

California Climate Zone 1

Reference City: Eureka
 Latitude: 41.3 N
 Longitude: 124.28 W
 Elevation: 43 ft

Design Day Data

	Eureka (F)	RH	Arcata (F)	RH
Winter 99%	35		31	
Winter 97.5%	38		33	
Summer 1%			68	63
Summer 2.5%			65	71

Degree Days

	<i>Eureka</i>	<i>Scotia</i>	<i>Klamath</i>	<i>Fort Bragg</i>
HDD	4496	3828	4554	4301
CDD	0	47	5	6

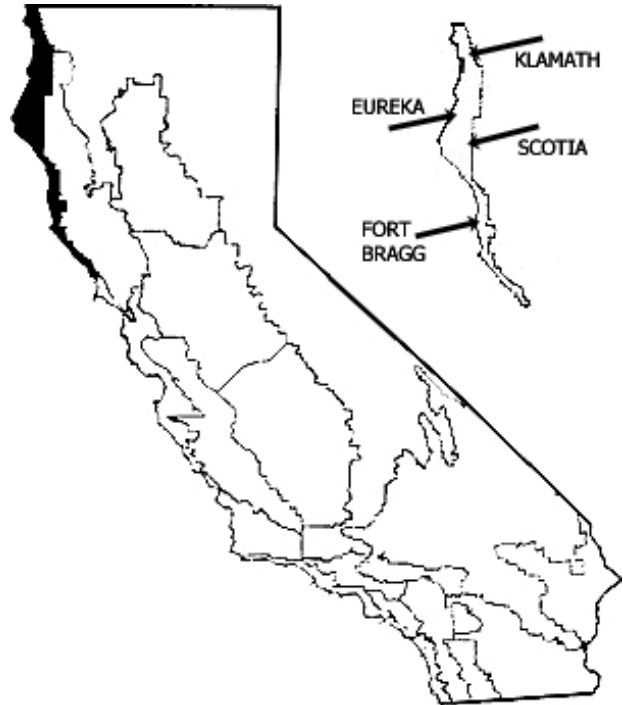
HDD = Heating Degree Days (base 65F)
 CDD = Cooling Degree Days (base 80F)

Climatic Design Priorities

Winter: Insulate
 Reduce Infiltration
 Passive Solar
 Summer: Shade
 Allow natural ventilation

Title 24 Requirements

<i>Package</i>	<i>C</i>	<i>D</i>
Ceiling Insulation	R49	R38
Wood Frame Walls	R29	R21
Glazing U-Value	0.42	0.57
Maximum Total Area	14%	20%



Basic Climate Conditions

Summer Temperature Range (F)	15
Record High Temperature (1979)	85
Record Low Temperature (1972)	21

