

California Climate Zone 7



Reference City: San Diego
 Latitude: 32.73 N
 Longitude: 117.17 W
 Elevation: 10 ft

Basic Climate Conditions

	(F)
Summer Temperature Range	14
Record High Temperature (1963)	111
Record Low Temperature (1949)	29

Design Day Data

Winter	99%	42		
	97.5%	44		
Summer				
	1%:	83	MCWB	69
	2.5%:	80	MCWB	69

Climatic Design Priorities

Winter: Insulate
 Reduce Infiltration
 Passive Solar

Summer: Shade
 Allow natural ventilation
 Distribute Thermal Mass

Title 24 Requirements

Package	C	D
Ceiling Insulation	R38	R30
Wood Frame Walls	R21	R13
Glazing U-Value	0.38	0.67
Maximum Total Area	14%	20%

Climate

Climate Zone 7 is the southernmost coastal region of California. The warm ocean water and latitude make this climate very mild. The temperature of the ocean water affects the air temperature over it, and this in turn moderates temperatures over the coastal strip.

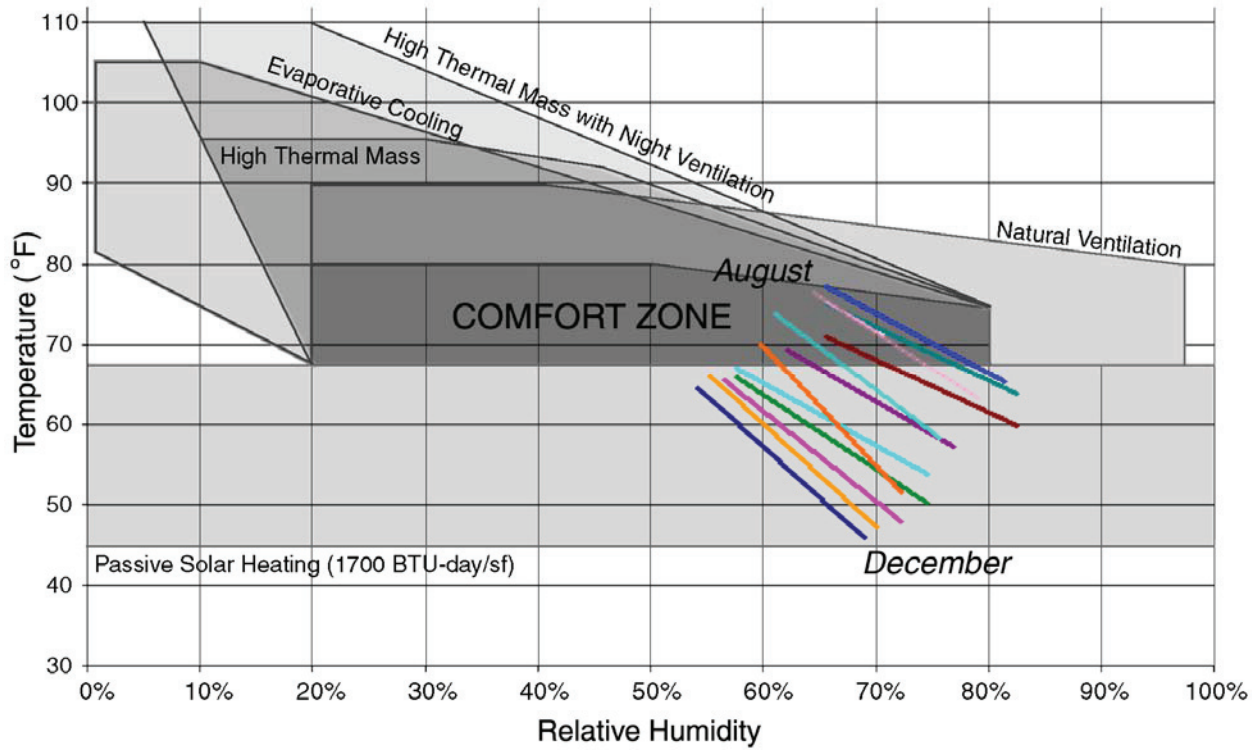
The ocean influences the weather most of the time, however the wind changes sometimes, bringing in the hot and extremely drying Santa Ana winds. The weather in the summer is warm and comfortable, and hot enough that cooling is necessary on some days.

