



CITY OF CONCORD

New Hampshire's Main Street™

Community Development Department

Code Administration – Health Services

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STRUCTURAL LOADS FOR CONCORD NH

Snow Load

For Concord New Hampshire at an elevation of 600 feet the ground snow load is 70 pounds per square foot or psf.

At lower elevations in Concord, this value may be reduced by 2.1 lbs per square foot for every 100 foot elevation difference. And for every 100 feet above 600 foot elevation, 2.1 lbs per square feet should be added. The lowest elevation in Concord is 200 feet and the highest is 875 feet, therefore, the ground snow load range would fall between 61.6 lbs per square foot and 75.8 lbs per square foot.

The above examples were done at the lowest and highest land elevation in Concord to illustrate the range in ground snow loads possible.

Design snow loads on roofs are determined by multiplying the ground snow load by a series of modification factors specified in ASCE7 and the building Code.

(Source: SENH-CRREL)

Wind Load

Basic Wind Speed = 90 mph for a 3-second gust.

(Source: Figure 1609, IBC 2006)

Seismic Load

Maximum Considered Earthquake Ground Motion – Site Class B:

0.2 Second Spectral Response Acceleration = 40% g

1.0 Second Spectral Response Acceleration = 10% g

(Source: Figure 1613.5(1) & 1613.5(2), IBC 2006)

Frost Line

Frost penetration shall be considered to extend to a minimum of 48” below grade.

Rainfall Intensity

100 year, 1-Hour Rainfall (Inches) = 2.5

(Source: Figure 1106.1 IPC2006)

(The above represents our best understanding. It shall be incumbent upon the Architect or Engineer to consult the sources and location conditions and apply professional judgment.)