



# Certificate of Design Application

From Designer:

re\*fab, llc - Julie Tupper

Date:

1/25/16

Job Name:

Marine Trade Center - Lobby Renovation

Address of Construction:

2 Portland Fish Pier, Portland, ME 04101

## 2009 International Building Code

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

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

Type of Construction 111B

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 (section 302.3) -

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

### Structural Design Calculations

N/A Submitted for all structural members (106.1 - 106.11)

NO Live load reduction

N/A 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,  $I_f$

Roof thermal factor,  $G$  (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, 16175.5.1)

N/A Design option utilized (1609.1.1, 1609.6)

N/A Basic wind speed (1809.3)

N/A Building category and wind importance Factor,  $I_w$   
table 1604.5, 1609.5<sup>b</sup>

N/A Wind exposure category (1609.4)

N/A Internal pressure coefficient (ASCE 7)

N/A Component and cladding pressures (1609.1.1, 1609.6.2.2)

N/A Main force wind pressures (1603.1.1, 1609.6.2.1)

### 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)

### Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use

OFFICE

*unclassified*

### Wind loads (1603.1.4, 1609)

N/A Design option utilized (1609.1.1, 1609.6)

N/A Basic wind speed (1809.3)

N/A Building category and wind importance Factor,  $I_w$   
table 1604.5, 1609.5<sup>b</sup>

N/A Wind exposure category (1609.4)

N/A Internal pressure coefficient (ASCE 7)

N/A Component and cladding pressures (1609.1.1, 1609.6.2.2)

N/A Main force wind pressures (1603.1.1, 1609.6.2.1)

### Earth design data (1603.1.5, 1614-1623)

N/A Design option utilized (1614.1)

N/A Seismic use group ("Category")

N/A Spectral response coefficients,  $S_D$  &  $S_I$  (1615.1)

N/A Site class (1615.1.5)