Climate Zones

Building America determines building practices based on climate zones to achieve the most energy savings in a home. This page offers some general guidelines on the definitions of the various climate regions based on heating degree-days, average temperatures, and precipitation. You can also view the Guide to Determining Climate Regions by County.

HOT-HUMID

A hot-humid climate is generally defined as a region that receives more than 20 in. (50 cm) of annual precipitation and where one or both of the following occur:

- **A 67°F (19.5°C) or higher wet bulb temperature for 3,000 or more hours during the warmest 6 consecutive months of the year; or**
- **A 73°F (23°C) or higher wet bulb temperature for 1,500 or more hours during the warmest 6 consecutive months of the year.**

MIXED-HUMID

A mixed-humid climate is generally defined as a region that receives more than 20 in. (50 cm) of annual precipitation, has approximately 5,400 heating degree days (65°F basis) or fewer, and

HOT-DRY

A hot-dry climate is generally defined as a region that receives less than 20 in. (50 cm) of annual precipitation and where the monthly average outdoor temperature remains above 45°F (7°C) throughout the year.

MIXED-DRY

A mixed-dry climate is generally defined as a region that receives less than 20 in. (50 cm) of annual precipitation, has approximately 5,400 heating degree days (65°F basis) or less, and where the average monthly outdoor temperature drops below 45°F (7°C) during the winter months.

COLD

A cold climate is generally defined as a region with approximately 5,400 heating degree days (65°F basis) or more and fewer than approximately 9,000 heating degree days (65°F basis).

VERY-COLD

A very cold climate is generally defined as a region with approximately 9,000 heating degree days (65°F basis) or more and fewer than approximately 12,600 heating degree days (65°F basis).

SUBARCTIC

MARINE

A marine climate is generally defined as a region that meets all of the following criteria:

- **A mean temperature of coldest month between 27°F (-3°C) and 65°F (18°C)**
- **A warmest month mean of less than 72°F (22°C)**
- **At least 4 months with mean temperatures more than 50°F (10°C)**
- **A dry season in summer. The month with the heaviest precipitation in the cold season has at least three times as much precipitation as the month with the least precipitation in the rest of the year. The cold season is October through March in the Northern Hemisphere and April through September in the Southern Hemisphere.**

Visit the Climate-Specific Publications Web page to access Best Practices guides for each climate zone and case studies for new and existing homes.

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