
STANDARD OPERATING PROCEDURE
BUILDING INSPECTORS

Field Inspection Checklist for Rooftop Photovoltaic (PV) Systems

The checklist items follow a typical inspection pathway from the roof down to the service entrance. Make sure all PV disconnects are in the open position and verify the following.

- (Customer/Installer to provide photos of mount, flashing and sealant prior to covering)
- (Customer/Installer to provide photos prior to placement of panels)
- (Customer/Installer to provide photos of Panel label for inspection)
- All work is done in a neat and workmanlike manner [NEC 110.12]
- PV modules make, model number, quantity, and location according to the approved plans.
- Array mounting system and structural connections according to approved plans.
- Roof penetrations flashed/sealed according to the approved plans.
- Array exposed cables are properly secured, supported, and routed to prevent physical damage.
- Conduit installation according to [NEC 690.31]
- Firefighter access according to approved plans. [R324]
- Roof-mounted PV systems have the required fire classification [IRC R902.4]
- Grounding/bonding of rack and modules according to manufacturer's installation instructions.
- Equipment installed is listed and labeled by a nationally recognized testing lab.
- Conductors, cables, and conduit types and size are according to approved plans.
- Conductors on roof need to maintain 7/8" clearance or temperature adder shall be calculated. [NEC 310.15(B)(2)]
- Overcurrent protection devices are the type and size according to plans.
- Disconnect location access and working space according to plans [NEC 110.26]
- Inverter output circuit breaker is located at opposite end of bus from the utility supply at the load center and/or service panelboard. If panelboard is center-fed, inverter output circuit breaker can be at either end of busbar [NEC 705.12(B)] (not required if the sum of the inverter and utility supply circuit breaker is less than or equal to the panelboard bus rating)
- PV system markings, labels and signs according to plans. [NEC705.10]
- Connection of the PV system to the grounding electrode system.
- Access and working space for operation and maintenance of PV equipment such as inverters, disconnecting means and panelboards (not required for PV modules)[NEC110.26]
- The rapid shutdown system is installed and operational. [NEC 690.12]