



Certificate of Design Application

From Designer: re*fab
 Date: 6/9/2015
 Job Name: j henry
 Address of Construction: 22 Free Street, Suite 101, 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) M-Mercantile

Type of Construction IIIB

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? 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

_____ 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
<u>MATCHES ORIGINAL BUILDING</u>	<u>DESIGN LIVE LOAD</u>

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, w_b (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)
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)
 _____ Seismic use group ("Category")
 _____ Spectral response coefficients, S_s & S_D (1615.1)
N/A Site class (1615.1.5)

NO Live load reduction
N/A 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_d and deflection amplification factor C_d (1617.6.2)
 _____ Analysis procedure (1616.6, 1617.5)
N/A Design base shear (1617.4, 1617.5.1)

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)
 _____ Partition loads (1607.5)
 _____ Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)