



City of Big Bear Lake

Building and Safety

Design Loads and Special Considerations

***All buildings and structures must be designed by a licensed civil or structural engineer or architect.*

Adopted Uniform Codes

- A. California Building Code Volumes 1 & 2, and Appendices Chapter B, H & J of Volume 2, 2019 edition;
- B. California Residential Code and Appendices Chapter H, O & V, 2019 edition;
- C. California Electrical Code 2019 edition;
- D. California Mechanical Code 2019 edition;
- E. California Plumbing Code 2019 edition;
- F. California Energy Code 2019 edition;
- G. California Historical Building Code 2019 edition;
- H. California Fire Code and Appendices Chapter 4, A, B, BB, C, CC, D, H, I and J and errata, 2019 edition;
- I. California Existing Building Code 2019 edition;
- J. California Green Building Standards Code 2019 edition;
- K. California Reference Standards Code 2019 edition;
- L. International Property Maintenance Code. 2018 Edition
- M. City of Big Bear Lake Municipal Code which contains amendments/additions to the codes above.

Soils Investigation Requirements required for:

- 1. All new single-family residential, commercial and industrial buildings.
- 2. An addition to a commercial or industrial buildings.

A soils investigation is not required for:

- 1. A residential room addition or non-habitable accessory structure where the allowable foundation and lateral pressure comply with the Category 5 Material Classification Soil Properties listed in CBC Table 1806.2 and not subject to potential liquefaction or the Slope Density Ordinance.
- 2. Exterior Deck not subject to potential liquefaction.
- 3. Retaining walls that are designed per Category 5 Material Classification Soil Properties listed in CBC Table 1806.2. Otherwise, retaining walls subjected to vehicle surcharge loads or supporting slopes that are greater than 1(V):2(H) shall require a soils report.

Wind – Residential

Design wind pressure is 85 miles per hour (mph), Exposure C (ASD)

Wind – Nonresidential

<u>Risk Category:</u>	<u>Wind Load: (Ultimate)</u>
I	100 mph
II	110 mph
III & IV	115 mph

(Risk Categories are found within CBC Table 1604.5)

Seismic

Site Accelerations S_{DS} and S_{D1} shall be site specific and be determined per USGS Design Maps utilizing 2018 IBC or ASCE 7-16 values using Site Class D.

<http://earthquake.usgs.gov/designmaps/us/application.php>

Snow Loads

Roof (p_f): 100 pounds per square foot (psf)

Ground (p_g) : 85 psf (for use in determining snow drift on lower roofs only)

Frost Depth

18 inches

Climate Zone

16

Please contact the City of Big Bear Lake Building and Safety Division for any questions regarding required design criteria.