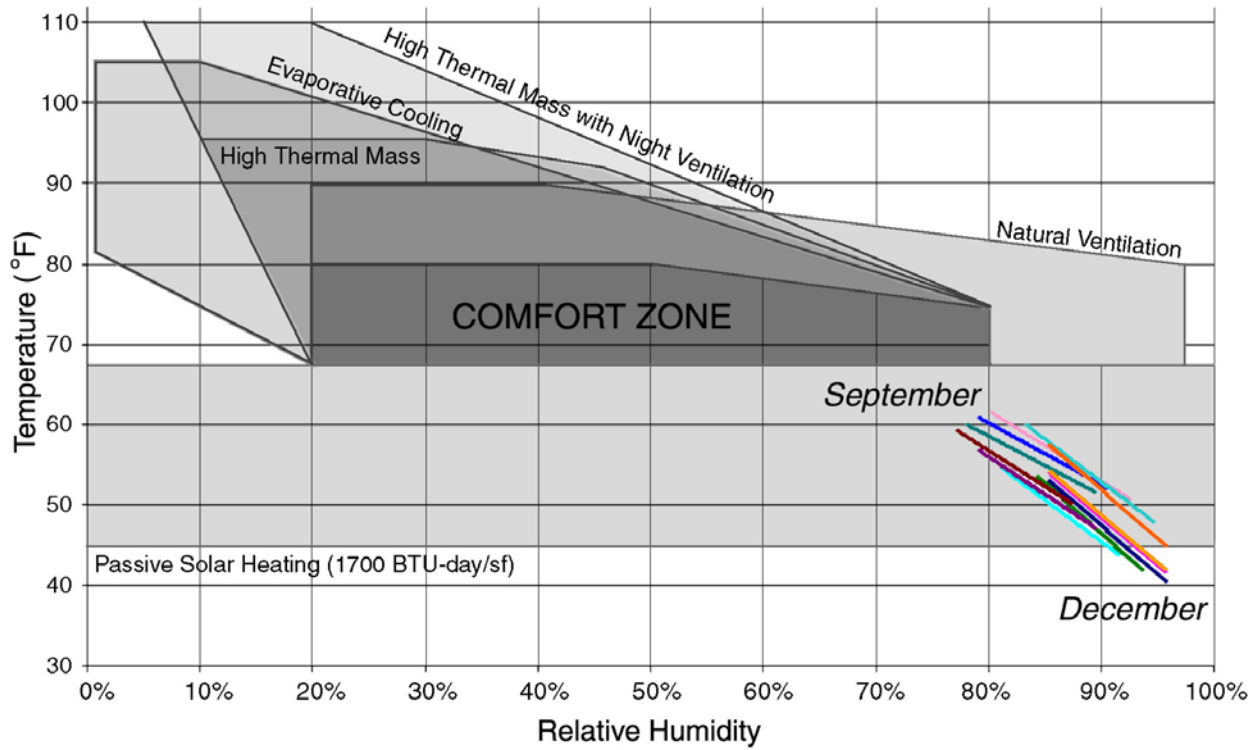
Climate

The northern coastal region is situated west of the Northern Coastal Range and has a moist, cool climate influenced greatly by the conditions of the Pacific Ocean.

The cool, wet winters, and cool summers with frequent fog and strong winds make it a climate that requires a lot of heat for comfort. Fog comes in high and fast, interposing a cooling and humidifying blanket between the sun and the earth, reducing