



Certificate of Design Application

From Designer:

Christopher Campbell

Date:

MAY 16 2013

Job Name:

BAKERY

Address of Construction:

742 CONGRESS ST PORTLAND

2009 International Building Code

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

Building Code & Year 1967 Use Group Classification (3) F-1
Type of Construction MS EXISTING
Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 IRC? No
Is the Structure mixed use? No If yes, separated or non-separated (See section 902.3)
Supervisory alarm System? No Geotechnical/Soil report required? (See Section 1802.2) No

Structural Design Calculations

N/A Submitted for all structural members (1603.1 - 1603.11).

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (1603.11, 1607)

Floor Area Use Loads Shown

Wind loads (1603.1.4, 1609)

Design option utilized (1603.1.1, 1609.4)

Basic wind speed (1609.3)

Building category and wind importance Factor, β_w (table 1604.5, 1609.5)

Wind exposure category (1609.6)

Internal pressure coefficient (ASCE 7)

Component and decking pressures (1609.11, 1609.4.2.2)

Most force wind pressures (1603.1.1, 1609.4.2.2)

Earth design data (1603.1.5, 1614-1623)

Design option utilized (1614.1)

Seismic use group ("Category")

Spectral response coefficients, SD_a & SD_d (1615.1)

Site class (1615.1.5)

Live load reduction

Roof deadload (1603.2, 1607.1)

Roof snow loads (1603.7.3, 1607)

Ground snow load, β_g (1603.2)

If $P_g > 10$ psf, the continuous load, β_g

If $P_g > 10$ psf, snow equivalent factor, β_g

If $P_g > 30$ psf, snow load importance factor, β_g

Roof thermal factors, β_{th} (1603.2)

Soil load reduction, β_p (1603.2)

Seismic design category (1616.2)

Basic seismic force reducing factor (1617.4.2)

Response modification coefficient and deflection amplification factor, β_R (1617.4.2)

Analyses procedure (1616.4, 1617.3)

Design base shear (1617.4, 1617.5.1.6)

Flood loads (1603.1.6, 1612)

Flood Hazard area (1612.2)

Elevation of structure

Other loads

Concentrated loads (1607.4)

Partition loads (1607.5)

Wind loads Table 1607.3, 1607.3.5, 1607.7, 1607.12, 1607.13, 1610, 1612, 1604