Certificate of Design Application

From Designer: **Michael Chestnutt.**

Date: **5/28/15.**

Job Name: **Keon.**

Address of Construction: **44 Oak Street, Portland Maine 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) __Residential R3.__

Type of Construction __3B.__

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

Is the Structure mixed use? __Yes.__ If yes, separated or non separated or non separated (section 302.3) __Separated 1 hr.__

Supervisory alarm System? _____ 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

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, SD_s & SD_1 (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