

California Climate

Zone 4

Reference City: San Jose
 Latitude: 37.35 N
 Longitude: 121.9 W
 Elevation: 70 ft

Basic Climate Conditions

	(F)
Summer Temperature Range	23
Record High Temperature (2000)	109
Record Low Temperature (1990)	19

Design Day Data

Winter	99%	34		
	97.5%	36		
Summer				
	1%:	85	MCWB	66
	2.5%:	81	MCWB	65

Climatic Design Priorities

Winter: Insulate
 Reduce Infiltration
 Passive Solar

Summer: Shade
 Allow natural ventilation
 Distribute Thermal Mass
 Use Evaporative Cooling

Title 24 Requirements

Package	C	D
Ceiling Insulation	R38	R30
Wood Frame Walls	R25	R13
Glazing U-Value	0.38	0.67
Maximum Total Area	14%	20%



Climate

The Central Coastal Range is inland of the coast but has some ocean influence which keeps temperatures from hitting more extreme highs and lows. This zone covers many microclimates from northern to southern parts of the state. The reference city is in the northern-most part of the zone.

	San Jose	Gilroy	Sunnyvale	Paso Robles
HDD	2335	2278	2643	2934
CDD	574	913	220	956

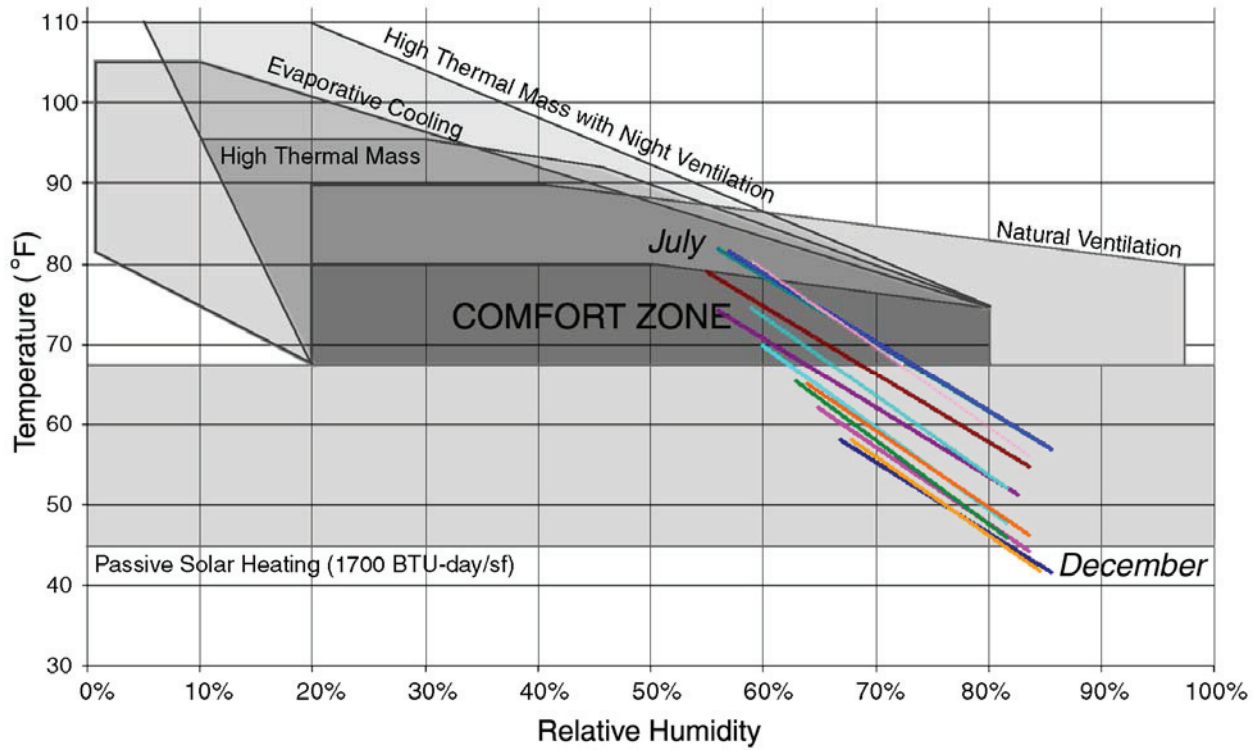
HDD = Heating Degree Days (base 65F)

CDD = Cooling Degree Days

Seasons are sharply defined. Summers are hot and dry with a large daily temperature swing. Summers are hot enough that cooling is necessary. Winters are cool but not severe. Heating is necessary on many days in the winter.

