



Certificate of Design Application

From Designer: Ryan Senatore Architecture
 Date: 12/26/17
 Job Name: OFFICE BUILDING
 Address of Construction: 547 RIVERSIDE STREET

2009 International Building Code

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

Building Code & Year 2009 Use Group Classification (s) B
 Type of Construction 5B
 Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 IBC NO
 Is the Structure mixed use? NO If yes, separated or non separated or non separated (section 302.3) _____
 Supervisory alarm System? NO Geotechnical/Soils report required? (See Section 1802.2) NA

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
<u>Office</u>	<u>50 psf</u>
_____	_____
_____	_____
_____	_____

Wind loads (1603.1.4, 1609)

Analytical 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, I_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)
20 psf Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

Equip. Lateral Force Design option utilized (1614.1)
1 Seismic use group ("Category")
0.331, 0.125 Spectral response coefficients, SDs & SDI (1615.1)
D Site class (1615.1.5)

_____ Live load reduction
 _____ Roof *live* loads (1603.1.2, 1607.11)
46.2 psf Roof snow loads (1603.7.3, 1608)
50 psf Ground snow load, P_g (1608.2)
46.2 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)
46.2 psf Sloped roof snowload, P_s (1608.4)
B Seismic design category (1616.3)
Light framed walls Basic seismic force resisting system (1617.6.2)
6.5 Response modification coefficient, R_f and deflection amplification factor C_d (1617.6.2)
Equip. Lateral Force Analysis procedure (1616.6, 1617.5)
7 k 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)