



Certificate of Design Application

From Designer:

MICHAEL F. HAYS - GRANT HAYS ASSOCIATES

Date:

6-9-2014

Job Name:

2ND FLOOR TOILET ROOM UPDATES

Address of Construction:

19 CROSS STREET / 261 COMMERCIAL 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 III B

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 IRC YES (EXISTING)

Is the Structure mixed use? NO If yes, separated or non separated or non separated (section 302.3) N/A

Supervisory alarm System? YES (E) Geotechnical/Soils report required? (See Section 1802.2) N/A

Structural Design Calculations

N/A 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>LOBBIES</u>	<u>100 PSF</u>
<u>LOBBY/REAR</u>	<u>100 PSF / 80 PSF</u>
<u>OFFICES</u>	<u>50 PSF</u>

Wind loads (1603.1.4, 1609)

N/A Design option utilized (1609.1.1, 1609.6)

Basic wind speed (1809.3)

Building category and wind importance Factor, I_w table 1604.5, 1609.5)

Wind exposure category (1609.4)

Internal pressure coefficient (ASCE 7)

Component and cladding pressures (1609.1.1, 1609.6.2.2)

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)

Seismic use group ("Category")

Spectral response coefficients, S_D & S_{D1} (1615.1)

Site class (1615.1.5)

N/A Live load reduction

Roof live loads (1603.1.2, 1607.11)

Roof snow loads (1603.7.3, 1608)

Ground snow load, P_g (1608.2)

If $P_g > 10$ psf, flat-roof snow load P_f

If $P_g > 10$ psf, snow exposure factor, C_e

If $P_g > 10$ psf, snow load importance factor, I_s

Roof thermal factor, C_t (1608.4)

Sloped roof snowload, P_s (1608.4)

Seismic design category (1616.3)

Basic seismic force resisting system (1617.6.2)

Response modification coefficient, R and deflection amplification factor, C_d (1617.6.2)

Analysis procedure (1616.6, 1617.5)

Design base shear (1617.4, 1617.5.1)

Flood loads (1803.1.6, 1612)

N/A Flood Hazard area (1612.3)

Elevation of structure

Other loads

N/A 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)