the intensity of the light and sunshine. In winter the temperatures are cool and rain is common.

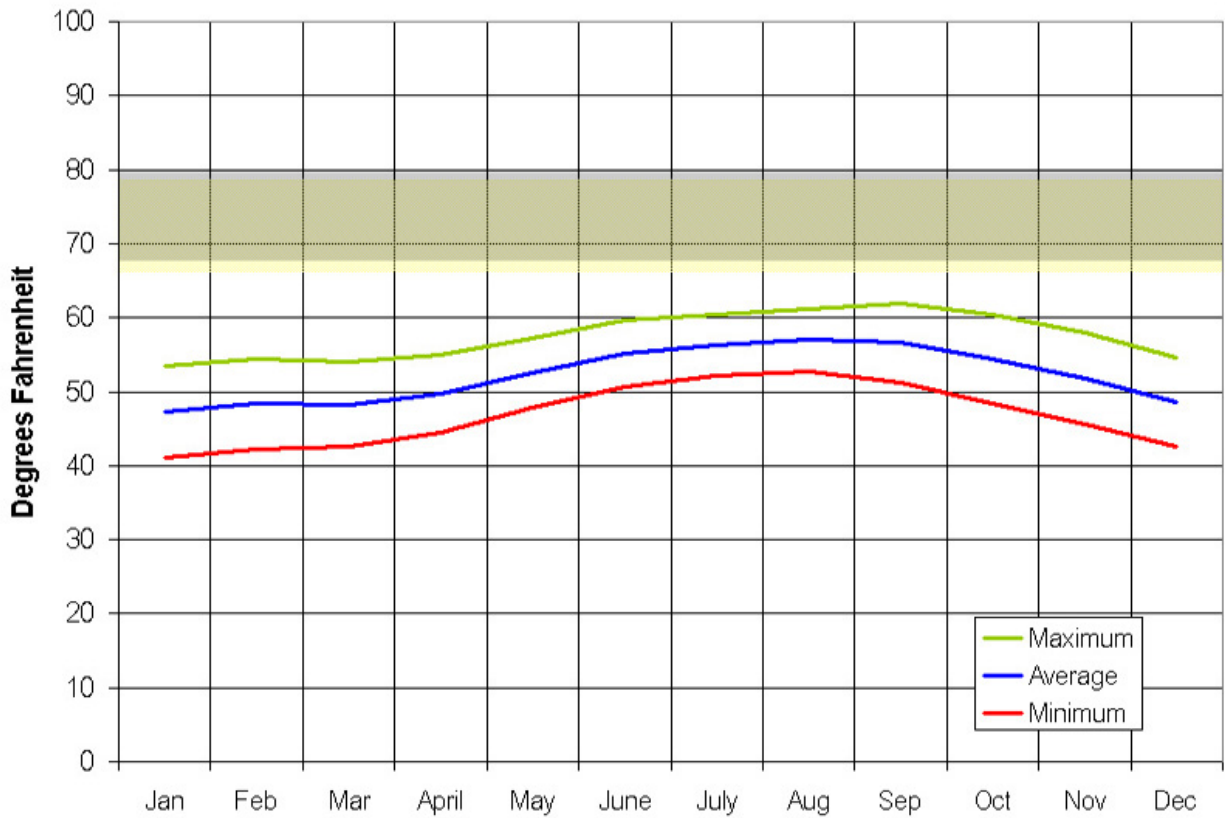
The annual precipitation for Climate Zone 1 is about 25 inches annually, most of it occurring in the winter months. The summers are drier and sunnier, but only warm enough to call for a few CDD. Though Climate Zone 1 is the coolest climate in California with the most HDD, it rarely freezes and seldom frosts.

