SAN BERNARDINO COUNTY	Land Use Services Building and Safety Division **Information Bulletin**	**Number:** IB-0003
		Code References: 2019 CBC ASCE 7-16
Building Official Signature: Jack Leonard, PE, CBO		**Original Effective Date:** November 28, 1972 **Updated:** July 2, 2020
Subject: Rainfall Water Flow Rate, Wind Speed Requirements, and Snow Load Design Values		

1.0 PURPOSE

The purpose of this Information Bulletin is to provide the rainfall water flow rate, wind speed requirements, and snow load design values for the communities listed below and all other areas where the elevation exceeds 3,600 feet above sea level. American Society of Civil Engineers (ASCE) 7-16 requires snow loads above 3,600 feet elevation to be determined by the authority having jurisdiction.

2.0 HISTORY

Original Effective Date: November 28, 1972; Updated: July 2, 2020

3.0 PROCEDURE

Rainfall Water Flow Rate

A. Rainfall Water Flow Rate: Throughout the County of San Bernardino, the recognized rainfall water flow rate is 2.5 inches per hour for a 100-year return.

B. Alternatively, the rainfall water flow rate may be determined based on the site location using the program available at:

https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ca

Use the design value of an hour for a 100-year return in inch.

Wind Speed Requirements

Wind loads shall be based on the California Building Code (CBC) Section 1609 with the following design criteria:

A. Minimum Exposure C category shall be used throughout the County of San Bernardino. The ultimate design wind speed, V_{ult} (mph), shall be determined by Figures 1609.3(1), 1609.3(2) and 1609.3(3) of CBC. Design values of 3-second gust wind speeds per Risk Category are as follows:

	V_{ult}	Special Wind Region
Risk Category I:	95 mph	110 mph
Risk Category II:	95 mph	120 mph
Risk Category III & IV:	107 mph	125 mph

B. Alternatively, the ultimate design wind speed may be determined based on the site location using the program available at: http://windspeed.atcouncil.org/

Snow Load Design Values

A. Snow loads shall be considered for the communities listed below in addition to the dead loads of the structure. Unbalanced loads shall be considered.

B. Potential accumulation of snow at valleys, parapets, roof structures and offsets in roofs of uneven configuration shall be considered.

C. All building exits under down-slope eaves having a slope greater than 4:12 shall be protected from sliding snow and ice.

D. Roof members supporting plaster shall be designed for deflection.

E. Snow loads shall not be reduced due to the tributary area.

F. The roof snow loads given in the table below may be reduced due to the slope of the roof when the pitch meets or exceeds 7:12. The roof snow loads may be further modified in accordance with the procedures found in ASCE 7-16. Ground snow loads shall not be a factor where roof snow loads have already been determined in accordance with this procedure. Minor adjustments to reduce the design snow load may be made by the Building Official when he or she has knowledge of less snowfall in a particular location.

G. 20% of the uniform design snow load, regardless of actual roof slope, shall be included in effective seismic weight of the structure where the flat roof snow load exceeds 30 psf.

AREA	ROOF SNOW LOAD (psf)	AREA	ROOF SNOW LOAD (psf)
Angelus Oaks	75	Lake Gregory	75
Arrowbear Lake	75	Minnelusa	75
Arrowhead Highlands	75	Moonridge	75
Baldwin Lake	75	Mt. Baldy	75
Barton Flats	100	Oak Glen	50
Big Bear City	75	Oak Hills (> 3,600')	30
Big Bear Lake	100	Onyx Summit	100
Blue Jay	100	Phelan (> 3,600')	30
Cajon Canyon	50	Pinion Hills (> 3,600')	30
Camp Angeles	75	Rim Forest	50
Cedarpines Park	50	Running Springs	75
Crestline	75	Seven Oaks	75
Erwin Lake	75	Skyforest	75
Fallsvale (Forest Falls)	75	Smiley Park	50
Fawnskin	75	Snow Valley	75
Forest Home	75	Sugarloaf	75
Green Valley	100	Twin Peaks	75
Lake Arrowhead	75	Valley of Enchantment	75
		Wrightwood	50

Note:

1. For communities not listed above use the snow load design values from adjacent communities. Elevations above 3,600 feet use a minimum of 30 psf.
2. Frost Line Depth: 18 inches of frost line depth shall be used for the foundation design in Mountain Region.