



# Certificate of Design Application

From Designer:

JOSEPH DIDONATO

Date:

07/26/2016

Job Name:

MACHIAS SAVINGS BANK. (INTERIOR FIT-UP)

Address of Construction:

193 MIDDLE STREET

## 2009 International Building Code

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

Building Code & Year 2009 IBC Use Group Classification (s) BUSINESS GROUP B

Type of Construction VB COMBUSTIBLE UNPROTECTED

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 IBC NFPA 13

Is the Structure mixed use? YES If yes, separated or non separated or non separated (section 302.3) NON-SEPARATED

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

Structural Design Calculations EXISTING BUILDING

NO 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

EXISTING FLOOR - N/A  
ORIGINALLY BUILT AS A BANK

Wind loads (1603.1.4, 1609) INTERIOR FIT-UP

Design option utilized (1609.1.1, 1609.6)

N/A 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) INTERIOR FIT-UP

Design option utilized (1614.1)

N/A Seismic use group ("Category")

Spectral response coefficients,  $S_D$  &  $S_{D1}$  (1615.1)

Site class (1615.1.5)

### EXISTING BUILDING

N/A 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,  $R_f$  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)