System

New Rooftop Residential Retrofit PV Systems
Installed by contractor with all licenses required by jurisdiction

Electrical

Applicable National Electric Code

600V Max per DC System Size
Single phase 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

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
Single Family Dwelling Only

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
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

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
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