



Expedited Residential Rooftop Photovoltaic Systems Plan Review, Fees, and Inspections

1. PURPOSE

In an effort to promote a consistent methodology for processing permits by all jurisdictions within and around Mendocino County, this standardized permit submittal has been developed for residential (one and two family dwellings and legally permitted accessory buildings) roof mounted PV systems. If the project is located in a historical district, in a homeowner's association, within the CA Coastal Zone or is a ground mount system, additional requirements for review may be required.

2. APPROVAL REQUIREMENTS

- a. Installed on a single family home or duplex.
- b. Maximum power output of 10kW or less.
- c. The solar system when installed on the roof does not exceed the maximum legal building height.
- d. The solar system is utility interactive.

3. SUBMITTAL REQUIREMENTS

- a. **Eligibility Checklist** - this form needs to be completely filled out, signed, and dated (the form is included with this handout).
- b. **Electrical Plan** - includes the following:
 - Location of main service, disconnects, inverters, etc. Indicate service size and bus bar rating.
 - Total number of modules, number of modules per string and total number of strings.
 - Make, model, and specification sheets for all equipment including panels, racking, attachment hardware, inverters, optimizers, disconnects, combiner boxes, etc.
 - One-line diagram of system including all components and wire sizes.
 - Specify grounding/bonding, conductor type and size, conduit type and size and number of conductors in each section of conduit.
 - Labeling of equipment as required by CEC, Sections 480, 690, and 705.
 - Site diagram showing the arrangement of panels on the roof, north arrow, lot dimensions and the distance from property lines to adjacent buildings/structures (existing and proposed).

A standard electric plan - PV Toolkit Document #3 or #4 can also be downloaded from the most current edition of the California Solar Permitting Guidebook (CSPG) at www.opr.ca.gov/docs/20190226-Solar_Permitting_Guidebook_4th_Edition.pdf.

c. **Roof Plan** – which includes:

- Roof layout.
- PV panel layout, racking attachment points, and conduit runs.
- PV system fire classification and the locations of all required labels and markings.
- Location of code-compliant access pathways are available in Section 324 of the California Residential Code, <https://codes.iccsafe.org/content/chapter/15524/>
- Notes that indicate the type of roof and number of layers, the type, size, and spacing of roof framing members, and roof slope.

- d. **Structural Plan** - based on Mendocino County's one and two-family housing stock and code compliance history, a structural plan may be required. Where there are no visible structural deficiencies or deflection in the roof structure and the maximum racking attachment spacing is 6 foot on center, then complete structural plans are not required. The 6-foot spacing is applicable to conventional framing as well as factory-built trusses where the contractor confirms no attachment points within 1 foot of any splices on the top chord of the truss. If this cannot be confirmed, or the truss spacing is 16 inches on center, then the anchor spacing for factory-built trusses is 4 foot on center alternating.

If a complete structural plan is required, then comply with the submittal requirements for the Structural Criteria for Residential Rooftop Solar Energy Installations - PV Toolkit Document #5 which can be downloaded at: www.opr.ca.gov/docs/20190226-Solar_Permitting_Guidebook_4th_Edition.pdf

For systems that do not qualify for using the Toolkit Document #5, provide structural drawings and calculations stamped and signed by a California licensed engineer along with the following information:

- Roof framing plan showing the type, size, and spacing of members
- Type of roof covering and number of overlays
- Weight of panels, support locations and method of attachment
- Framing plan and details for any work necessary to strengthen the existing roof structure.
- Site-specific structural calculations

PLAN REVIEW

- a. Permit applications can be submitted in person or electronically.
- b. Permit applications utilizing and complying with these submittal requirements may be approved "over the counter" at our office when staff is available or may be submitted "over the counter" electronically.
- c. Permits not approved over the counter should be reviewed within 1 to 3 days.

4. **FEES** To be in compliance with CA State AB 1414

5. **INSPECTIONS**

Once all permits to construct the solar installation have been issued and the system has been installed, it must be inspected before final approval and activation is granted for the solar system. On-site inspections can be scheduled by contacting the County of Mendocino Planning and Building department at (707) 234-6650 (inland) or (707) 961-2677 (coastal) during working hours. Inspection requests received are typically scheduled for the next business day. Permit holders must be prepared to show conformance with all requirements in the field at the time of inspection. The approved plans and permit shall be onsite for the inspector.

6. **DEPARTMENTAL CONTACT INFORMATION**

For additional information regarding this permit process, please consult our departmental website at: <https://www.mendocinocounty.org/government/planning-building-services>

ELIGIBILITY CHECKLIST FOR EXPEDITED SOLAR PHOTOVOLTAIC PERMITTING OF ONE AND TWO FAMILY DWELLINGS

GENERAL REQUIREMENTS

- | | | |
|--|----------------------------|----------------------------|
| A. System size is 10 kW alternating current nameplate rating or less | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| B. The solar array is roof-mounted on one- or two-family dwelling or accessory structure | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| C. The solar panel/module arrays will not exceed the maximum legal building height | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| D. Solar system is utility interactive | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| E. Permit application is completed and attached (if required) | Y <input type="checkbox"/> | N <input type="checkbox"/> |

ELECTRICAL REQUIREMENTS

- | | | |
|--|----------------------------|----------------------------|
| A. For central/string inverter systems, strings are not combined prior to the inverter | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| B. For central/string inverter systems: No more than two inverters are utilized | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| C. The PV system is interconnected to a single-phase AC service panel of nominal 120/220 V ac with a bus bar rating of 225 A or less | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| D. A Solar PV Plan and supporting documentation is completed and attached | Y <input type="checkbox"/> | N <input type="checkbox"/> |

STRUCTURAL REQUIREMENTS

- | | | |
|---|----------------------------|----------------------------|
| A. A completed Structural Criteria and supporting documentation is attached (if required) | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| B. No visible structural deficiencies or deflection in the roof structure | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| C. The dwelling is located in a ZERO snow load area | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| D. The dwelling is not located in Wind Exposure D (structure is not on a hill with an average slope greater than 15%, or within 200 yards of the ocean or large coastal bay) | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| E. Only one roof covering is installed on the roof | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| F. I have verified that all rail attachments points are > 1 foot from any splices or connectors on the top chord of trusses (when the roof framing consists of manufactured plated wood trusses), which are spaced at 24 inches on center. <i>If the splice locations are not verified or the truss spacing is 16 inches on center then the rail spacing is required to be 4 foot on center and alternating instead of 6 foot on center.</i> | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| G. Anchor fastener data: Are 5/16" diameter lag screws with 2.5" embedment into the rafter, used, OR does the anchor fastener meet the manufacturer's guidelines? | Y <input type="checkbox"/> | N <input type="checkbox"/> |

FIRE SAFETY REQUIREMENTS

- | | | |
|--|----------------------------|----------------------------|
| A. Clear access pathways provided | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| B. Fire classification solar system is provided | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| C. All required markings and labels are provided | Y <input type="checkbox"/> | N <input type="checkbox"/> |
| D. A diagram of the roof layout of all panels, modules, clear access pathways and approximate locations of electrical disconnecting means and roof access points is completed and attached | Y <input type="checkbox"/> | N <input type="checkbox"/> |

PROPERTY OWNER _____

PROJECT LOCATION _____

INSTALLER COMPANY NAME _____

INSTALLER BUSINESS ADDRESS _____

INSTALLER BUSINESS PHONE _____

INSTALLER LICENSE NUMBER _____

INSTALLER SIGNATURE _____ DATE _____

* By signing this form, I am confirming that all the information I have indicated by a checkmark is true.