



Certificate of Design Application

From Designer: Bruce Ronayne Hamilton Architects

Date: 9/3/15

Job Name: EMC Tenant Fit Out

Address of Construction: 55 Industrial Way, Portland, ME

2009 International Building Code

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

Building Code & Year 2009 IBC & IEBC Use Group Classification (s) B and S-1

Type of Construction 2B

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 IRC No

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

Supervisory alarm System? No 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

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 (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

 Design option utilized (1614.1)

 Seismic use group ("Category")

 Spectral response coefficients, SDs & SD1 (1615.1)

 Site class (1615.1.5)

 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_B (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, 16175.5.1)

Flood loads (1803.1.6, 1612)

 Flood Hazard area (1612.3)

 Elevation of structure

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)