



Certificate of Design

Date: 1.26.11

From: AWLED ENG. INC - BILL FAUCHER

These plans and / or specifications covering construction work on:

BAYVIEW APARTMENTS - ROOF STRUCTURE UPGRADES FOR
GRAVITY AND SNOW LOAD SUPPORT - ONLY.

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the **2003 International Building Code** and local amendments.

Signature: [Handwritten Signature]

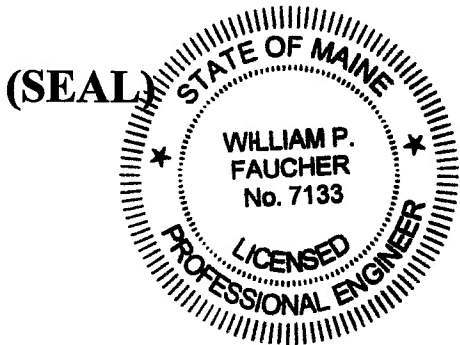
Title: Principal

Firm: AWLED ENGINEERING

Address: 160 Veranda St

Portland ME 04103

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For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

FROM DESIGNER: WILLIAM P. FAUCHER P.E.

DATE: 1-26-11

Job Name: BAYVIEW APARTMENTS - ROOF STRUCTURE SUPPORT MOVS.

Address of Construction: _____

2003 International Building Code

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

Building Code and Year IBC 2009 Use Group Classification(s) INSTITUTIONAL

Type of Construction _____

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

Is the Structure mixed use? _____ if yes, separated or non separated (see Section 302.3) _____

Supervisory alarm system? _____ Geotechnical/Soils report required?(See Section 1802.2) _____

STRUCTURAL DESIGN CALCULATIONS
N/A Submitted for all structural members
(106.1, 106.1.1)

DESIGN LOADS ON CONSTRUCTION DOCUMENTS
(1603)

Uniformly distributed floor live loads (1603.11, 1607)

Floor Area Use	Loads Shown
<u>N/A</u>	_____
_____	_____
_____	_____
_____	_____
_____	_____

N/A Live load reduction (1603.1.1, 1607.9, 1607.10)
N/A < 5L Roof live loads (1603.1.2, 1607.11)
 Roof snow loads (1603.7.3, 1608)
20 psf Ground snow load, P_g (1608.2)
45 psf If $P_g > 10$ psf, flat-roof snow load, P_f (1608.3)
0.9 If $P_g > 10$ psf, snow exposure factor, C_e (Table 1608.3.1)
1.0 If $P_g > 10$ psf, snow load importance factor, I_s (Table 1604.5)
1.1 Roof thermal factor, C_t (Table 1608.3.2)
N/A Sloped roof snowload, P_s (1608.4)

N/A Wind loads (1603.1.4, 1609)
 _____ Design option utilized (1609.1.1, 1609.5)
 _____ Basic wind speed (1609.3)
 _____ 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 (1603.1.1, 1609.6.2.1)

N/A Seismic design category (1616.3)
N/A Basic seismic-force-resisting system (Table 1617.6.2)
N/A Response modification coefficient, R , and deflection amplification factor, C_d (Table 1617.6.2)
N/A Analysis procedure (1616.6, 1617.5)
N/A Design base shear (1617.4, 1617.5.1)

Flood loads (1603.1.6, 1612)
N/A Floodhazard area (1612.3)
N/A Elevation of structure

Earthquake design data (1603.1.5, 1614-1623)
N/A Design option utilized (1614.1)
N/A Seismic use group ("Category") (Table 1604.5, 1616.2)
N/A Spectral response coefficients, S_{DS} & S_{D1} (1615.1)
N/A Site class (1615.1.5)

Other loads
N/A Concentrated loads (1607.4)
N/A Partition loads (1607.5)
N/A Impact loads (1607.8)
N/A Misc. loads (Table 1607.6, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)