



Certificate of Design Application

From Designer: Dewberry Engineers Inc.
 Date: March 15, 2013
 Job Name: Holt Hall
 Address of Construction: 794 Congress Street, Portland, ME 04102

2003 International Building Code

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

Building Code & Year IBC 2009 Use Group Classification (s) N/A

Type of Construction Appurtenance Equipment Support

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC N/A

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

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

Structural Design Calculations

X 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)
100 Basic wind speed (1809.3)
1 Building category and wind importance Factor, I_w , table 1604.5, 1609.5)
B Wind exposure category (1609.4)
N/A Internal pressure coefficient (ASCE 7)
24.32 Component and cladding pressures (1609.1.1, 1609.6.2.2)
N/A 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)
N/A Seismic use group ("Category")
N/A Spectral response coefficients, S_D & S_I (1615.1)
N/A Site class (1615.1.5)

N/A Live load reduction
Snow Roof *live* loads (1603.1.2, 1607.11)
45 Roof snow loads (1603.7.3, 1608)
60 Ground snow load, P_g (1608.2)
45 If $P_g > 10$ psf, flat-roof snow load P_f
0.9 If $P_g > 10$ psf, snow exposure factor, C_e
1 If $P_g > 10$ psf, snow load importance factor, I_s
N/A Roof thermal factor, C_t (1608.4)
N/A Sloped roof snowload, P_s (1608.4)
N/A Seismic design category (1616.3)
N/A Basic seismic force resisting system (1617.6.2)
N/A Response modification coefficient, R , and deflection amplification factor C_d (1617.6.2)
N/A Analysis procedure (1616.6, 1617.5)
N/A Design base shear (1617.4, 1617.5.1)

Flood loads (1803.1.6, 1612)

N/A Flood Hazard area (1612.3)
N/A Elevation of structure

Other loads

N/A Concentrated loads (1607.4)
N/A Partition loads (1607.5)
N/A Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)