# Certificate of Design Application

From Designer: **R. Dean Bingham/Architect**

Date: **6/25/14**

Job Name: **Dean'sSweets**

Address of Construction: **475 Fore Street, Portland, ME 04101**

## 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__

Type of Construction _____

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

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 |
|---|---|
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| | |
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## Wind loads (1603.1.4, 1609)

_____ 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)

_____ Design option utilized (1614.1)

_____ Seismic use group ("Category")

_____ Spectral response coefficients, $S_{Ds}$ & $S_{D1}$ (1615.1)

_____ Site class (1615.1.5)

_____ 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 (1617.6.2)

_____ 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)

_____ 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