



# Clark County Building and Fire Prevention Field Inspection Division FIELD INSPECTION GUIDELINE

<b>Division:</b>	<b>Inspections</b>	<b>Policy &amp; Procedure:</b>	<b>FIG-B-009</b>
<b>Subject:</b>	<b>Solar Field Plan Review / Inspection</b>	<b>Effective Date:</b>	
<b>Code:</b>		<b>Revised Date:</b>	<b>10/01/2020</b>
<b>Proposed:</b>	<b>Matthew Brewer</b>	<b>Approved:</b>	<b>Sam Palmer</b>

## Scope:

In order for a PV system to be considered for in the field plan review, the following must apply:

- Must be a Single Family Residence.
- Must be a roof top mounted system including installation on flat roofs.
- Must be installed by a licensed contractor.
- All components must be listed and PV modules, utility-interactive inverters, and combiner boxes must be identified for use in PV systems.
- The total inverter capacity has a continuous AC power output of 15,000 Watts or less (80 amp) breaker.
- The PV array is composed of no more than 4 series strings per inverter.
- The AC interconnection point is on the load side of service disconnecting means (240 Volt breaker on the load side buss, **No taps**).

If any of these conditions do not apply to the project, then this program does not qualify, and plan submittal is required.

If a service upgrade will be performed the contractor can elect to include it in the scope of the solar permit or obtain a separate permit for the panel replacement.

Any new load/circuits require a separate permit (i.e., vehicle charger).

Contractors utilizing this program will be subject to a periodic full inspection audit where a site representative must be on site for a full inspection of all components. This full inspection will require a ladder, and all components being opened. The project will be selected by the inspection area supervisor.

## General Requirements:

- System shall not be energized prior to final inspection.
- Ladders are not required for solar inspections.
- The service panel dead front, and Inverter panel are not required to be left open for inspection.
- A site plan showing the location of all solar PV system components. Note that all rooftop mounted modules shall be installed in compliance with the layout requirements specified in the latest adopted edition of the International Fire Code.
- PV Modules shall not be closer than 3 ft. to the ridge.
- Hip roofs shall have 3 ft. clear pathway from the eave to ridge line.
- Gable roofs shall have (2)-3ft. pathways from eave to ridge.

**Structural Requirements:**

Option one:

- Engineer stamped calculations provide for the mounting system. (No further review of structural required).

Option two:

- Solar PV systems are roof mounted and do not exceed the existing building height at the highest point.
- The solar PV systems weight does not exceed 4 psf.
- The solar panels are mounted parallel to the roof plane to which they are attached
- The solar PV systems are installed within 24 inches of the roof immediately below.
- The maximum spacing of the solar PV system connection points to the roof shall be in accordance with the mounting system manufacture's requirements.