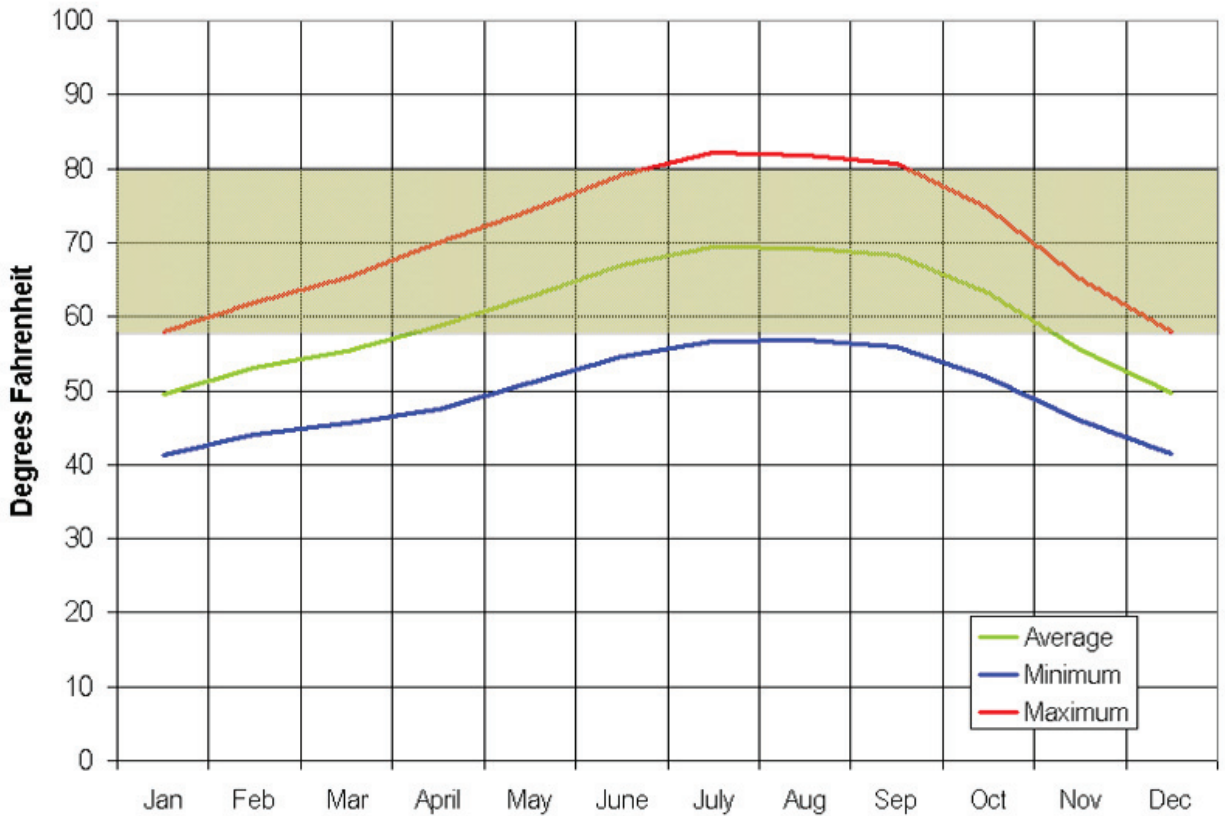
Days are typically clear with the coastal range blocking much of the fog and high winds.

