Certificate of Design Application

From Designer: Loranger Door & Window Co., Inc.

Date: 4/16/13--repair date T.B.D.

Job Name: Mercy 5th Floor Window Replacement

Address of Construction: 144 State Street, Portland ME 04101

2009 International Building Code

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

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

Type of Construction window replacement

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

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

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

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
n/a	n/a

Wind loads (1603.1.4, 1609)

n/a Design option utilized (1609.1.1, 1609.6)

n/a Basic wind speed (1809.3)

n/a Building category and wind importance Factor, I_w table 1604.5, 1609.5)

n/a Wind exposure category (1609.4)

n/a Internal pressure coefficient (ASCE 7)

n/a Component and cladding pressures (1609.1.1, 1609.6.2.2)

n/a 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)

n/a Seismic use group ("Category")

n/a Spectral response coefficients, SDs & SD1 (1615.1)

n/a Site class (1615.1.5)

n/a Live load reduction

n/a Roof *live* loads (1603.1.2, 1607.11)

n/a Roof snow loads (1603.7.3, 1608)

n/a Ground snow load, P_g (1608.2)

n/a If P_g > 10 psf, flat-roof snow load $_{pf}$

n/a If P_g > 10 psf, snow exposure factor, $_{Ce}$

n/a If P_g > 10 psf, snow load importance factor, $_{Is}$

n/a Roof thermal factor, $_{Ct}$ (1608.4)

n/a Sloped roof snowload, $_{Ps}$ (1608.4)

n/a Seismic design category (1616.3)

n/a Basic seismic force resisting system (1617.6.2)

n/a Response modification coefficient, $_{Rs}$ and deflection amplification factor $_{Cd}$ (1617.6.2)

n/a Analysis procedure (1616.6, 1617.5)

n/a Design base shear (1617.4, 16175.5.1)

Flood loads (1803.1.6, 1612)

n/a Flood Hazard area (1612.3)

n/a Elevation of structure

Other loads

n/a Concentrated loads (1607.4)

n/a Partition loads (1607.5)

n/a Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404