Certificate of Design Application

From Designer: James P. Gauthier, AIA

Date: August 5, 2015

Job Name: MaineHealth Window Replacement

Address of Construction: 110 Free Street, Portland, 04101

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

Building Code & Year 2009 IBC   Use Group Classification (s) Group B, Business

Type of Construction   existing

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

Is the Structure mixed use? no   If yes, separated or non separated or non separated (section 302.3)

Supervisory alarm System? existing   Geotechnical/Soils report required? (See Section 1802.2) n/a

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
n/a	

Wind loads (1603.1.4, 1609)

n/a _____ 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)

n/a _____ Design option utilized (1614.1)

_____ Seismic use group ("Category")

_____ Spectral response coefficients, S_{DS} & S_{D1} (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_s (1608.4)

_____ Seismic design category (1616.3)

_____ Basic seismic force resisting system (1617.6.2)

_____ Response modification coefficient, R_I 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)

n/a _____ Flood Hazard area (1612.3)

_____ Elevation of structure

Other loads

n/a _____ 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)