



# Certificate of Design Application

From Designer: DENNIS NOOKIN  
 Date: 2.12.15  
 Job Name: RESTORIX HEALTH AT MAINE MC CLASS "B" CHAMBER  
HYPERBARIC SUITE  
 Address of Construction: 335 BRIGHTON AVE, PORTLAND ME

## 2009 International Building Code

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

Building Code & Year 2010 MUBEC Use Group Classification (s) I-2  
 Type of Construction INTERIOR ALTERATION OF MEDICAL SPACE  
 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,  $I_w$  (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)

N/A Design option utilized (1614.1)  
 Seismic use group ("Category")  
 Spectral response coefficients,  $S_D$  &  $S_{DI}$  (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,  $R_f$  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)