# Certificate of Design Application

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 10/16/15

From Designer: Perkins+Will

Date: 09/01/2015

Job Name: Maine Medical Center - Hybrid OR & OR #6

Address of Construction: 22 Bramhall Street, Portland, Maine 04102

## 2009 International Building Code

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

Building Code & Year IBC 2009 Use Group Classification (s) Institutional Group I-2 (Hospital)

Type of Construction IBC Construction Type 1B - NFPA II (222) (non-combustible, 2-hour rated)

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? No If yes, separated or non separated or non separated (section 302.3) N/A

Supervisory alarm System? Yes Geotechnical/Soils report required? (See Section 1802.2) No

### 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 |
|---|---|
| N/A | N/A |
| | |
| | |
| | |
| | |

### Wind loads (1603.1.4, 1609)

N/A Design option utilized (1609.1.1, 1609.6)

N/A Basic wind speed (1809.3)

N/A Building category and wind importance Factor, $I_w$ table 1604.5, 1609.5)

N/A Wind exposure category (1609.4)

N/A Internal pressure coefficient (ASCE 7)

N/A Component and cladding pressures (1609.1.1, 1609.6.2.2)

N/A 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)

N/A Seismic use group ("Category")

N/A Spectral response coefficients, $S_{Ds}$ & $S_{D1}$ (1615.1)

N/A Site class (1615.1.5)

N/A Live load reduction

N/A Roof *live* loads (1603.1.2, 1607.11)

N/A Roof snow loads (1603.7.3, 1608)

N/A Ground snow load, $P_g$ (1608.2)

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

N/A If $P_g$ > 10 psf, snow exposure factor, $C_e$

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

N/A Roof thermal factor, $C_t$ (1608.4)

N/A Sloped roof snowload, $P_s$ (1608.4)

N/A Seismic design category (1616.3)

N/A Basic seismic force resisting system (1617.6.2)

N/A Response modification coefficient, $R_I$ and deflection amplification factor $C_d$ (1617.6.2)

N/A Analysis procedure (1616.6, 1617.5)

N/A 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

N/A 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