

## Design Load

The following minimum values are to be utilized for designing structures within the City of Bozeman jurisdictional area:

- ◆ Specify the method of design: strength design or allowable stress design
- ◆ Building Classification Category I: Seismic Factor  $I_E = 1.00$ , Snow Factor  $I_S = 1.0$ , and Wind Factor  $I_W = 1.00$
- ◆ Site Soils Classification: To be determined by a soils analysis by a geotechnical engineer or engineering geologist
- ◆ Seismic: Design Category 'D'
- ◆ Wind Speed:  $V_{3s} = 90$ ,  $V_{fm} = 75$ , and Exposure C
- ◆ Basic Ground Snow Load: 46 PSF\* (per Snow Loads for Design in Montana F.F. Videon & J.P. Schinlke, 1989).
- ◆ Roof Snow Load: 40 psf
- ◆ Roof Design: Based on 100 Year, 1-hour rainfall of 1.22 inches
- ◆ Frost Depth – 3 ft – 1 story building  
4 ft – 2 story building

\* Higher elevation areas on the **east** side of town may need to design for higher snow loading due to greater volume of snow and greater potential for wind driven snow accumulation.