



# Certificate of Design Application

From Designer: WHIPPLE CALVINO & ARCHITECTS  
 Date: 2/15/13  
 Job Name: TITE PLYMOUTH HOUSE  
 Address of Construction: 145 GLENWOOD AVENUE

## 2009 International Building Code

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

Building Code & Year IBC '09 Use Group Classification (s) R-4/R-3

Type of Construction II

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) —

Supervisory alarm System? YES Geotechnical/Soils report required? (See Section 1802.2) NO

Structural Design Calculations EXISTING STRUCTURE Live load reduction  
 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

- 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,  $R$  and deflection amplification factor  $C_d$  (1617.6.2)
- Analysis procedure (1616.6, 1617.5)
- Design base shear (1617.4, 1617.5.1)

### Wind loads (1603.1.4, 1609)

- 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)

- ### Flood loads (1803.1.6, 1612)
- Flood Hazard area (1612.3)
  - Elevation of structure

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

- Design option utilized (1614.1)
- Seismic use group ("Category")
- Spectral response coefficients,  $S_D$  &  $S_{D1}$  (1615.1)
- Site class (1615.1.5)

- ### Other loads
- 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)