Bioclimatic Chart

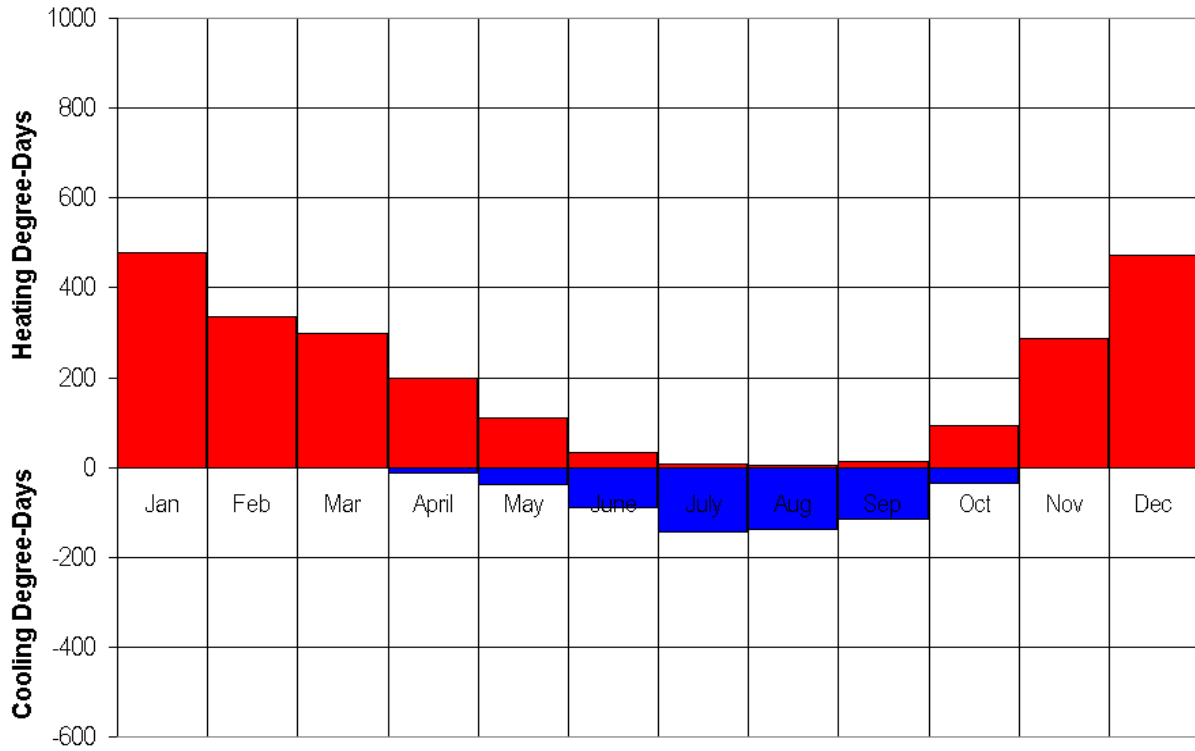


Temperature

