application

From Designer: Shields Architecture, John Shields - Architect

Date: 2/3/16

Job Name: 3 PLEASANT AVENUE

Address of Construction: 3 PLEASANT AVENUE, PORTLAND, MAINE

2009 International Building Code

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

Building Code & Year 2009 IBC Use Group Classification (s) RESIDENTIAL R2 - APT. BLDG.

Type of Construction 5B

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 IRC YES - NFPA 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
Residential Units	40 PSF
Stairs / Exits	

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, w_p (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_{D1} (1615.1)

n/a Site class (1615.1.5)

n/a Live load reduction

n/a Roof live loads (1603.1.2, 1607.11)

n/a Roof snow loads (1603.7.3, 1608)

60 PSF Ground snow load, P_g (1608.2)

42 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_f

1.0 Roof thermal factor, C_t (1608.4)

42 PSF 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_f 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)