Certificate of Design Application

From Designer: _ALPHA architects_

Date: _1-5-2016_

Job Name: _West field Building_

Address of Construction: _17 Westfield St, Portland ME 04102_

2009 International Building Code
Construction project was designed to the building code criteria listed below:

Building Code & Year _2009 IBC_ Use Group Classification (s) _F1/F2_

Type of Construction _IIB_

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) _—_

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

Structural Design Calculations

_NR_ 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
NA	

Wind loads (1603.1.4, 1609)

_NA_

- 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 (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

_NA_

- Design option utilized (1614.1)
- Seismic use group ("Category")
- Spectral response coefficients, S_{Ds} & S_{D1} (1615.1)
- Site class (1615.1.5)

_NA_

- 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_d and deflection amplification factor C_d (1617.6.2)
- Analysis procedure (1616.6, 1617.5)
- Design base shear (1617.4, 16175.5.1)

Flood loads (1803.1.6, 1612)

_NA_

- Flood Hazard area (1612.3)
- Elevation of structure

Other loads

_NA_

- 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