	Oceanside	Chula Vista	San Diego	La Mesa
HDD	2009	1321	1256	1400
CDD	505	862	984	1110

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

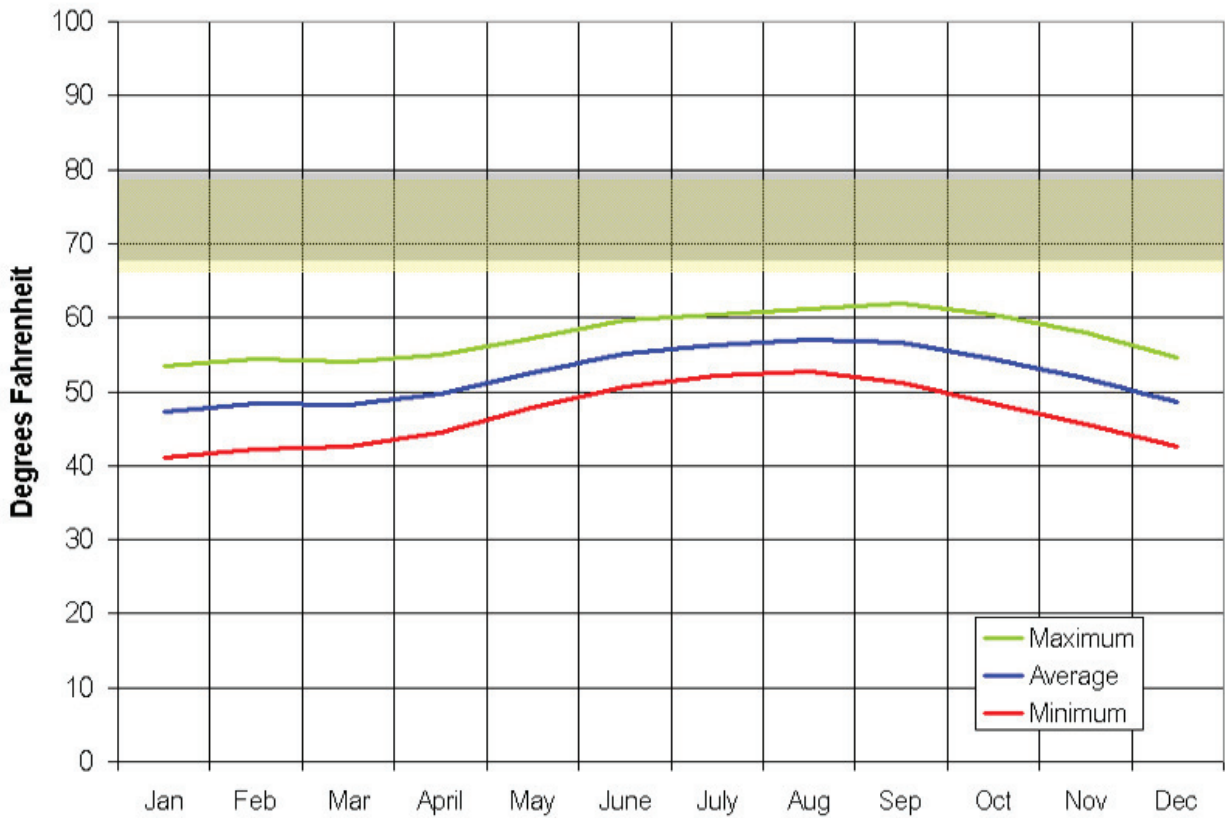
However, daily high fogs naturally cool the area at night. The winters are cool and heating is necessary sometimes. The weather and comfort standards in this region are in concurrence as shown by the low consumption of energy use.

