

GENERAL DESIGN INFORMATION FOR CONSTRUCTION IN DUCHESNE COUNTY

For determining minimum Building Safety Standards, Utah State and / or Duchesne County have adopted the following:

The International Building Code (IBC) 2018 Edition
 The International Residential Code (IRC) 2015 Edition for One and Two Family Dwelling and Townhouses
 The International Mechanical Code (IMC) 2018 Edition
 The International Energy Conservation Code (IECC) 2018 Edition
 The International Fire Code (IFC) 2018 Edition

The International Existing Building Code (IEBC) 2018 Edition
 The International Plumbing Code (IPC) 2018 Edition
 The International Fuel Gas Code (IFGC) 2018 Edition
 The National Electric Code (NEC) 2020 Edition
 The Utah Wildland-Urban Interface Code 2006 Edition

Notes:

1. Utah State has adopted amendments that apply state wide to all of the above listed codes. Some local jurisdiction have also adopted amendments specific to their jurisdiction. To see these amendments go to Utah Code Title 15A. (https://le.utah.gov/xcode/Title15A/15A.html?v=C15A_1800010118000101)
2. Typically Utah State adopts codes one year after their publication date and they go into effect July 1 of the following year.

TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP ^e	ICE BARRIER UNDERLAYMENT REQUIRED ^h	FLOOD HAZARD ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
	Speed ^d (mph)	Topographic effects ^k	Special wind region ^l	Wind-borne debris zone ^m		Weathering ^a	Frost line depth ^b	Termite ^c					
See Note 1	115 IRC 105 IBC	Site Specific	No	No	C / D1	Severe	30"	S / M	-2°	Yes	Note 2	2841	45°

For SI: 1 pound per square foot = 0.0479 kN/m², 1 mile per hour = 1.609 km/h
 S / M = slight to moderate

- 1- Ground snow load will vary due to elevation and recorded snow conditions for specific areas. See Utah State code 15A-3-202(9) IRC and 15A-3-107(8)(d) IBC for Amendments. See web site <http://utahsnowload.usu.edu/> for ground snow loads at specific sites.
- 2- Duchesne City and Myton City have FEMA flood plain maps available. (<https://msc.fema.gov/portal>) The rest of Duchesne County has to be evaluated on a site specific bases.
 - a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of the codes.
 - b. The frost line depth may require deeper footings than indicated in Figure R403.1(1) and may be site specific.
 - c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
 - d. Wind exposure category B, C or D shall be determined on a site-specific basis in accordance with IRC Section R301.2.1.4 or IBC Sections 1609.4.2 and 1609.4.3.
 - e. The outdoor design dry-bulb temperature shall be selected from the columns of 97 1/2 -percent values for winter from Appendix D of the *International Plumbing Code*. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the *building official*.
 - f. The *jurisdiction* shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
 - g. The *jurisdiction* shall fill in this part of the table with (a) the date of the *jurisdiction's* entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of the currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having *jurisdiction*, as amended. *See Note 2.*
 - h. In accordance with Sections R905.1.2, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the *jurisdiction* shall fill in this part of the table with "YES."
 - i. The *jurisdiction* shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99 percent) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)." (*Days shown are based off of the Fort Duchesne data*)
 - j. The *jurisdiction* shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)." (*Temperature shown are based off of the Fort Duchesne data*)
 - k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the *jurisdiction* shall fill in this part of the table with "YES." Otherwise, the *jurisdiction* shall indicate "NO" in this part of the table.
 - l. In accordance with Figure R301.2(4)A, where there is local historical data documenting unusual wind conditions, the *jurisdiction* shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the *jurisdiction* shall indicate "NO" in this part of the table.
 - m. In accordance with Section R301.2.1.2.1, the *jurisdiction* shall indicate the wind-borne debris wind zone(s). Otherwise, the *jurisdiction* shall indicate "NO" in this part of the table.