



Certificate of Design Application

From Designer: Ryan Senatore
 Date: 6/8/15
 Job Name: 89 Anderson Street Apartments
 Address of Construction: 89 Anderson Street, Portland

2009 International Building Code

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

Building Code & Year IBC 2009 Use Group Classification (s) R2, M, A-2, S2, B
 Type of Construction 5B with 1A First Floor
 Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 ~~IBC~~ IFC NFPA 13
 Is the Structure mixed use? Yes If yes, separated or non separated or non separated (section 302.3) Separated
 Supervisory alarm System? Y Geotechnical/Soils report required? (See Section 1802.2) _____

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 40 psf	Balconies 60 psf
Public spaces 100 psf	Stairs 100 psf
Corridors above 1st 40 psf	
Storage areas 125 psf	
Commercial on 1st 100 psf	

Wind loads (1603.1.4, 1609)

Analytical method Design option utilized (1609.1.1, 1609.6)
 100 mph Basic wind speed (1809.3)
 Cat. II, 1.0 Building category and wind importance Factor, w table 1604.5, 1609.5)
 B Wind exposure category (1609.4)
 0.55 Internal pressure coefficient (ASCE 7)
 50 psf Component and cladding pressures (1609.1.1, 1609.6.2.2)
 22 psf Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

Equiv. Lateral Force Design option utilized (1614.1)
 1 Seismic use group ("Category")
 0.324, 0.123 Spectral response coefficients, S_D & S_{DI} (1615.1)
 D Site class (1615.1.5)

none Live load reduction
 _____ Roof live loads (1603.1.2, 1607.11)
 42 psf _____ 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_s
 1.0 _____ Roof thermal factor, C_t (1608.4)
 42 psf _____ Sloped roof snowload, P_s (1608.4)
 B _____ Seismic design category (1616.3)
 Conc. moment frame _____ Basic seismic force resisting system (1617.6.2)
 5 _____ Response modification coefficient, R , and
 _____ deflection amplification factor C_d (1617.6.2)
 Equiv. Lateral Force _____ Analysis procedure (1616.6, 1617.5)
 148 kips _____ Design base shear (1617.4, 1617.5.1)

Flood loads (1803.1.6, 1612)

_____ Flood Hazard area (1612.3)
 _____ Elevation of structure

Other loads

_____ Concentrated loads (1607.4)
 _____ Partition loads (1607.5)
 _____ Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)