Mandatory Solar Ready Area Requirement

(2013 Energy Efficiency Standards effective July 1, 2014)

All single family subdivisions and low-rise multi-family projects must submit a copy of the Solar Ready Area –New Construction (CF1R-SRA-01-E) form showing how the home or building is complying with the solar ready requirements. The user will select one of six options for showing compliance and depending on which compliance path is chosen, additional documents may be required. For compliance paths that require additional documentation, the CF1R-SRA-01-E lists the names of the forms that will have to be submitted.

All high-rise multifamily buildings and hotel/motel occupancies with 10 stories or fewer and nonresidential buildings with three stories or fewer must submit a copy of the Solar Ready Areas (NRCC-SRA-01-E) form showing how the building is complying with the solar ready requirements. The user will select one of five options for showing compliance and depending on which compliance path is chosen, additional documents may be required. For those compliance paths that require additional documentation, the NRCC-SRA-01-E lists the names of the forms that will have to be submitted.

Required Occupancy Types

- Subdivisions with 10 or more single-family residences with a subdivision map deemed complete after 1/1/14. These types of developments must comply with the requirements of Section 110.10(b) through 110.10(e).
- Low-rise multifamily buildings must comply with the requirements of Section 110.10(b) through 110.10(d).
- Hotel/Motel Occupancies and high-rise multifamily buildings with 10 stories or fewer must comply with the requirements of Section 110.10(b) through 110.10(d).
- All other nonresidential buildings with three stories or fewer must comply with the requirements of Section 110.10(b) through 110.10(d).

The Solar Ready requirements DO NOT apply to additions or alteration of single-family residences or low-rise multifamily buildings. Additions or alterations to non-residential buildings, high-rise multifamily buildings or hotel/motel occupancies that increase the area of the roof by 2000 square feet or more must comply with the Solar Ready requirements per Section 141.0(a) of the Standards.

Solar Zone Area Requirements

Section 110.10 (b)

For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet for a single-family residence.

For low-rise and high-rise multifamily buildings, Hotel/Motel occupancies and nonresidential buildings, the solar zone must be located on the roof or overhang of the building, the roof or overhang of another structure located within 250 feet of the building, or on covered parking installed with the building. The solar zone must have a total area of no less than 15 percent of the total roof area of the building excluding any skylight area.

There are several exceptions that apply to the solar zone requirements. Claiming some exceptions will reduce the required size of the solar zone on a building while other claiming other exceptions will eliminate the need to comply with any of the Solar Ready requirements.

All sections of the solar zone located on steep-sloped roof (ratio of rise to run of greater than 2:12) must be oriented between 110 degrees and 270 degrees of true north.

Article from California Energy Commission Blueprint Jan – Feb 2014

No obstruction shall be located in the solar zone. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located a sufficient horizontal distance away from the solar zone in order to reduce the resulting shading of the solar zone.

Construction drawings must indicate the structural roof dead load and roof live load of all areas of the roof designated as solar zones.

Section 110.10(c)

The construction documents must indicate location for inverters and metering equipment and a pathway for routing of conduit from the solar zone to the point of interconnection with the electrical service.

The construction documents must also indicate a pathway for routing of plumbing from the solar zone to the water-heating system.

Section 110.10(d)

A copy of the construction document or a comparable document indicating the information from the Section 110.10(b) through 110.10(e) must be provided to the occupant.

Section 110.10(e)

The main electric panel shall have a minimum busbar rating of 200 amps.

The main electrical service panel must have space to allow for the installation of a double pole circuit breaker for a future solar installation.

The reserved space shall be positioned at the opposite (load) end from the input feeder location or main circuit location.

The reserved space must be permanently marked as "For Future Solar Electric".