Bioclimatic Chart

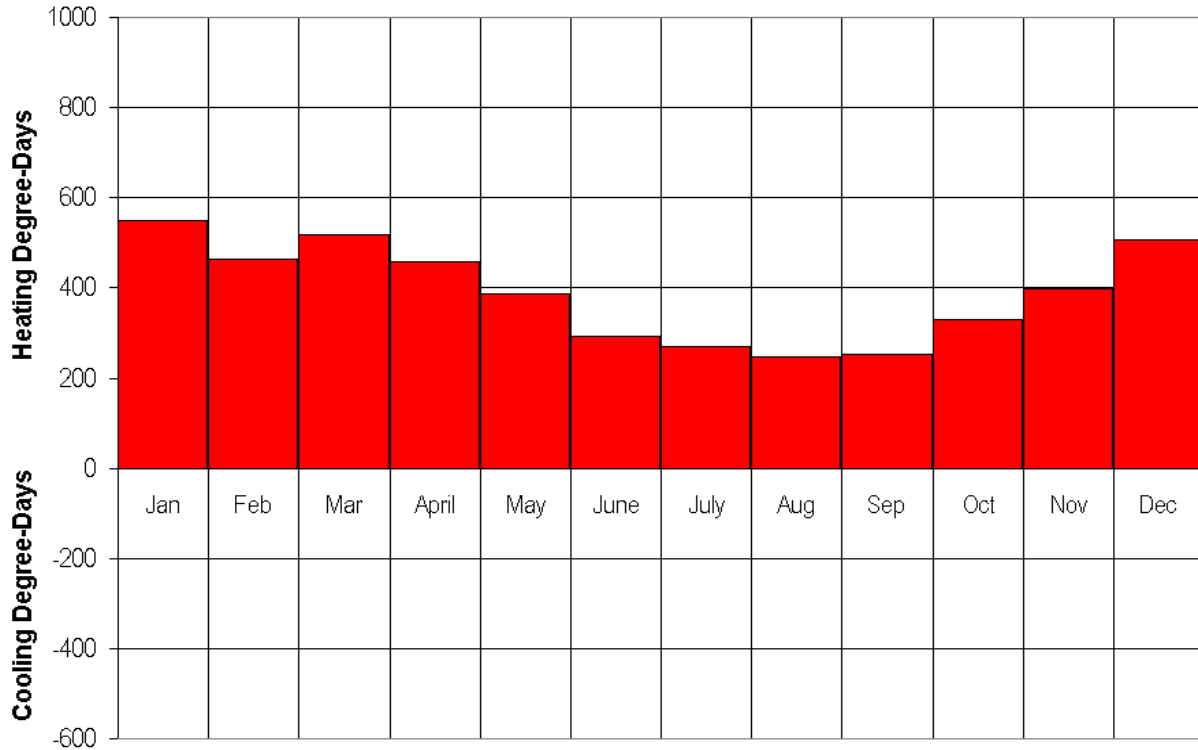


Temperature

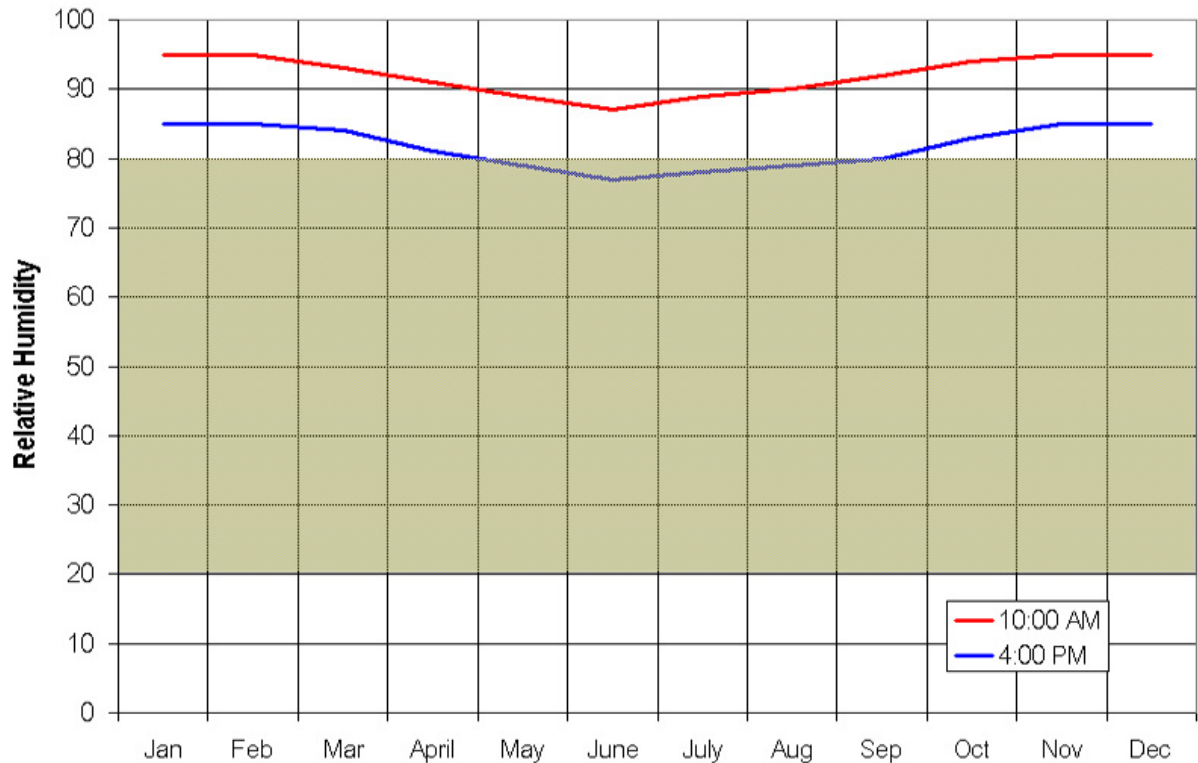
(Typical Comfort Zone: 68-80°F)



Degree Day
(Base 65°)

