



Certificate of Design Application

From Designer: RESURGENCE ENGINEERING & PRESERVATION, INC.
 Date: 11 Nov 08
 Job Name: 61 INDIA STREET
 Address of Construction: 61 INDIA STREET

2003 International Building Code

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

Building Code & Year IBC 2003 Use Group Classification (s) B, M, R-2
 Type of Construction 5A

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC YES at new portion of building
 Is the Structure mixed use? YES If yes, separated or non separated or non separated (section 302.3) SEPARATED
 Supervisory alarm System? YES Geotechnical/Soils report required? (Sec Section 1802.2) YES, ATTACHED

Structural Design Calculations

Submitted for all structural members (106.1 - 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (1603.1.1, 1807)

Floor Area Use	Loads Shown
<u>STAIRS</u>	<u>100 PSF</u>
<u>2ND FLOOR OFFICE</u>	<u>80 PSF</u>
<u>3RD FLOOR RESID</u>	<u>40 PSF</u>
<u>4TH FLOOR RESID</u>	<u>40 PSF</u>
<u>GROUND FLOOR</u>	<u>100 PSF</u>

Wind loads (1603.1.4, 1609)

1609.1.1 Design option utilized (1609.1.1, 1609.6)
100 mph Basic wind speed (1809.3)
1.0 Building category and wind importance Factor, I_w (table 1604.5, 1609.5)
B Wind exposure category (1609.4)
±0.18 Internal pressure coefficient (ASCE 7)
VAR, 30 psf Component and cladding pressures (1609.1.1, 1609.6.2.2)
17 psf Main force wind pressures (1603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

ASCE 7-02 Design option utilized (1614.1)
I Seismic use group ("Category")
0.37 Spectral response coefficients, S_D & S_I (1615.1)
0.10 Site class (1615.1.5)

NO Live load reduction
N/A 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
0.90 If $P_g > 10$ psf, snow exposure factor, C_e
1.0 If $P_g > 10$ psf, snow load importance factor, I_s
1.10 Roof thermal factor, C_t (1608.4)
N/A Sloped roof snowload, P_s (1608.4)
C Seismic design category (1616.3)
B Basic seismic force resisting system (1617.6.2)
3, 3 Response modification coefficient, R , and deflection amplification factor, C_d (1617.6.2)
E.L.F. Analysis procedure (1616.6, 1617.5)
0.123W 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
2ND FL. 2000# 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)