



Prescriptive Design

- **International Residential Code – limitations.** Buildings designed under International Residential Code provisions are limited to one and two family dwellings as well as multiple single-family dwellings (townhouses) not more than three stories in height.
- **IRC Table R301.2** Prescriptive design values are determined as required by climatic and geographical design criteria based upon local conditions and established in IRC table R301.2(1).

**TABLE R 301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA
City of Enumclaw**

| GROUND SNOW LOAD ^a | WIND SPEED (mph) | SEISMIC DESIGN CATEGORY | SUBJECT TO DAMAGE FROM | | | | WINTER DESIGN TEMP | ICE SHIELD UNDER-LAYMENT REQUIRED | FLOOD HAZARDS | AIR FREEZING INDEX | MEAN ANNUAL TEMP |
|-------------------------------|------------------|-------------------------|------------------------|------------------|--------------------|--------------------|--------------------|-----------------------------------|---------------|--------------------|------------------|
| | | | Weathering | Frost line depth | Termite | Decay | | | | | |
| 30 | 120 | D2 | MODERATE | 18" | Slight to Moderate | Slight to Moderate | 26 | NO | FIRM 2020 | 250 | 45 |

^a Elevations 750' will have an assigned snow load of 30 pounds per square foot, elevations above 750' will have an assigned snow load of 10 pounds per square foot for every 100 feet of rise in elevation

Basic Wind Speed: assigned value is 120 with 3-second gust (V_{3S}).

Engineering Design

- **Design of portions.** When a building of otherwise conventional construction contains structural elements exceeding the limits of IRC Section R301 or otherwise, not conforming to this code, these elements shall be designed in accordance with accepted engineering practice. The extent of such design need only demonstrate compliance of non-conventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system. Engineered design in accordance with the *International Building Code* is permitted for all buildings and structures, and parts thereof, included in the scope of this code.
- **Engineering design criteria.** Please refer to Enumclaw Design Assistance Bulletin #3 IBC for engineered design values.
- **Staples will not be used for any roof sheeting or shear walls, or on any roofing**

Soil Tests

- **Local conditions.** The City of Enumclaw has significantly distinct soils profiles. As example, the soils in the valley floor will rarely meet prescriptive load-bearing requirements while the areas above the valley will usually exceed prescriptive requirements. The field inspector is authorized to require soils tests when there is concern that site-specific soils may not meet prescriptive requirements.
- **When required.** In areas likely to have expansive, compressible, shifting or other unknown soil characteristics, the building official shall determine whether to require a soil test to determine the soils characteristics at a particular location. This test shall be made by an agency approved by the City of Enumclaw.