Certificate of Design Application

From Designer:	Brewster Buttfield, Prospect Design; Joe Hemes, Hemesphere Design LLC
Date:	March 13, 2013
Job Name:	Diamond Street Warehouse Renovation
Address of Construction:	1-11 Diamond Street

2009 International Building Code

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

Building Code & Year IBC 2009, NFPA 2009 Use Group Classification (s) **S, M, B** ▪

Type of Construction **Type 3, Ordinary**

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

Is the Structure mixed use? **Yes** If yes, separated or non separated or non separated (section 302.3) **Separated**

Supervisory alarm System? **Yes** Geotechnical/Soils report required? (See Section 1802.2) **N/A**

Structural Design Calculations Existing Structure

_____ 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 & SDI (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, 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)