



Certificate of Design Application

From Designer: Dennis Morelli
 Date: 10/2/15
 Job Name: Provider Workroom
 Address of Construction: 22 Bramhall Street

2009 International Building Code

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

Building Code & Year IBC 2009 Use Group Classification (s) Healthcare 1-2
 Type of Construction IBC Type 1B NFA Type 2 (222)
 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? no If yes, separated or non separated or non separated (section 302.3) n/a
 Supervisory alarm System? yes 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
<u>n/a</u>	

Wind loads (1603.1.4, 1609)

n/a Design option utilized (1609.1.1, 1609.6)
 Basic wind speed (1809.3)
 Building category and wind importance Factor, I_p (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)

n/a Design option utilized (1614.1)
 Seismic use group ("Category")
 Spectral response coefficients, Ω_x & Ω_y (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 , and
 deflection amplification factor, C_d (1617.6.2)
 Analysis procedure (1616.6, 1617.5)
 Design base shear (1617.4, 1617.5.1)

Flood loads (1803.1.6, 1612)

n/a Flood Hazard area (1612.3)
 Elevation of structure

Other loads

n/a 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)