Bioclimatic Chart

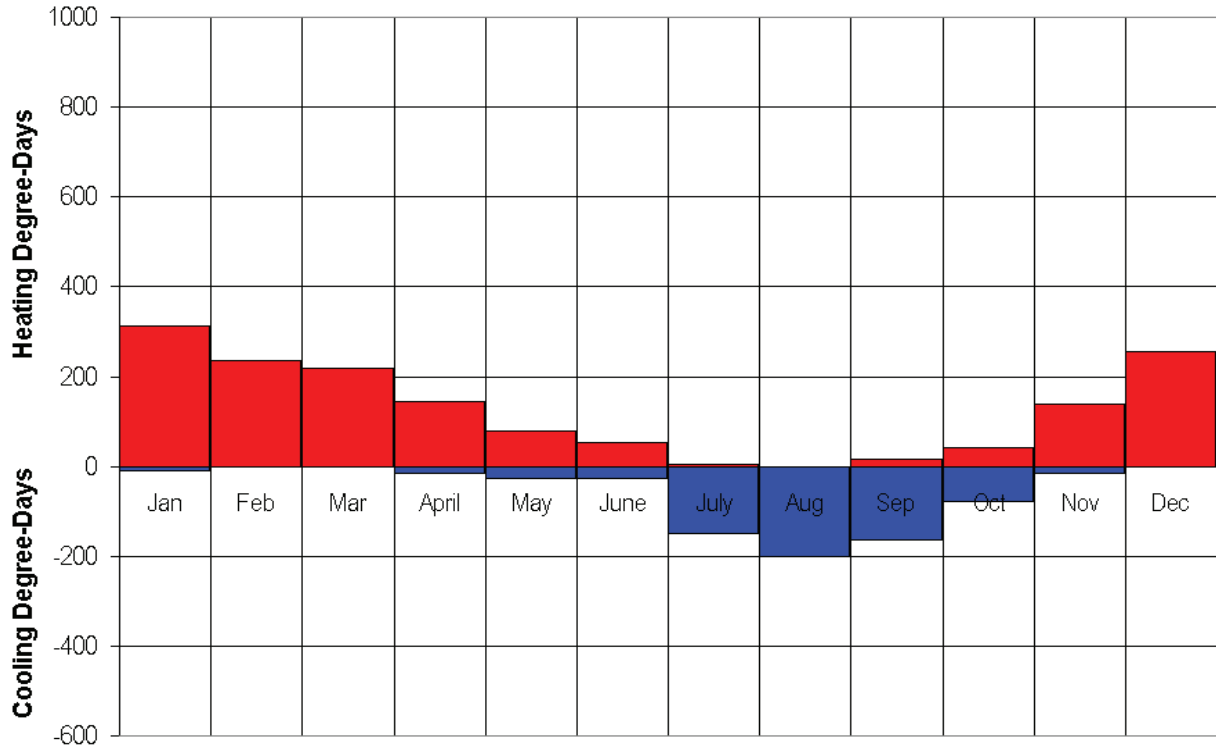


Temperature

