



**City of Walnut Creek**  
**Development Review Services**  
 1666 N. Main Street, Walnut Creek, CA 94596  
 (925) 943-5834 phone (925) 256-3500 fax

Revised Dec. 17, 2018

Policy Bulletin No. PB-049

**Climatic and Geographic Design Criteria**  
**2016 California Residential Code Table R301.2(1)**

Ground Snow Load	Wind Design				Seismic Design Category <sup>f</sup>	Subject to Damage From		
	Speed <sup>d</sup> (mph)	Topographic Effects <sup>k</sup>	Special wind region <sup>m</sup>	Wind-borne debris zone <sup>l</sup>		Weathering <sup>a</sup>	Frost Line Depth <sup>b</sup>	Termite <sup>c</sup>
0	85	No	No	No	D <sub>2</sub>	Negligible	12"	Slight to Moderate

Winter Design Temp <sup>e</sup>	Ice Barrier Underlayment Required <sup>h</sup>	Flood Hazards <sup>g</sup>	Air Freezing Index <sup>i</sup>	Mean Annual Temp <sup>j</sup>
32°F	No	Entry into National Flood Insurance Program: May 1, 1985  Date of Flood Insurance Study: March 21, 2017  Current FIRM effective date: June 16, 2009 Panel numbers: 0283, 0284, 0286, 0287, 0291, 0292, 0315, 0427, 0431, 0432, 0433 March 21, 2017 Panel numbers: 0289, 0293, 0294, 0303	10	57°F

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade. In accordance with Section R403.1.4, all exterior footings shall have 12" minimum depth below the undisturbed ground surface.
- 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. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. *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.

Created March 16, 2011

Revised December 17, 2018 by TCR



**City of Walnut Creek**  
**Development Review Services**  
1666 N. Main Street, Walnut Creek, CA 94596  
(925) 943-5834 phone (925) 256-3500 fax

**Revised Dec. 17, 2018**

**Policy Bulletin No. PB-049**

- 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 all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
- h. In accordance with Sections R905.2.7.1, 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." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- 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%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32°)" at <https://www.ncdc.noaa.gov/climate-information/statistical-weather-and-climate-information/frost-protected-shallow-foundations>
- 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)" <https://www.ncdc.noaa.gov/climate-information/statistical-weather-and-climate-information/frost-protected-shallow-foundations>
- 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.