



Certificate of Design Application

From Designer: Domenech Hicks & Krockmalnic, Inc.

Date: September 21, 2007

Job Name: Terminal Passenger Circulation Improvements

Address of Construction: Portland International Jetport, 1001 Westbrook St., Portland, Maine

2003 International Building Code

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

Building Code & Year IBC-2003 Use Group Classification (s) Assembly Group A-3 (EXISTING)

Type of Construction EXISTING *

Is there a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IBC? YES Supervisory alarm system? YES

Is the Structure mixed use? NO If yes, separated or non separated or non separated (section 302.3) N/A

Geotechnical/Soils report required? (See Section 1802.2) N/A

Structural Design Calculations

Completed 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
Assembly per IBC Table 1607.2	100 psf
_____	_____
_____	_____
_____	_____

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)
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 (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

Equiv. Lat Force Design option utilized (1614.1)
III Seismic use group ("Category")
0.378, 0.161 Spectral response coefficients, S_D s & S_{D1} (1615.1)
D Site class (1615.1.5)

*** This project is an interior renovation project within the existing Jetport Terminal, involving no alterations to the building structure and exterior walls.**

No Live load reduction
N/A Roof live loads (1603.1.2, 1607.11)
N/A Roof snow loads (1603.7.3, 1608)
N/A Ground snow load, P_g (1608.2)
N/A If $P_g > 10$ psf, flat-roof snow load P_f
N/A If $P_g > 10$ psf, snow exposure factor, C_e
N/A 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)
II Seismic design category (1616.3)
Light framed walls/w
Flat strap bracing Basic seismic force resisting system (1617.6.2)
4.0, 2.0 per ASCE7-02 Response modification coefficient, R_t and deflection amplification factor C_d (1617.6.2)
Equiv. Lat Force Analysis procedure (1616.6, 1617.5)
17.1 kip 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
No Concentrated loads (1607.4)
Not Required Partition loads (1607.5)
N/A Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)