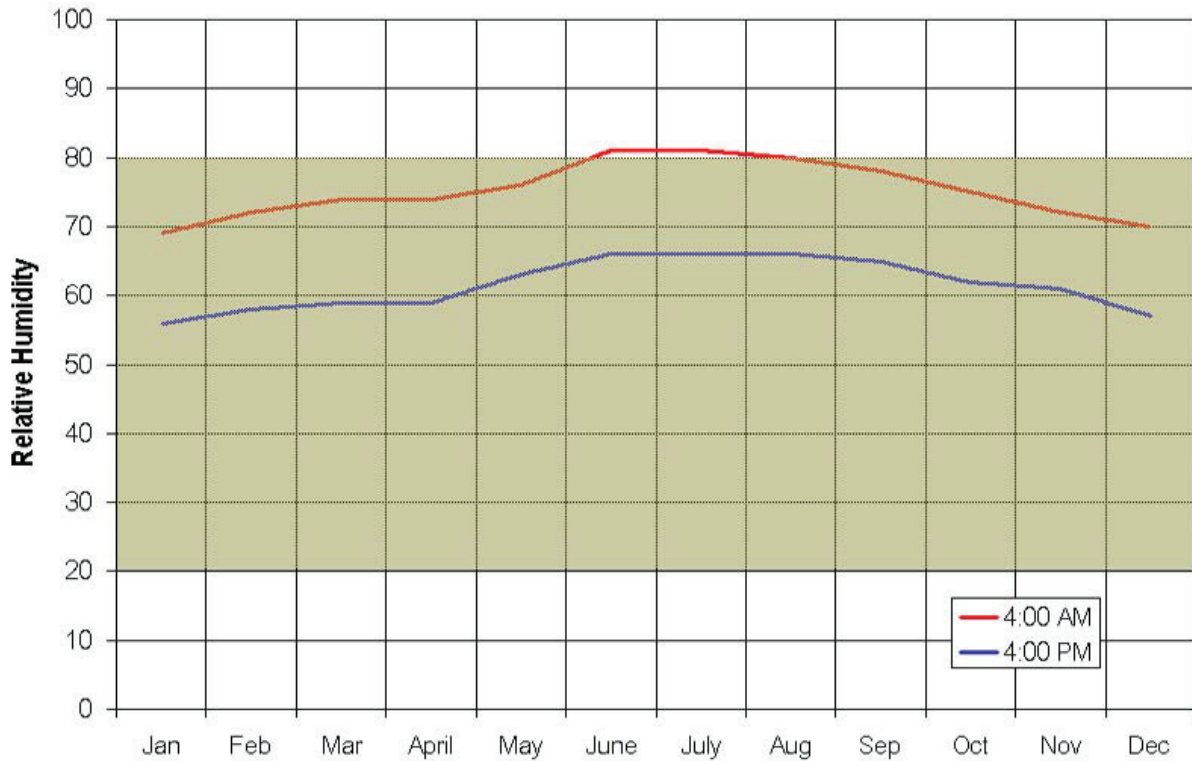
(Typical Comfort Zone: 68-80°F)



Degree Day
(Base 65°)

