

System

New Rooftop Residential Retrofit PV Systems

Installed by contractor with all licenses required by jurisdiction

Each residence must have a unique utility meter

Electrical

Applicable National Electric Code

600V Max per DC System Size

Single phase 240 V only

No Aluminum Wires

Must Use 600V rated PV wire (due to outer diameter > 0.24" (6.1mm))

Must use 90 deg C rated insulated wire

Max 2 DC strings in parallel

Max 9 current carrying conductors in a raceway

Inverter output circuit conductors must be THWN-2, or listed NM

Terminals must be rated to 75 deg C, labeled for use with Cu wires, and accept minimum 8 AWG wire

If using microinverter, 1 module per microinverter

Whenever used, microinverters or AC Modules must be rated for a 20A branch circuit overcurrent device

Permitted to install on up to or equal to 400A Service

Permitted to install on up to or equal to 225A Service Disconnect

Permitted to install on up to or equal to 225A busbars

No existing PV or ESS or Back up Generators or any separately derived power sources.

May install only 1 module type

May install up to 2 Inverters for String Inverters, up to 1 inverter type for Micro-inverters and AC modules Systems

Conduit may not be Schedule 80 PVC

Modules and Inverters must be listed on CEC

Rapid Shutdown cannot be satisfied using the method: No exposed wiring or conductive parts [690.12(B)(2)(3)]

No trenching allowed

All power production inverter outputs have the same point of connection

No new loads, only new monitoring loads are allowed

All equipment is assumed to be non-continuous rated

May install only 1 racking system type

Height of rooftop conduit > = 7/8"

Flat Plate PV Modules Only

Structural

Detached one- and two-family dwellings and townhomes not more than three stories above grade plane in height with a separate means of egress

Accessory structures to one- and two-family dwellings and townhomes not more than three stories above grade plane in height

Penetrations within 4 ft of the fire-rated property line on the roof of a townhome shall not be permitted

Installations in multi-family structures or R-2 occupancies shall not be permitted

Installations on mobile homes governed by Health and Safety Code and/or Housing and Urban Development regulations shall not be permitted.

Applicable International Residential Code

PV system + hardware weight is less than or equal to 4psf

No ground mounted systems

No carports or non-permanent structures

No modification alterations or upgrades to the structure

At least 20% of each tilt-up mounted array must be contained under 2 feet above the roof

Installed on a permitted structure

No wood shake or wood shingle roofing

Limit of 10" above the roof for pitched (>2/12) roof systems

No metal roof or low-slope roof in areas with > 15psf snow load**Fire**

Applicable International Residential Code