



COMMUNITY DEVELOPMENT
BUILDING PERMITS & INSPECTIONS DIVISION
(712) 890-5284

Solar Photovoltaic Submittal Requirements Checklist

Solar Photovoltaic applications are reviewed by the Building Permits and Inspections Division, Planning Division, and the Fire Marshal's office as applicable. Please review and use this submittal requirements checklist to facilitate the review of your project.

PERMITS

The following shall be submitted for any solar installation:

1. **Electrical Permit Application form must be completed.**
2. **Miscellaneous Building Permit Application form must be completed.**
3. **Permit fee.** Due at time of permit issuance, the fee is based on the City of Council Bluffs Fee schedule, which can be viewed at: <https://www.councilbluffs-ia.gov/2278>
4. **Building Plans.** The building plans shall show all information for the applicable type of PV system:
 - Ground Mounted:
 - Provide a drawing that shows configuration and means of connection of the racking system (or poles) and size of the supporting footings.
 - Provide a site plan showing that the furthest projection of the installation will meet the setback requirements for the property.
 - Per NEC requirements, where PV and output circuits operating at voltages greater than 30 volts are installed in readily accessible locations, circuit conductors shall be guarded.
 - Roof Mounted:
 - Provide a drawing that shows the racking configuration and the surrounding clearances (must comply with the 2015 IFC).
 - Submit details of equipment weight and racking system.
 - Provide a plan of the existing structural components of the roof.

PLAN REVIEW

Documents required:

1. **Residential (Streamlined) Review.** The anticipated plan residential review turnaround time is three (3) business days. Please provide information as located in the Iowa State Fire Marshal Electrical Bureau PV Worksheet [Standard String Array](#) or [Micro Inverter Array](#).
2. **Commercial (Standard) Review.** Commercial reviews may require additional plan review time and documentation. Please contact the Permits & Inspections Division at (712) 890-5284 to discuss your commercial solar project.



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INSPECTIONS

Solar arrays require the following inspections:

- Ground Mounted systems:
 1. **Footings:** If a footing is to be installed, the hole(s) shall be inspected prior to pouring concrete.
 2. **Final:** Once the panels are mounted to their supporting structure and all wiring and connections are completed, a final inspection shall be performed.

- Rooftop Systems:
 1. **Structural:** The roof and support structures shall be inspected to determine if they are adequate to support the load from the planned system.
 2. **Final:** Once the panels are mounted to their supporting structure and all wiring and connections are completed, a final inspection shall be performed.

CHECKLISTS

The following checklists will be a helpful reference for submittal of your plans. Incomplete information may result in plan rejection or delay in the approval of your project.

1. **Site Plan:** For ground-mounted equipment, provide a site plan showing:
 - The location of all disconnects.
 - The location of all modules.
 - The location of inverters.
 - The location and connection of all grounding electrode conductors.
 - The clearances around all equipment.
 - Dimensions between equipment and structures.
 - Dimensions between equipment and property lines.

2. **Wiring Requirements:** Provide a one-line diagram that includes the following information:
 - Conductor sizes.
 - Conductor insulation types (i.e., THHN, THWN, direct burial cable, etc.).
 - Conductor material (i.e., copper/aluminum).
 - Conduit sizes.
 - Conduit material (i.e., non-metallic, EMT, etc.).
 - Over current device ratings.
 - Existing and new panel amperage ratings (buss ratings).
 - Series and parallel configuration of the module connections.



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3. **Equipment:** Provide product listing sheets for all equipment with the following information:
 - Module short circuit current ratings.
 - Module open circuit voltage ratings.
 - Module series fuse ratings.
 - Inverter output circuit current rating.
 - Inverter UL listings.
 - All associated documentation (batteries, inverters, disconnects, modules, charge controllers, over-current devices etc.).
 - Method of grounding for modules and array.

Please contact the Permits & Inspections Division at (712) 890-5284 if you have any questions.