

**System**

New Rooftop Residential Retrofit PV Systems With Energy Storage Systems

Installed by contractor with all licenses required by jurisdiction

Lithium Ion

**Electrical**

Applicable National Electric Code

600V Max per DC System Size

Single phase only

Aluminum wires are only allowed for Backup Initiation Device feeders

Must Use 600V rated PV wire (due to outer diameter &gt; 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

ESS must be paired with new PV at this time

AC Coupled ESS may not be connected in parallel

May install only 1 racking system type

Height of rooftop conduit &gt; = 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

ESS Must be less than 400lbs and its center of mass shall be located less than 4ft from the floor in high seismic areas (Seismic Design Category D,E,F)

No wood shake or wood shingle roofing

Limit of 10" above the roof for pitched (&gt;2/12) roof systems

No metal roof or low-slope roof in areas with &gt; 15psf snow load

**Fire**

Applicable International Residential Code