Certificate of Design Application

From Designer: Mark Sengelmann dba ALPHAarchitects

Date: 4-6-2015

Job Name: Coastal Trading & Pawn - Tenant Fit Up

Address of Construction: 264 St. John 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) M - Mercantile

Type of Construction _____

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) NR

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
NR	

Wind loads (1603.1.4, 1609)

NR 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)

NR Design option utilized (1614.1)

Seismic use group ("Category")

Spectral response coefficients, S_{DS} & S_{D1} (1615.1)

Site class (1615.1.5)

NR 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)

NR Flood Hazard area (1612.3)

" Elevation of structure

Other loads

NR 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