# Certificate of Design Application

From Designer: **John H. Leasure Architect Inc**

Date: **April 14, 2016**

Job Name: **Spare Time Bowling**

Address of Construction: **867 Riverside Street**

## 2009 International Building Code
Construction project was designed to the building code criteria listed below:

Building Code & Year **2009 IBC** Use Group Classification (s) **Assembly A-3**

Type of Construction **Type II (000)**

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

Is the Structure mixed use? **YES** If yes, separated or non separated or non separated (section 302.3) **NON-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 |
| --- | --- |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

### 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)

*Not Applicable*

_____ Live load reduction

_____ Roof *live* loads (1603.1.2, 1607.11)

_____ Roof snow loads (1603.7.3, 1608)

_____ Ground snow load, $Pg$ (1608.2)

_____ If $Pg > 10$ psf, flat-roof snow load $P_f$

_____ If $Pg > 10$ psf, snow exposure factor, $C_e$

_____ If $Pg > 10$ 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, $R_f$ 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)