



Certificate of Design Application

ASSOCIATED DESIGN PARTNERS, INC

From Designer:

6-16-16

Date:

Job Name:

1039 RIVERSIDE ST UNIT #2- NEW BUILDING

Address of Construction:

1039 RIVERSIDE ST, PORTLAND MAINE 04103

2009 International Building Code

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

Building Code & Year 2009 IBC Use Group Classification (s) M

Type of Construction VB

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

Is the Structure mixed use? N If yes, separated or non separated or non separated (section 302.3) _____

Supervisory alarm System? Y Geotechnical/Soils report required? (See Section 1802.2) Y

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
slab on grade	125 psf light warehouse
_____	_____
_____	_____
_____	_____

Wind loads (1603.1.4, 1609)

ANALYTICAL Design option utilized (1609.1.1, 1609.6)

100 Basic wind speed (1809.3)

1.0 Building category and wind importance factor, I_w (table 1604.5, 1609.5)

B Wind exposure category (1609.4)

+/-0.18 Internal pressure coefficient (ASCE 7)

PER ASCE BASED ON ENCL A Component and cladding pressures (1609.1.1, 1609.6.2.2)

See Package Calc Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

ASCE 12.8.1 Design option utilized (1614.1)

III / 1.25 Seismic use group ("Category")

0.41/0.18 Spectral response coefficients, S_D & S_I (1615.1)

E Site class (1615.1.5)

- NO Live load reduction
- 20 Roof *live* loads (1603.1.2, 1607.11)
- 42+UNBAL Roof snow loads (1603.7.3, 1608)
- 60 Ground snow load, P_g (1608.2)
- 42 If $P_g > 10$ psf, flat-roof snow load P_f
- 1 If $P_g > 10$ psf, snow exposure factor, C_e
- 1.0 If $P_g > 10$ psf, snow load importance factor, I_E
- 1.0 Roof thermal factor, C_T (1608.4)
- NA Sloped roof snowload, P_S (1608.4)
- C Seismic design category (1616.3)
- OSCBF, OSMF Basic seismic force resisting system (1617.6.2)
- (3/3) Response modification coefficient, R and deflection amplification factor C_d (1617.6.2)

EQUIV LAT FORCE Analysis procedure (1616.6, 1617.5)

23.63K Design base shear (1617.4, 16175.5.1)

Flood loads (1803.1.6, 1612)

NA Flood Hazard area (1612.3)

NA Elevation of structure

Other loads

NA Concentrated loads (1607.4)

NA Partition loads (1607.5)

N/A Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)