



## LOCAL DESIGN CRITERIA

### COMMERCIAL & RESIDENTIAL: Any building under the IBC

For both commercial and residential buildings constructed under the IBC, the structural design criteria shall be performed in accordance with *IBC Chapter 16, ASCE 7-16*, and the project geotechnical investigation. **Please note that design criteria shall be site specific.** See IBC TABLE 1613.2.5 for determination of Seismic Design Category.

### RESIDENTIAL: Single Family, Two Family, and Townhomes under the IRC

For residential buildings and structures constructed under the IRC, the climatic and geographic design criteria shall be as provided in the completed *IRC Table R301.2(1)* provided below.

| <b>IRC TABLE R301.2(1)</b>                     |   |                 |
|--|---|-----------------|
| <b>CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA</b> |   |                 |
| Ground Snow Load                               | 20 psf  |                 |
| Wind Design                                    | Speed (mph)   | $V_{ult} = 110$ |
|  | Topographic Effects                                   | No              |
|  | Exposure Category                                     | C               |
|  | Special Wind Region                                   | No              |
| Seismic Design Category                        | C – (D for commercial)                                |                 |
| Subject to Damage From                         | Weathering  | Severe          |
|  | Frost Line Depth                                      | 24 inches       |
|  | Termite   | No              |
| Winter Design Temperature                      | 2°  |                 |
| Ice Barrier Underlayment Required              | Yes   |                 |
| Flood Hazards                                  | Entered March 1, 1984 (See <a href="#">GIS Maps</a> ) |                 |
| Air Freezing index                             | 661   |                 |
| Mean Annual Temperature                        | 54.6°   |                 |

| <b>IRC TABLE R301.2(1)</b>           |                          |
|--------------------------------------|--------------------------|
| <b>ACCA MANUAL J DESIGN CRITERIA</b> |                          |
| Elevation                            | 531 feet                 |
| Latitude                             | 46°17' North             |
| Winter Heating                       | 11°F                     |
| Summer Cooling                       | 96°F                     |
| Altitude Correction Factor           | 1.0                      |
| Indoor Design Temperature            | 70°F                     |
| Design Temperature Cooling           | 75°F                     |
| Heating Temperature Difference       | 59°F                     |
| Cooling Temperature Difference       | 21°F                     |
| Wind Velocity Heating                | 15 MPH                   |
| Wind Velocity Cooling                | 7.5 MPH                  |
| Coincident Wet Bulb                  | 67°F                     |
| Daily Range                          | High                     |
| Winter Humidity                      | N/A                      |
| Summer Humidity                      | -11 (grains of moisture) |