**GENERAL DESIGN INFORMATION FOR CONSTRUCTION IN UNINCORPORATED IRON COUNTY**

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

The International Building Code (IBC) 2021 Edition The International Existing Building Code (IEBC) 2021 Edition The International Residential Code (IRC) 2021 Edition

The International Plumbing Code (IPC) 2021 Edition

The International Mechanical Code (IMC) 2021 Edition The International Fuel Gas Code (IFGC) 2021 Edition The International Energy Conservation Code (IECC) 2015 Edition (Residential) The National Electric Code (NEC) 2020 Edition

The International Energy Conservation Code (IECC) 2021 Edition (Commercial) The Utah Wildland-Urban Interface Code 2006 Edition

The International Fire Code (IFC) 2021 Edition

Note: 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. <http://le.utah.gov/UtahCode/chapter.jsp?code=15A>

# TABLE R301.2(1)

**CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **GROUND SNOW LOAD** | **WINDDESIGN** | **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 (i)** |
| **Speed (mph) (d)** | **Topographic effects (k)** | **Special wind****Region (l)** | **Wind-borne debris zone (m)** | **Weathering (a)** | **Frost line****Depth (b)** | **Termite (c)** |
| Min. 32 psfSee Note 1 | 105Exp C | No | No | No | D1 | Severe | 30”See Note 2 | M/H | 8 | Yes | YesSee Note 3 | 781 | 49.3 |

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

Notes:

1. Contact Iron County Building Department to verify snow load over 6000 feet elevation.
2. Minimum Frost Line Depth is 30” to 48” depending on elevation.
3. Review flood plain maps available. [(https://msc.fema.gov/portal)](file:///C%3A%5CUsers%5Ccboxwell%5CDesktop%5C%28https%3A%5Cmsc.fema.gov%5Cportal%29) or contact Iron County Engineer’s Office 435-865-5370.
4. Where weathering requires a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code, the frost line depth strength required for weathering shall govern. The weathering column shall be filled in with the weathering index, “negligible,” “moderate” or “severe” for concrete as determined from [Figure R301.2(1)](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch03_SecR301.2_FigR301.2_1). The grade of masonry units shall be determined from [ASTM C34](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2%22%20%5Cl%20%22IRC2021P2_Pt09_Ch44_PromASTM_RefStdC34_2017), [ASTM C55](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2%22%20%5Cl%20%22IRC2021P2_Pt09_Ch44_PromASTM_RefStdC55_2017), [ASTM C62](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2%22%20%5Cl%20%22IRC2021P2_Pt09_Ch44_PromASTM_RefStdC62_2017), [ASTM C73](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2%22%20%5Cl%20%22IRC2021P2_Pt09_Ch44_PromASTM_RefStdC73_2017), [ASTM C90](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2%22%20%5Cl%20%22IRC2021P2_Pt09_Ch44_PromASTM_RefStdC90_2016A), [ASTM C129](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2%22%20%5Cl%20%22IRC2021P2_Pt09_Ch44_PromASTM_RefStdC129_2017), [ASTM C145](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2%22%20%5Cl%20%22IRC2021P2_Pt09_Ch44_PromASTM_RefStdC145_85), [ASTM C216](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2%22%20%5Cl%20%22IRC2021P2_Pt09_Ch44_PromASTM_RefStdC216_2017A) or [ASTM C652](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2%22%20%5Cl%20%22IRC2021P2_Pt09_Ch44_PromASTM_RefStdC652_2017A).
5. Where the frost line depth requires deeper footings than indicated in [Figure R403.1(1)](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch04_SecR403.1_FigR403.1_1), the frost line depth strength required for weathering shall govern. The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
6. 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.
7. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [[Figure R301.2(2)](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch03_SecR301.2_FigR301.2_2). Wind exposure category shall be determined on a site-specific basis in accordance with [Section R301.2.1.4](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch03_SecR301.2.1.4).
8. The jurisdiction shall fill in this section of the table to establish the design criteria using Table 10A from [ACCA Manual J](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2%22%20%5Cl%20%22IRC2021P2_Pt09_Ch44_PromACCA_RefStdANSI_ACCA_2_Manual_J_2016) or established criteria determined by the jurisdiction.
9. The jurisdiction shall fill in this part of the table with the seismic design category determined from [Section R301.2.2.1](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch03_SecR301.2.2.1).
10. The jurisdiction shall fill in this part of the table with: 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); and the title and date of the currently effective Flood Insurance Study or other flood hazard study and maps adopted by the authority having jurisdiction, as amended.
11. In accordance with [Sections R905.1.2](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch09_SecR905.1.2), [R905.4.3.1](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch09_SecR905.4.3.1), [R905.5.3.1](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch09_SecR905.5.3.1), [R905.6.3.1](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch09_SecR905.6.3.1), [R905.7.3.1](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch09_SecR905.7.3.1) and [R905.8.3.1](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch09_SecR905.8.3.1), 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.” Otherwise, the jurisdiction shall fill in this part of the table with “NO.”
12. 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)](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch04_SecR403.3_FigR403.3_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).”
13. 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).”
14. In accordance with [Section R301.2.1.5](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch03_SecR301.2.1.5), 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.
15. In accordance with[Figure R301.2(2)](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch03_SecR301.2_FigR301.2_2), 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.
16. In accordance with [Section R301.2.1.2](https://codes.iccsafe.org/s/IRC2021P2/chapter-3-building-planning/IRC2021P2-Pt03-Ch03-SecR301.2#IRC2021P2_Pt03_Ch03_SecR301.2.1.2) the jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate “NO” in this part of the table.