



# Certificate of Design Application

From Designer: David Douglass AIA

Date: March 9, 2016

Job Name: Cathedral of St. Lukes Tracery Window Repair

Address of Construction: 134 Park Street Portland Maine 04101

## 2009 International Building Code

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

Building Code & Year na Use Group Classification (s) na

Type of Construction na

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

Is the Structure mixed use? na If yes, separated or non separated or non separated (section 302.3) na

Supervisory alarm System? na Geotechnical/Soils report required? (See Section 1802.2) na

### Structural Design Calculations

na Submitted for all structural members (106.1 – 106.11)

na Live load reduction

na Roof *live* loads (1603.1.2, 1607.11)

na Roof snow loads (1603.7.3, 1608)

na Ground snow load,  $P_g$  (1608.2)

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

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

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

na Roof thermal factor,  $C_t$  (1608.4)

na Sloped roof snowload,  $P_R$  (1608.4)

na Seismic design category (1616.3)

na Basic seismic force resisting system (1617.6.2)

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

na Analysis procedure (1616.6, 1617.5)

na Design base shear (1617.4, 1617.5.1)

### Flood loads (1803.1.6, 1612)

na Flood Hazard area (1612.3)

na Elevation of structure

### Other loads

na Concentrated loads (1607.4)

na Partition loads (1607.5)

na Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)

### Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use	Loads Shown
<u>na</u>	<u>na</u>
<u>na</u>	<u>na</u>
<u>na</u>	<u>na</u>
<u>na</u>	<u>na</u>
<u>na</u>	<u>na</u>

### Wind loads (1603.1.4, 1609)

na Design option utilized (1609.1.1, 1609.6)

na Basic wind speed (1809.3)

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

na Wind exposure category (1609.4)

na Internal pressure coefficient (ASCE 7)

na Component and cladding pressures (1609.1.1, 1609.6.2.2)

na Main force wind pressures (7603.1.1, 1609.6.2.1)

### Earth design data (1603.1.5, 1614-1623)

na Design option utilized (1614.1)

na Seismic use group ("Category")

na Spectral response coefficients,  $S_D$ s &  $S_I$  (1615.1)

na Site class (1615.1.5)