

## DESIGN CRITERIA

**Table R301.2(1)  
Climatic and Geographic Design Criteria**

	Speed (mph)	Topographic effects	Special wind region	Wind-borne debris zone	SEISMIC DESIGN Category	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP	ICE BARRIER UNDER-LAYMENT Required	FLOOD Hazards	GROUND SNOW LOAD	WIND DESIGN
						Weathering	Frost line depth	Termite					
PER GIS <sup>1</sup>	110	NO	NO	NO	D	Negligible	NA	YES	VARIABLES	NO	FEMA	6	61.7
PER GIS <sup>2</sup>	120	YES	YES	NO	D	Severe	18/24	YES	VARIABLES	YES	FEMA	1187	42.5

### Joint Appendix 2.2, Table 2-3 Design Day Data for California Cities

#### Climate Zone 11

Elevation Feet	Latitude Degrees North	Winter Heating	Summer Cooling	Mean Coincident wet bulb	Interior design temperature	Design temperature cooling	Daily Range	HDD
160 <sup>1</sup>	38.7	24	100	70	68	75	36	0

#### Climate Zone 16

Elevation Feet	Latitude Degrees North	Winter Heating	Summer Cooling	Mean Coincident wet bulb	Interior design temperature	Design temperature cooling	Daily Range	HDD
5995 <sup>2</sup>	39.3	-10	86	57	68	75	40	8230

<sup>1</sup> Roseville - Roseville/Auburn service area

<sup>2</sup> Truckee - Truckee/Tahoe service area

#### Notes

- You can find specific Placer County parcel information at [https://maps.placer.ca.gov/Html5viewer/Index.html?viewer=LIS\\_Public.LIS\\_Base-Public](https://maps.placer.ca.gov/Html5viewer/Index.html?viewer=LIS_Public.LIS_Base-Public).
- The above climate data for Roseville and Truckee generally cover the major population centers for Placer County in each Climate Zone. For climate data for other locations, refer to [Title 24, Part 6, 2019 California Energy Code, Joint Appendix 2.2, Table 2-3 Design Criteria](#). You may select the area closest to the specific site location.
- Outdoor design conditions are based on data from the [ASHRAE CLIMATIC DATA FOR REGION X](#), the American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled "ASHRAE Climatic Data for Region X, Arizona, California, Hawaii and Nevada," Publication SPCDX, 1982 and "Supplement," 1994.
- Indoor design conditions for sizing space condition systems are found in the [2019 California Energy Code, Section 150.0 \(h\)2](#).
- HDD – Heating Degree Day is a unit, based on temperature difference and time, used in estimating fuel consumption and specifying nominal annual heating load of a building. For any one day when the mean temperature is less than 65°F (18°C), there exist as many degree days as there are Fahrenheit degrees difference in temperature between mean temperature for the day and 65°F (18°C).

Note: HVAC indoor design temperatures shall be 68 F for heating (minimum) and 75 F for cooling, Outdoor design temperatures for heating shall be no lower than the Heating Winter Median of Extremes values. The outdoor design temperatures for cooling shall be no greater than the 1.0 percent Cooling Dry Bulb and Mean Coincident Wet Bulb values.

**Wind Speeds** Refer to Placer County Code online at [Placer County Code](#) (Placer County, California) (qcode.us) , 15.04.360 Building Planning section R301.2.1 of the 2019 California Residential Code.

**Risk Category** Refer to [2019 California Building Code, Table 1604.5](#).

**Seismic Design Category**

Wind and seismic information for a specific address may be found on <https://asce7hazardtool.online/>.

1. Go to <https://asce7hazardtool.online/>, enter the parcel address and check the desired data boxes. Note the value of  $S_{DS}$ .
2. Use the table below to determine the parcel specific seismic design category.

**TABLE R301.2.2.1.1  
SEISMIC DESIGN CATEGORY DETERMINATION**

<b>CALCULATED <math>S_{DS}</math></b>	<b>SEISMIC DESIGN CATEGORY</b>
$S_{DS} \leq 0.17g$	A
$0.17g < S_{DS} \leq 0.33g$	B
$0.33g < S_{DS} \leq 0.50g$	C
$0.50g < S_{DS} \leq 0.67g$	D <sub>0</sub>
$0.67g < S_{DS} \leq 0.83g$	D <sub>1</sub>
$0.83g < S_{DS} \leq 1.25g$	D <sub>2</sub>
$1.25g < S_{DS}$	E