



# Certificate of Design Application

From Designer: Chris Drobat, Lavallee Brensinger Architects

Date: 7/27/2015

Job Name: Chemistry Lab C300 Fit-out, Science Building

Address of Construction: 70 Falmouth St,

## 2009 International Building Code

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

Building Code & Year IBC 2009 Use Group Classification (s) OCCUPANCY GROUP B: COLLEGE / UNIVERSITY INSTRUCTIONAL BUILDING

Type of Construction EXISTING BUILDING: BOCA 1999 CONSTRUCTION TYPE IIB

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 IRC Existing building fully sprinklered

Is the Structure mixed use? No If yes, separated or non separated or non separated (section 302.3) \_\_\_\_\_

Supervisory alarm System? Yes Geotechnical/Soils report required? (See Section 1802.2) No

### Structural Design Calculations

Not applicable 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>Not applicable</u> | _____       |
| _____                 | _____       |
| _____                 | _____       |
| _____                 | _____       |
| _____                 | _____       |

### Wind loads (1603.1.4, 1609)

Not applicable Design option utilized (1609.1.1, 1609.6)

Not applicable Basic wind speed (1809.3)

Not applicable Building category and wind importance Factor,  $I_w$ , table 1604.5, 1609.5)

Not applicable Wind exposure category (1609.4)

Not applicable Internal pressure coefficient (ASCE 7)

Not applicable Component and cladding pressures (1609.1.1, 1609.6.2.2)

Not applicable Main force wind pressures (7603.1.1, 1609.6.2.1)

### Earth design data (1603.1.5, 1614-1623)

Not applicable Design option utilized (1614.1)

Not applicable Seismic use group (“Category”)

Not applicable Spectral response coefficients,  $S_D$ s &  $S_{D1}$  (1615.1)

Not applicable Site class (1615.1.5)

Not applicable Live load reduction

Not applicable Roof *live* loads (1603.1.2, 1607.11)

Not applicable Roof snow loads (1603.7.3, 1608)

Not applicable Ground snow load,  $P_g$  (1608.2)

Not applicable If  $P_g > 10$  psf, flat-roof snow load  $P_f$

Not applicable If  $P_g > 10$  psf, snow exposure factor,  $C_e$

Not applicable If  $P_g > 10$  psf, snow load importance factor,  $I_s$

Not applicable Roof thermal factor,  $C_t$  (1608.4)

Not applicable Sloped roof snowload,  $P_B$  (1608.4)

Not applicable Seismic design category (1616.3)

Not applicable Basic seismic force resisting system (1617.6.2)

Not applicable Response modification coefficient,  $R$ , and deflection amplification factor  $C_d$  (1617.6.2)

Not applicable Analysis procedure (1616.6, 1617.5)

Not applicable Design base shear (1617.4, 1617.5.1)

### Flood loads (1803.1.6, 1612)

Not applicable Flood Hazard area (1612.3)

Not applicable Elevation of structure

### Other loads

Not applicable Concentrated loads (1607.4)

Not applicable Partition loads (1607.5)

Not applicable Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)