



PERSHING COUNTY

SOLAR BUILDING GUIDE

RECOMMENDATIONS / GUIDELINES FOR SOLAR / OFFGRID RESIDENTIAL and COMMERCIAL SUBMITTAL

SOLAR / OFF GRID SUBMITTAL CHECKLIST

ALL solar / off grid installations for residential or commercial installations shall comply with the following codes:
2017 National Electrical Code and 2018 International Energy Conservation Code.

Codes are available online at: <https://up.codes/codes/nevada>

Standards for Solar Building Plans

Solar Plans must be prepared by a Nevada licensed Design Professional (Engineer or Residential Designer), or licensed Contractor (if they are building the project).

**** An Owner-Builder may submit as the applicant, but all electrical work is to be performed by a licensed electrical contractor. Owner-Builders must complete the affidavit form provided by County. Owner-Builders are allowed under the exemption of NRS 623.335 and 623A.070(1)(a) and must comply with NRS 278.573.***

Provide 3 copies of all required drawings and specifications.

Plans, specifications and calculations submitted to the Building Department must be of sufficient nature to clearly show the project in its entirety with emphasis on the following:

1. Compliance with NEC Article 690 and 705
2. Structural Design – Ground mount or building mount
3. Letter from Utility if interconnected to electrical grid

The minimum required drawings will depend greatly upon the size, nature and complexity of the project. ***(* If plans are by Owner-Builder, the applicant must show adequate skills and knowledge to demonstrate industry standards of construction and compliance with codes (per NRS 278.573 Owner-Builder construction must comply with all applicable laws, ordinances, building codes and zoning regulations) in their submissions.*** The following is indicative, yet not exclusive of the minimum standards required before the Building Official shall begin the plan review process.

REVISION DATE: MARCH 5, 2024

Electrical System:

The electrical system shall show points of connection to utilities, as well as all electrical equipment (solar panels, inverters, batteries, and generators), wiring sizes, circuiting, grounding, panel schedules, single line diagram, load calculations, disconnects, and location of main panel and any sub-panels.

Off grid systems that use generators or batteries must comply with NEC Article 445 and 710 respectively.

Plans that are the responsibility of the electrical engineer or contractor licensed by the State of Nevada to perform such work. Plans shall be in color or black ink on white paper with a maximum size of 30"h x42" w and contain no added "changes" in ink or pencil. If pre-engineered structural supports are to be used, stamped/signed engineering calculations must be included with plans submitted. Plan submittal shall include at a minimum:

1. Site Plan
2. Structural plans showing building attachment details or ground mount details. Include wind loading and / or floor loading. Ground mount include anchoring details.
3. Floor Plan if any component of the system is mounted indoors, such as generator, batteries or inverters. Provide necessary ventilation details as required.
4. Electrical System – one line AC and DC diagram, equipment schedules, and panel schedules
5. Manufactures product listing data and complete schedules for solar panels, inverters, for specialty materials and equipment.
6. If systems are connected to the grid, provide a letter from the utility that the plans have been reviewed and approved for compliance with grid tie requirements.

Site Plan:

Show proposed new structure, project address and author of drawings (design professionals, owner-builder or licensed contractor). Show any existing buildings, structures, utilities and dimension distances between these as well as to property lines. Show all property lines, streets, alleys, driveways, roads, easements and setbacks per zoning requirements with dimensions. Show all electrical points of connection. Show proposed service routes, existing and proposed utilities on the site.

Revisions and Standards:

All responses to plan review corrections shall be identified with a delta symbol, and clouded on the drawings or resubmitted as a new project ad shall be accompanied by a typed letter addressing each plan review comment and referencing the sheet # on which the revision has been made.

Standards

The County does not provide Design Services. The County provides a cursory review to verify code compliance upon submission of drawings and does not provide direction or consulting on codes without any submissions. It is the responsibility of the author of the design to ensure the submission is code compliant, complete, and meets industry standards. If the plans do not meet this criteria, the Building Department may take any of the following actions:

1. Provide a complete list of corrections.
2. Increase the plan check fee for additional plan review time required due to lack of completeness.
3. Return plans unchecked.
4. Report the design professional into the State Board for discipline.
5. Report the licensed contractor to the Nevada Board of Contractors.

Materials, designs or methods of construction not specifically prescribed by the applicable code may require pre-approval from the Building Official.

Plan Preparation:

Plans shall be prepared by a Nevada State Licensed Engineer or Electrical contractor licensed to provide such work- see Nevada Blue Book.

No certificate of occupancy shall be issued until all the required wet/stamp-engineering certificates have been received and accepted by personnel of the department.

Applicability:

Where, in any specific case, different sections of the legally adopted code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.