
SNOW LOADS

Design snow loads shall be determined in accordance with Chapter 7 of ASCE 7-22, but the design roof load shall not be less than that determined by Section 1607.

Snow load is an environmental load, not a live load (Section 202). Therefore, the reduction of live loads for tributary areas in Sections 1607.13 and 1607.14, is not permitted.

ASCE's Hazard Tool (<https://ascehazardtool.org/>) provides ground snow load criteria based on Risk Categories to be used for buildings and structures.

When the elevation of a building or structure is at 2,000 feet or greater, a minimum ground snow load, P_g , of 20 lb/ft² shall be considered.

Per Exception 2 of Sections 1605.1 and 1605.2, where the Allowable Stress design load combinations of ASCE 7-22 Section 2.4 or Alternative Allowable Stress design load combinations of the Building Code are used:

- If the flat roof snow load, P_f , exceeds 45 lb/ft², 15 percent of this uniform design snow load shall be combined with the effective seismic weight
- If the flat roof snow load is 45 lb/ft² or less, this snow load need not be combined with effective seismic weight.

These exceptions do not apply to "Load and Resistance Factor Design" or "Strength Design". Flat roof snow loads shall be included in "Strength Design" or "Load and Resistance Factor Design".

The Existing Building Code provides for structural load design exceptions when considering existing buildings of Group R occupancy, with no more than five dwelling or sleeping units, used solely for residential purposes, and constructed of conventional light-frame.

Solar Projects

For solar installations on residential buildings or carport structures, use Risk Category II for determining snow load criteria. For ground-mounted solar installations, use Risk Category I for determining snow load criteria.

Supersedes BCM 1608 Article 1 dated 09-20-11

APPROVED,

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