Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 11/06/14

Certificate of Design Application

From Designer: Steven Grant - SRG Engineering, PO Box 925, Gray, ME 04039

Date: 9-25-14

Job Name: U Haul Moving and Storage

Address of Construction: 425 Marginal Way, Portland, Maine

2009 International Building Code

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

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

Type of Construction IIB

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) Separated

Supervisory alarm System? Yes 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
N/A	

Wind loads (1603.1.4, 1609)

ASCE7, Ch6 Design option utilized (1609.1.1, 1609.6)

100 Basic wind speed (1809.3)

II, 1.00 Building category and wind importance Factor, I_w table 1604.5, 1609.5)

B Wind exposure category (1609.4)

+/- 0.18 Internal pressure coefficient (ASCE 7)

20.8 Component and cladding pressures (1609.1.1, 1609.6.2.2)

14 Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

ELF Design option utilized (1614.1)

II Seismic use group ("Category")

0.51, 0.247 Spectral response coefficients, S_{DS} & S_{D1} (1615.1)

E Site class (1615.1.5)

N/A Live load reduction

N/A Roof *live* loads (1603.1.2, 1607.11)

46 Roof snow loads (1603.7.3, 1608)

60 Ground snow load, P_g (1608.2)

46 If P_g > 10 psf, flat-roof snow load P_f

1.0 If P_g > 10 psf, snow exposure factor, C_e

1.0 If P_g > 10 psf, snow load importance factor, I_s

1.1 Roof thermal factor, C_t (1608.4)

N/A Sloped roof snowload, P_s (1608.4)

D Seismic design category (1616.3)

Masonry Walls Basic seismic force resisting system (1617.6.2)

2 Response modification coefficient, R_f and deflection amplification factor C_d (1617.6.2)

ELF Analysis procedure (1616.6, 1617.5)

122.6 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