



Mesa County Photovoltaic Guide

Applicable Codes: 2018 IBC, IRC, IEBC, IFC, and 2023 NEC

The following items must be provided for all PV system applications (as applicable):

- Valuation - **SHALL INCLUDE ALL LABOR AND MATERIALS** broken out as follows:
 - Modules to inverters
 - Remainder of electrical work (ex. generator, AC wiring, service upgrade, ESS, etc.)
 - Any required structural alterations
- Structural certification report is required for verification that the existing roof framing will safely support the array. Design criteria shall include wind speed (115 mph) and snow loads by elevation ([Adopted Codes and Regulations](#)).
- Three-line diagram showing all conductor sizing and insulation types, overcurrent protective devices and conduit sizing and types.
- The source connection being used.
- The method being used to determine the required ampere rating of busbars.
- All specification sheets of listed compatible components must be provided.
- Roof layout showing access, pathways, setback at ridge, total roof area, and total array area. (sq. ft.)
- DC circuits in buildings will require metal raceways and labeling of “PHOTOVOLTAIC POWER SOURCE”.
- A rapid shutdown function to reduce shock hazard for firefighters is required.

All commercial and ground mount photovoltaic system designs require structural, foundation, and electrical drawings stamped and signed by a Colorado Professional Engineer.

Commercial systems to be installed within the city limits of Grand Junction and unincorporated areas of Mesa County require a planning and fire clearance.

For residential systems a residential planning clearance is required prior to issuance on all ground mount solar permits, regardless of jurisdiction. Roof mount systems require a residential planning clearance prior to issuance if installing the system in De Beque, Collbran, or Palisade