



Certificate of Design Application

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
<u>N/A</u>	<u>N/A</u>
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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, 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_D & 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 , and deflection amplification factor C_d (1617.6.2)

N/A Analysis procedure (1616.6, 1617.5)

N/A 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

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)