



City of Sheridan, Building Department, 4101 S. Federal Blvd., 303-762-2200, email Building Department here: Building@ci.sheridan.co.us, Building Department Website Click Here:

<https://www.ci.sheridan.co.us/432/Building-Department>

Solar Photovoltaic (PV) System Permitting Checklist

The pre-submittal checklist below contains the minimum information and project plan details required to be submitted to the City of Sheridan when applying for a permit to install a residential or commercial solar photovoltaic (PV) system. The intent of using the checklist is to provide transparent and well-defined information to minimize the number of required revisions, improve permit application quality, and accelerate the application and review process.

Codes and Design Criteria

The City of Sheridan has adopted the following codes:

2021 International Residential Code

2021 International Building Code

2021 International Fire Code

2023 National Electrical Code

The following local design criteria should be used, click below to find out more information:

<https://ci.sheridan.co.us/438/City-of-Sheridan-Design-Criteria>

Required Permits

A City of Sheridan building permit must be issued prior to the start of any work. Additionally, a separate electrical permit issued by the State of Colorado is required. Because all PV projects require a thorough plan review, the plans and documents must be uploaded into the City of Sheridan EPlan Submission Portal. Before attempting to submit for the building permit, please familiarize yourself with the following guide below:

<http://ci.sheridan.co.us/DocumentCenter/View/1584/ePlan-Submission-Guide-PDF>

Complete the following permit application form(s) and submit any additional required documents into the City of Sheridan Plan Review Portal.

Documents Required for Submission:

- 1 set of construction documents is required for each individual address.
- The State of Colorado Electrical permit information must be included for record keeping.
- Property owner and licensed contractor information is required.

- Site Plan - Site plan should show the address and location of major components on the property. The site plan should be drawn to scale, and it should include all the relative locations of components on site.
- Roof mounted PV systems must show the total area of roof and must also include the percentage of roof covered by the solar panels. Setbacks and pathways and roof access on must also be in compliance with 2021 International Fire Code Section 1205
- Structural plans shall show the means of attachment if installed on a roof.
- Structural plans shall include specification sheets and installation manuals (if available)
- Existing structures shall be evaluated by a structural engineer and the plans shall include how the existing structure will be altered to support the additional loads of the system. If the engineer finds that the existing structure will support the additional loads, a letter shall be submitted with the application stating the existing structure will support the additional gravity and lateral loads. In each case the plans and/or a letter shall be stamped by a structural engineer licensed by the State of Colorado.
- Electrical plans must Provide one-line diagram showing number of modules, wattage of modules, conductor sizes, wire lengths, insulation types, conduit sizes, fuses, circuit breaker ratings, inverter ratings, AC & DC disconnect rating and ground fault protection device.
- Electrical plans must Specify the PV module's nameplate short-circuit current and open-circuit voltage relative to the work performed.
- Electrical plans must Provide calculations used to determine wire sizes, fuse/breakers; which include temperature deration factors per the NEC Table 690.31(C). Roof mounted systems should use the worse case ambient temperature of 56-60 degrees C.
- Electrical plans must Provide calculations to show that the PV system voltage does not exceed the maximum rated DC inverter input voltage or that of the connected equipment.
- Electrical plans shall include all grounding on one-line diagram. Show the grounding electrode system per NEC 690.47. Show calculations used to size equipment grounding conductor per NEC 690.43 & 690.45.
- Electrical plans shall show the location of all disconnecting means. Installation of equipment and panels with reference to house and service equipment. Clearly identify if the wiring is run on the interior or the exterior of the building. The PV system disconnecting means shall be grouped together per NEC 690.14(C)(5).
- Electrical plans shall provide UL Standard 1703 manufacturer's specifications for the module installation and grounding requirements.

Permit Fees

- Permit fees for residential solar PV systems are capped at \$500 and commercial PV systems are capped at \$1,000. Both residential and commercial systems are subject to applicable taxes and plan review fees.

Complete fee information can be found below:

<https://www.ci.sheridan.co.us/DocumentCenter/View/679/2023-Fee-Schedule-PDF?bidId=>

The appropriate plan review fee must be paid prior to the start of the review process. Payments can be made in person or over the phone.

Submit Permit Application

All permits and documents shall be submitted electronically via the OnBase plan review portal, click link below:

<https://permits.sheridangov.org/PlanReview>

Review Process Timeline

The City of Sheridan Building Department is committed to providing a timely review of solar PV permit applications. Best efforts are made to review completed residential solar permit applications within seven business days and commercial/non-residential solar permit applications within ten business days. These turnaround times are typical, not guaranteed. Sheridan has a staff of dedicated individuals, but workloads, vacations, and sick leave can cause unforeseen delays that may impact turnaround time.

Certain circumstances can prolong the permit turnaround time including:

- Applicant does not submit all required information
- Contractor applying for permit is not a licensed contractor
- Equipment is not listed

Permit Status

To check your permit status please, visit your account at the following link:

<https://permits.sheridangov.org/PlanReview> or call our permit technician at 303-438-3302.

Permit Expiration

All permits expire six (6) months after date of issue. Failure to start the work authorized by a permit within this six-month period renders the permit invalid and a new permit must be obtained. Once work begins, noticeable progress must continue until completion. All work must be complete within twelve (12) months of a permit issue date.

Scheduling an Inspection and the Inspection Process

To schedule an inspection please call 303-438-3302. Please call before 3:30 pm for next day inspection.

A residential solar PV system requires (4) inspections:

- Rough frame and rough electrical inspection to verify panel placement and grounding/bonding
- Final Electrical Inspection, State of Colorado
- Final Framing Inspection, after state electrical has been approved and net meter installed

Contact Information

If you have any questions, please contact us at:

- Staff POC (if applicable): Jess Bradshaw, Chief Building Official
- building@ci.sheridan.co.us
- 303-438-3302 or 303-438-3309

Address: 4101 S. Federal Blvd. Sheridan, CO, 80110

Hours of Operation

- Office & Permit Counter: 8 am – 4:30 pm