



Design Criteria for the State of Utah

SNOW:

- Site specific depending upon the County and site elevation. The ground snow load must be calculated in accordance with Section 1608.1.2 of the Utah Amended Code (Title 15A-3-107) with regional snow load factors compliant with Table 1608.1.2(a).
- At locations where the roof snow load exceeds 30psf, a percentage of the snow load must be considered in the effective seismic weight of the structure per Sections 1605.2, 1605.3.1 and 1605.3.2 of the Utah Amended Code (Title 15A-3-107).

WIND:

- Exposure: Site specific. Typically “B” or “C”.
- Speed: Per local jurisdiction, typically as shown in Table 1.

Table 1. 2015 IBC Ultimate Design Wind Speeds

Risk Category <i>(per IBC Table 1604.5)</i>	Ultimate Design Wind Speed <i>V_{ult} (mph)</i>
I	105
II	115
III	120
IV	120

SEISMIC:

- Ground Motions: Shall be determined on a site-specific basis and not by use of a zip code. For specific acceleration values based upon a specific latitude and longitude please go to the following USGS website: <http://geohazards.usgs.gov/designmaps/us/application.php>.
- Seismic Design Category: Site specific (per Section 1613.3.5 of the IBC).

SOILS:

- Frost Depth: Per geotechnical report and local jurisdiction.
- All projects require a site-specific geotechnical report meeting the requirements of Section 1803 of the IBC. Additions to existing facilities of less than 3,000 square feet are exempted from this requirement.
- Site Class: Site specific. For projects not requiring a geotechnical report Site Class ‘D’ can be assumed per Sections 1613.3.2 and 1806.2 of the IBC.
- Allowable Bearing Pressures:
 - Foundation pressure: 1,500psf, per Table 1806.2 of the IBC.
 - Lateral pressure: 100psf/f, per Table 1806.2 of the IBC.
 - The above listed values are maximum allowable values unless listed otherwise by a site-specific geotechnical report.



SOILS: *Continued*

- All geotechnical reports submitted for DFCM approval must be dated no later than two years from the submittal date. Outdated reports must be accompanied by a letter from a qualified geotechnical engineer stating that the report requirements are still valid, or stating what items may have changed. All building code references must be updated to the current code adopted by the State of Utah.
- All projects located in close proximity to active faults must provide an appropriate surface-fault-rupture-hazard study in accordance with the “Guidelines for Evaluating Surface-Fault-Rupture Hazards in Utah”. Earthquake fault maps for specific Utah Counties can be found on the website for the Utah Geologic Survey.

EXISTING BUILDINGS:

- All existing buildings that are required to undergo a mandatory seismic upgrade must meet the performance levels defined in Chapter 3 of the 2015 International Existing Building Code (IEBC). Mandatory seismic upgrades may be required for projects which undergo a change in use or else a significant repair, alteration or addition as specified in the IEBC and Title 15A-3-801 of the Utah Amended Code.
- Existing buildings which undergo a voluntary seismic upgrade are not required to meet the performance requirements outlined in Chapter 3 of the IEBC. Voluntary projects are nonetheless required to conform to either the IBC or the other existing building codes and standards listed for use by the State of Utah. In addition, a detailed engineering analysis must be provided to DFCM in accordance with Section 807.6 of the IEBC.

Last Revised: 10/2016