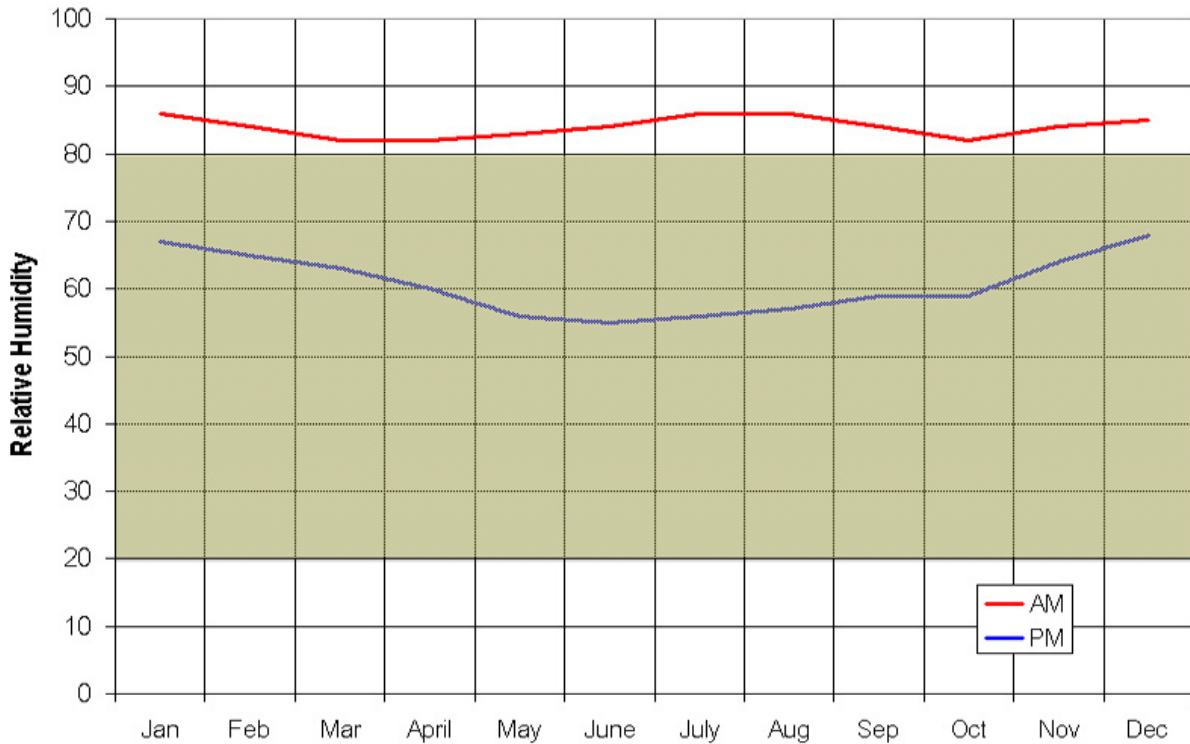
(Typical Comfort Zone: 68-80°F)



Degree Day
(Base 65°)