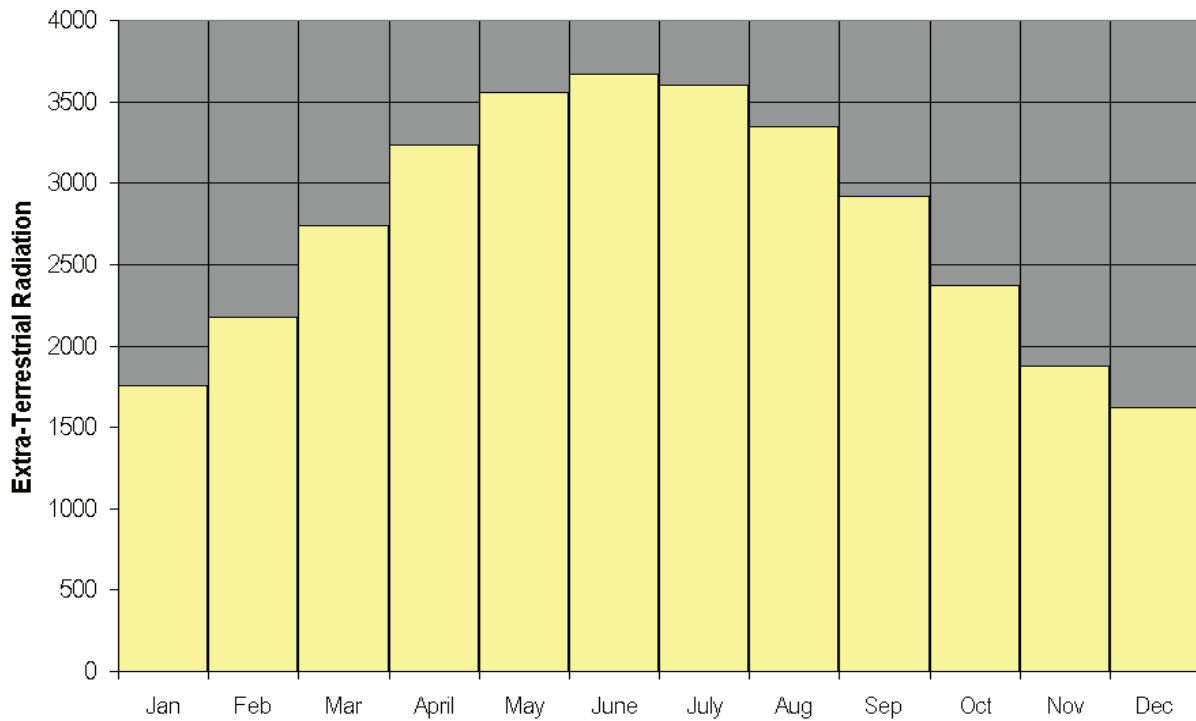


Relative Humidity
(Typical Comfort Zone: 20-80%)

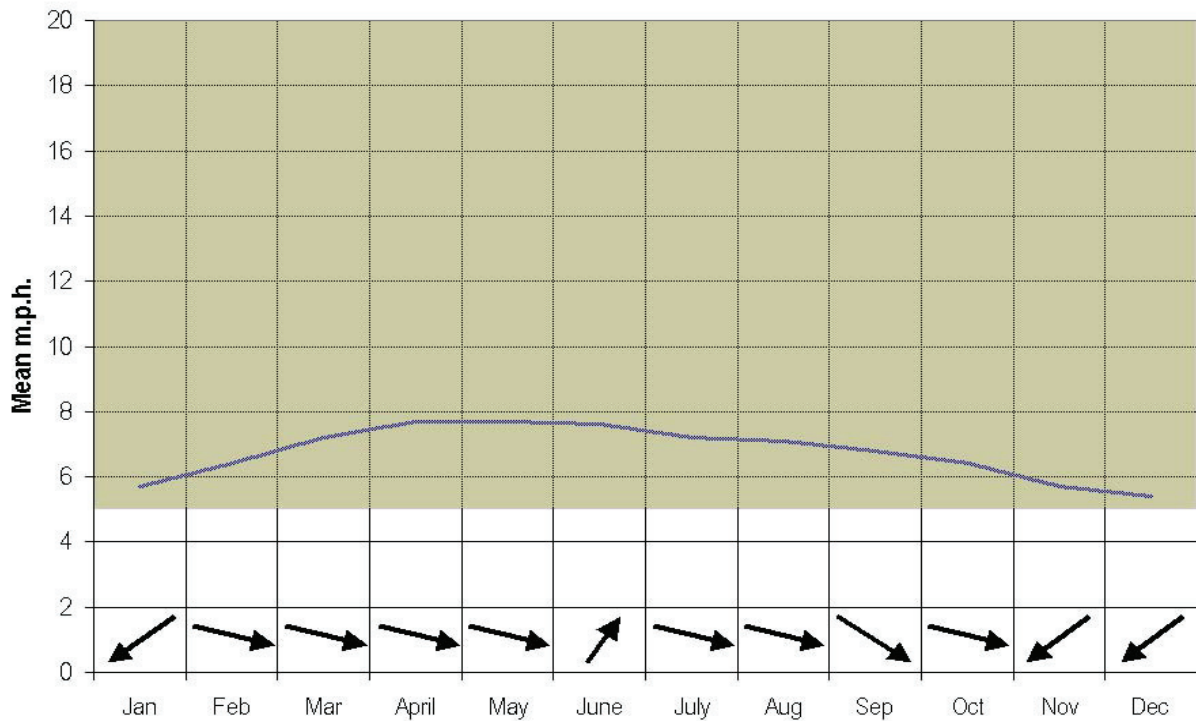


Extra-Terrestrial Radiation

Daily Mean ETR: 2739



Wind Speed



Prevailing Wind Direction

Summer: WNW
Winter: NE

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