



Certificate of Design Application

From Designer: Mark Sengelmann dba ALPHA architects
 Date: 3-15-13
 Job Name: Coastal Trading & Pawn
 Address of Construction: 543 Forest Ave Portland ME 04103

2009 International Building Code

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

NEPA 101 2009, IEBC 2009, IBC 2009
 Building Code & Year ^ Use Group Classification (s) M
 Type of Construction 3B

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 IRC NR
 Is the Structure mixed use? NO If yes, separated or non separated or non separated (section 302.3) -
 Supervisory alarm System? NO Geotechnical/Soils report required? (See Section 1802.2) NR

Structural Design Calculations

Submitted for all structural members (106.1 - 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (703.1.1, 1807)	Loads Shown
Floor Area Use	
<u>NA</u>	

Wind loads (1603.1.4, 1609)

NA 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 (1603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

NA Design option utilized (1614.1)
 Seismic use group ("Category")
 Spectral response coefficients, S_D & S_M (1615.1)
 Site class (1013.1.5)

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 (1617.4.2)
 Response modification coefficient, R , and deflection amplification factor, C_d (1617.6.2)
 Analysis procedure (1616.6, 1617.5)
 Design base shear (1617.4, 1617.5.1)

Flood loads (1803.1.6, 1612)

NA Flood Hazard area (1612.3)
 Elevation of structure

Other loads

NA 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)