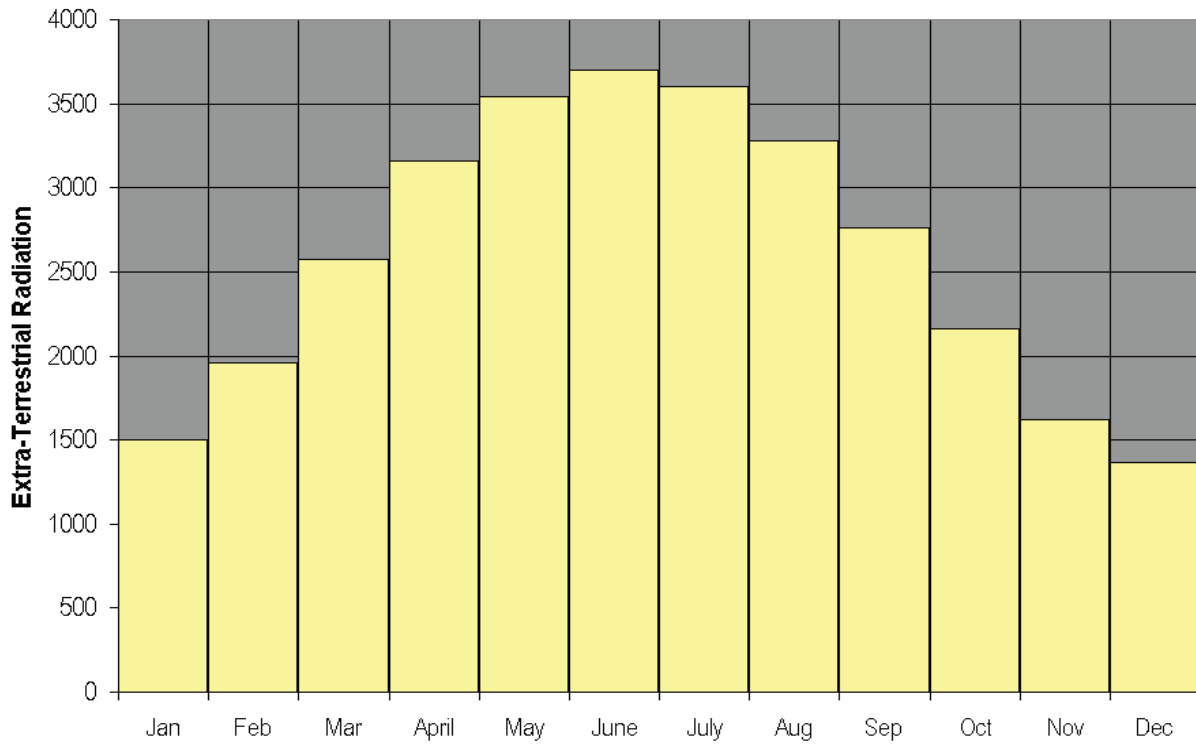


Relative Humidity
(Typical Comfort Zone: 20-80%)

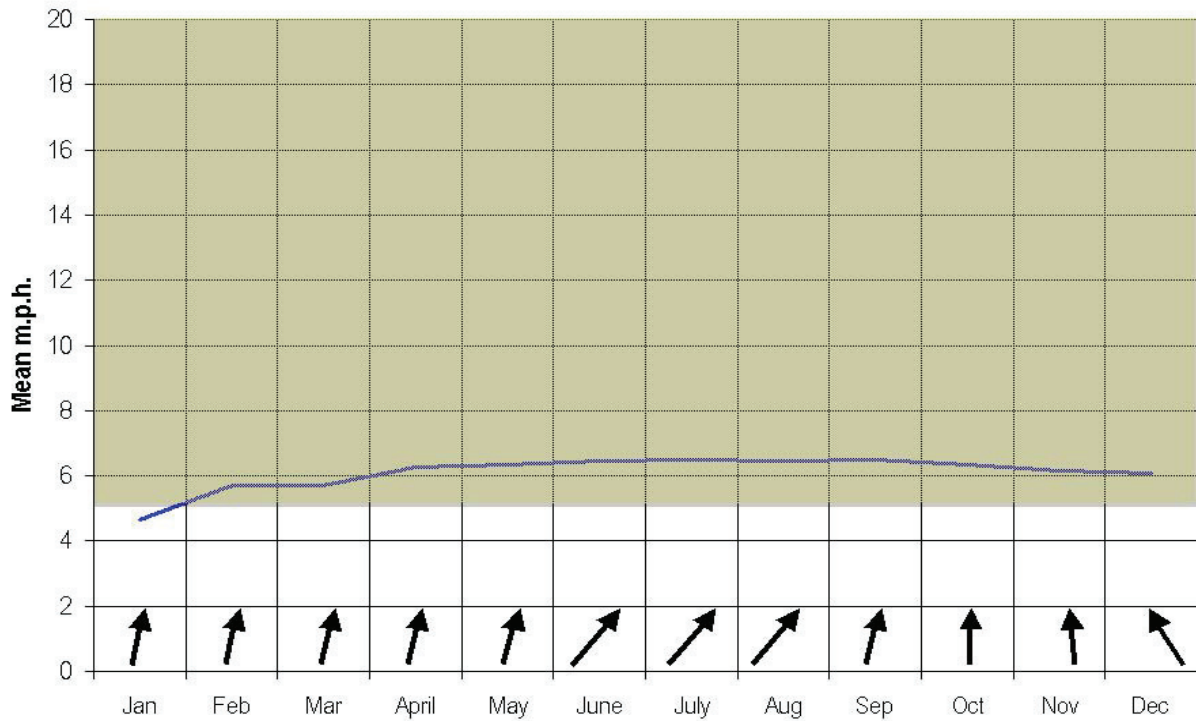


Extra-Terrestrial Radiation

Daily Mean ETR: 2602



Wind Speed



Prevailing Wind Direction

Summer: NNW

Winter: SE

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