



# Certificate of Design Application

From Designer: Winton Scott Architects, 5 Milk Street, Portland, ME 04101  
 Date: 8/7/14  
 Job Name: City of Portland Public Facilities Operations Center renovations  
 Address of Construction: 212 Canco Road, Portland

## 2009 International Building Code

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

Building Code & Year IBC/IEBC/NFPA Use Group Classification (s) F1 / S2

Type of Construction Type IIIB

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) NON\_SEPARATED

Supervisory alarm System? YES Geotechnical/Soils report required? (See Section 1802.2) NO

### Structural Design Calculations

                     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>                    </u>	<u>                    </u> NOT APPLICABLE-
<u>                    </u>	<u>                    </u> NO STRUCTURAL WORK IS
<u>                    </u>	<u>                    </u> BEING UNDERTAKEN
<u>                    </u>	<u>                    </u>
<u>                    </u>	<u>                    </u>

- 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)

### Wind loads (1603.1.4, 1609)

- 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 (1603.1.1, 1609.6.2.1)

### Flood loads (1803.1.6, 1612)

- Flood Hazard area (1612.3)
- Elevation of structure

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

- Design option utilized (1614.1)
- Seismic use group ("Category")
- Spectral response coefficients,  $S_D$  &  $S_I$  (1615.1)
- Site class (1615.1.5)

### Other loads

- 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)