

**CITY OF FREMONT 2016 BUILDING CODES**

# **Mandatory Solar Requirement**

Under the 2016 California Energy Code, new residential and non-residential developments must be designed to be “Solar Ready” by providing for a solar zone and a solar pathway that will enable future solar installations.

In order to expedite the adoption of solar technologies, the City of Fremont adopted an energy requirement that goes beyond the minimum provision of solar readiness to require the mandatory installation of solar photovoltaic (PV) systems in new residential developments.



Building and Safety Division  
Phone: 510-494-4460  
Email: [bld\\_info@fremont.gov](mailto:bld_info@fremont.gov)

# What is the requirement?

Prescriptive minimum solar PV system sizes are required for residential buildings with up to 4,499 sq. ft. of conditioned space. For buildings 4,500 sq. ft. or above, solar PV systems must be sized to meet a minimum percentage of total building "time dependent valuation (TDV)" energy use.

Alternative renewable energy systems including ground-mounted or carport solar or wind energy systems may be considered. Developers may also achieve compliance with the ordinance by meeting the energy efficiency standards established under the CALGreen Building Standards Tier 1.

Conditioned Space	Minimum System Size
< 1,000 ft <sup>2</sup>	1.5 kW (DC)
1,000 – 1,499 ft <sup>2</sup>	1.7 kW (DC)
1,500 – 1,999 ft <sup>2</sup>	2.1 kW (DC)
2,000 – 2,499 ft <sup>2</sup>	2.4 kW (DC)
2,500 – 2,999 ft <sup>2</sup>	2.7 kW (DC)
3,000 – 3,499 ft <sup>2</sup>	3.0 kW (DC)
3,500 – 3,999 ft <sup>2</sup>	3.2 kW (DC)
4,000 – 4,499 ft <sup>2</sup>	3.5 kW (DC)
≥ 4,500 ft <sup>2</sup>	55% total TDV

In addition to meeting minimum system sizing requirements, developers must provide solar readiness beyond the minimum required system sizes. Developers must also offer expanded system sizes to potential buyers. Developers are encouraged to consider expandable solar technologies and to design for all-electric building energy systems.

For detailed information, visit the City of Fremont's municipal code section: Chapter 15.44 – Fremont Energy Code  
[www.codepublishing.com/CA/Fremont/?Fremont15/Fremont1544.html](http://www.codepublishing.com/CA/Fremont/?Fremont15/Fremont1544.html)



# What are the benefits?

The City of Fremont is a national leader in advancing solar energy, offering a streamlined solar review process and over-the-counter permitting for residential solar installations. Requiring solar installations in new residential developments:

- Offers long-term energy savings to residents
- Reduces the environmental impact of new residential developments
- Helps Fremont transition to a clean energy economy
- Aligns with the statewide goal of achieving zero net energy in residential construction by 2020

# What resources are available?

- The Center for Sustainable Energy provides toolkits for multi-family contractors and property owners/operators to help navigate virtual net energy metering (VNEM) resources and interconnection documents. [www.energycenter.org/smp](http://www.energycenter.org/smp)
- The New Solar Homes Partnership provides financial incentives and other support to home builders to integrate solar PV and high energy-efficiency standards throughout their developments. [www.gosolarcalifornia.ca.gov/builders](http://www.gosolarcalifornia.ca.gov/builders)
- The federal government provides an Income Tax Credit for the installation of solar PV at a level of 30 percent of the installed cost through 2019, 26 percent through 2020, and 22 percent through 2021. [www.energystar.gov/taxcredits](http://www.energystar.gov/taxcredits)