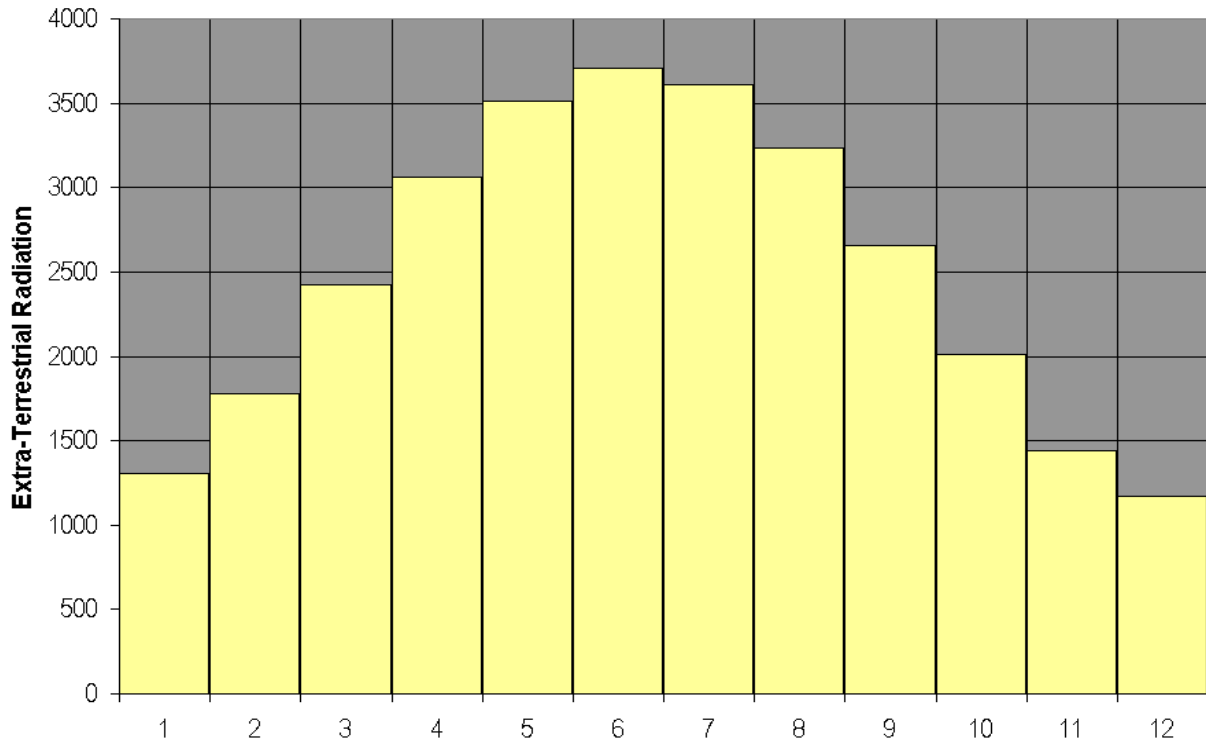


Relative Humidity
(Typical Comfort Zone: 20-80%)

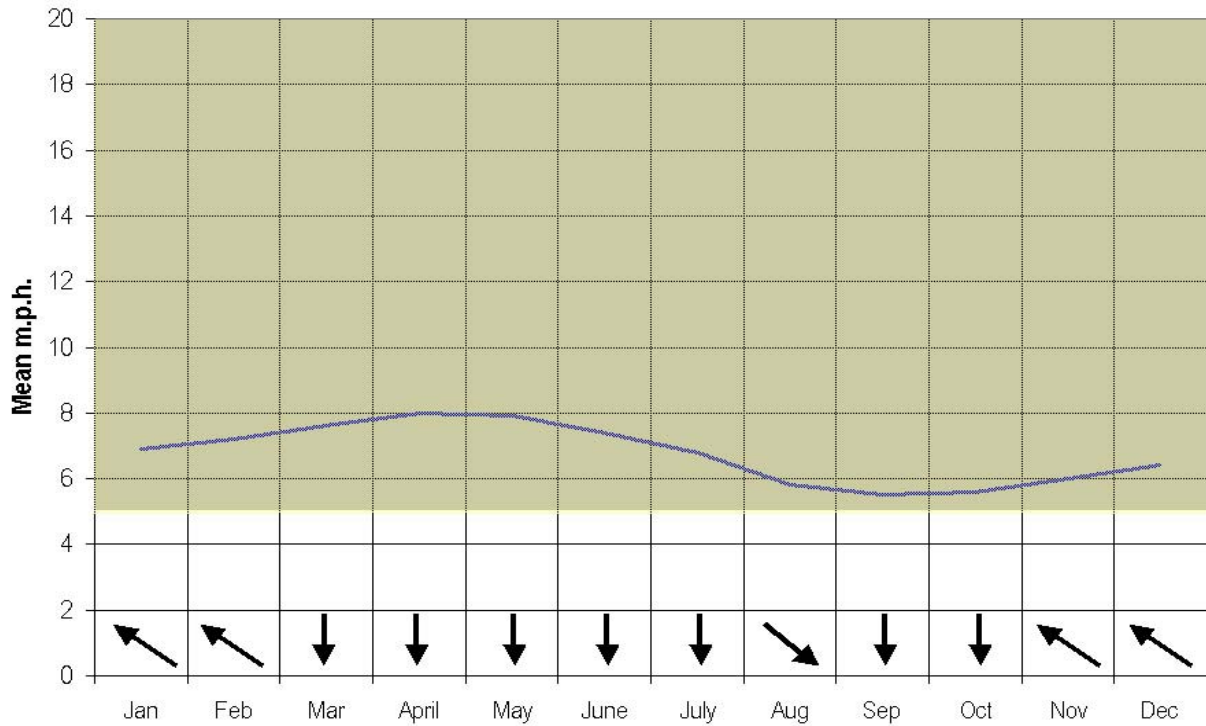


Extra-Terrestrial Radiation

Daily Mean ETR: 2493



Wind Speed



Prevailing Wind Direction

Summer: N
Winter: SE

Natural Ventilation is most effective when wind speed is 5 mph or greater.