



Certificate of Design Application

From Designer:

STEPHEN J. REIFENBERG

Date:

7/23/14

Job Name:

CANAL LANDING

Address of Construction:

100 WEST COMMERCIAL STREET PORTLAND, ME 04101

2009 International Building Code

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

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

Type of Construction I B

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

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

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

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

- NO Live load reduction
- 20 Roof live loads (1603.1.2, 1607.13)
- 42 Roof snow loads (1603.7.3, 1608)
- 60 Ground snow load, P_g (1608.2)
- 42 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
- 1.0 Roof thermal factor, C_t (1608.4)
- 42 Sloped roof snowload, P_s (1608.4)
- C Seismic design category (1616.3)
- SEE CALC Basic seismic force resisting system (1617.6.2)
- 1.2 Response modification coefficient, R and deflection amplification factor, C_d (1617.6.2)
- ELF Analysis procedure (1616.6, 1617.5)
- SEE CALC Design base shear (1617.4, 1617.5.1)

Wind loads (1603.1.4, 1609)

- ASCE 7-05 Chapter 6 Design option utilized (1609.1.1, 1609.6)
- 115 Basic wind speed (1809.3)
- II I=1.0 Building category and wind importance Factor, I , table 1604.5, 1609.5)
- Fully EXPOSED Wind exposure category (1609.4)
- Fully ENCLOSED Internal pressure coefficient (ASCE 7)
- _____ Component and cladding pressures (1609.1.1, 1609.6.2.2)
- 28.78 PSF Main force wind pressures (7603.1.1, 1609.6.2.1)

Flood loads (1803.1.6, 1612)

- _____ Flood Hazard area (1612.3)
- _____ Elevation of structure

Earth design data (1603.1.5, 1614-1623)

- _____ Design option utilized (1614.1)
- _____ Seismic use group ("Category")
- _____ Spectral response coefficients, S_D & S_I (1615.1)
- _____ Site class (1615.1.5)

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)

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