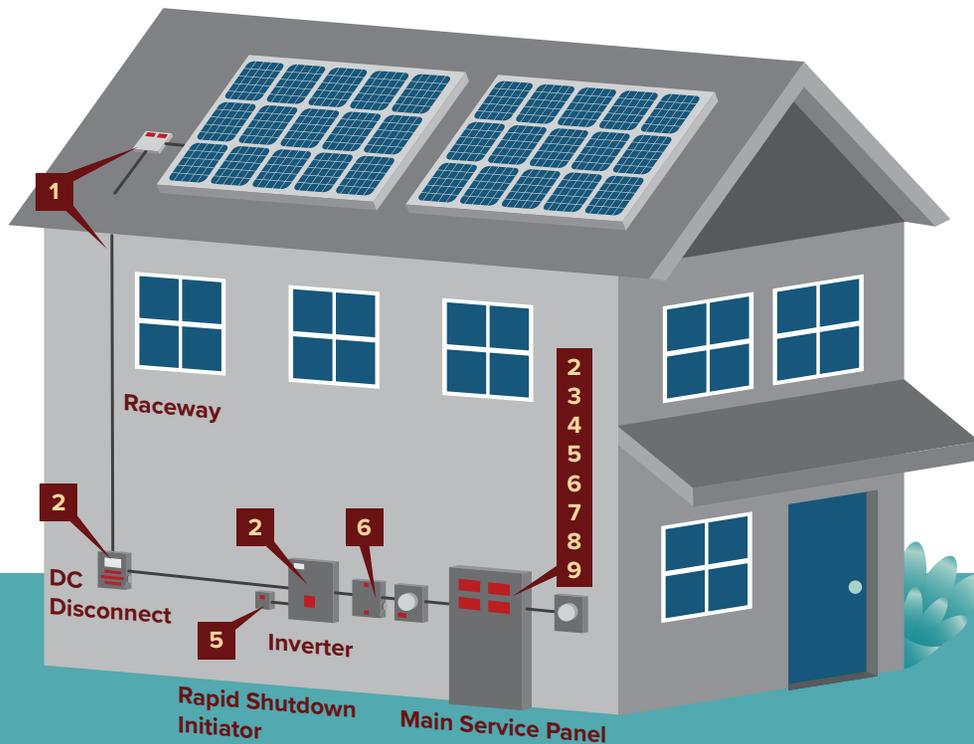


# Field Applied Labeling Interconnected PV Systems

1. **PV System dc raceways and enclosures** - Where not self-evident, the following wiring methods and enclosures shall be identified at least every 10 feet by a permanent label or equivalent marking:
  - a. Exposed raceways, cable trays, and other wiring methods
  - b. Covers or enclosures of pull boxes and junction boxes
  - c. Conduit bodies in which any of the available conduit openings are unused
2. **Maximum dc system voltage** - A label providing the maximum PV system dc voltage is required at one of the following locations:
  - a. DC PV system disconnecting means  
Note: Most inverters are equipped with an integral dc disconnect
  - b. PV system electronic power conversion equipment (inverter)
  - c. Premises distribution equipment associated with the PV system
3. **PV system ac output rating** - A label that identifies the ac output amperage and voltage of the PV system shall be provided at the PV system interconnection point.
4. **Rapid Shutdown System** - The existence of a rapid shutdown system must be indicated at the main service panelboard in accordance with the following:
  - a. Buildings equipped with rapid shutdown shall have a sign that indicates the existence of the rapid shutdown system.



- b. For buildings with multiple PV systems, equipped with more than one type of rapid shutdown, or multiple systems with and without rapid shutdown, a plan view plaque shall be provided that identifies the PV arrays that remain energized after rapid shutdown initiation.
5. **Rapid Shutdown Initiator** - A rapid shutdown initiator shall be indicated by a reflective label located no greater than 3 feet from the device. *Note: The initiator may be the inverter circuit breaker or disconnect, the service panel main circuit breaker, or a separate device in accordance with the specific design.*
6. **PV system disconnect** - The disconnecting means for the interconnected PV system shall be permanently marked "PV SYSTEM DISCONNECT" or equivalent. *Note: The inverter circuit breaker can serve as the PV system disconnect.*
7. **Identification of all source circuit breakers and connections** - All PV system circuit breakers must be identified. *Note: ALL circuit breakers in any panelboard must be identified anyway.*
8. **Identification of all power sources** - There shall be a plaque or directory indicating the location of each power source disconnecting means on the premises. *Note: Where the power source circuit breaker(s) in the service panelboard serve as the power source disconnecting means, the service panelboard directory (panel schedule) can fulfill this requirement.*
9. **PV system contribution limitation** - one of the two labels below will be required based on the panelboard bus rating and resulting PV system contribution limitation in accordance with the design:
  - a. Do not relocate PV system circuit breaker - panelboards with PV system circuit breaker(s) that must be located at the opposite end of the bus from the utility supply, to comply with load-side limitation requirements, shall include a label that prohibits relocation of the PV system circuit breaker(s).
  - b. Limitation on sum of all circuit breaker ratings - where the sum of the ampere ratings of load and PV supply overcurrent devices is used to comply with load-side panelboard limitations, a warning label shall be provided that indicates the presence of multiple sources and prohibiting addition of overcurrent devices that exceed the bus rating.

- The National Electrical Code specifies specific language and certain font sizes, colors and reflective elements for some labels. All labels must be suitable for the environment. See ANSI Z535.4-2011, Product Safety Signs and Labels, and ANSI Z535.2-2011 Environmental and Facility Safety Signs, for additional information.
- Some labels are permitted at multiple locations, shown in the diagram by the same number 2, 5, and 6. Only one label is required. The same label does not have to be posted at multiple locations. The location of the label is based on the specific design elements.
- As seen at the main service panel, sometimes the information on one plaque fulfills multiple code requirements.
- For PV system disconnects and any equipment disconnects that have line and load terminals that can be energized when the disconnect is in the open (off) position, a warning label is required.