Certificate of Design Application

From Designer: BECKER STRUCTURAL ENGINEERS

Date: 12/4/12

Job Name: HYATT PLACE PORTLAND - OLD PORT

Address of Construction: 433 FORE ST.

2009 International Building Code

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

Building Code & Year 2009 IBC Use Group Classification (s) R-1

Type of Construction 1B

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

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? (See Section 1802.2) YES

Structural Design Calculations

COMPLETED 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
ALL GROUND FLR	100 PSF
ALL PUBLIC SPACES	100 PSF
PUBLIC CORRIDORS	100 PSF
STAIRS	100 PSF
PRIVATE ROOMS & CORRIDORS	40 PSF

Wind loads (1603.1.4, 1609)

MHTD 2 Design option utilized (1609.1.1, 1609.6)

100 MPH Basic wind speed (1809.3)

II,1.0 Building category and wind importance Factor, I_w table 1604.5, 1609.5)

C Wind exposure category (1609.4)

+/- 0.18 Internal pressure coefficient (ASCE 7)

PER ASCE 7-05 Component and cladding pressures (1609.1.1, 1609.6.2.2)

PER ASCE 7-05 Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

Equiv. Lat. Force Design option utilized (1614.1)

II Seismic use group ("Category")

0.324 / 0.123 Spectral response coefficients, S_{DS} & S_{D1} (1615.1)

D Site class (1615.1.5)

N/A Live load reduction

20 PSF Roof *live* loads (1603.1.2, 1607.11)

46 PSF + DRIFT Roof snow loads (1603.7.3, 1608)

60 PSF Ground snow load, P_g (1608.2)

46 PSF + DRIFT 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)

N/A Sloped roof snowload, P_s (1608.4)

B Seismic design category (1616.3)

OCBF, OEBF Basic seismic force resisting system (1617.6.2)

3.0, 3.0 Response modification coefficient, R_I and deflection amplification factor C_d (1617.6.2)

Equiv Lat Force Analysis procedure (1616.6, 1617.5)

300K Design base shear (1617.4, 16175.5.1)

Flood loads (1803.1.6, 1612)

N/A Flood Hazard area (1612.3)

N/A Elevation of structure

Other loads

AS INDICATED Concentrated loads (1607.4)

INCLUDED Partition loads (1607.5)

AS INDICATED Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404