

CITY OF LITTLETON SUBMITTAL REQUIREMENTS FOR SOLAR PHOTOVOLTAIC SYSTEMS

- Two permits may be required if the installer is independent of the Licensed Electrical Contractor.
- A plan review may only be accepted with valid address.
- A limited review may be accepted without approval from other city departments however, permits issuance may be subject to approval from other city departments. (Exterior changes are required to be routed to Planning Counter prior to permit issuance.)
- An individual plan review set is required for each individual address.
- Plans received by main courier, UPS, or otherwise unaccompanied by applicant knowledgeable with the project will be checked for completeness per checklist. If the plans are determined to be unacceptable for plan review the applicant (listed contact person) will be notified that the plans must be picked up within one working day, or they will be discarded.

ELECTRICAL PLANS

- Provide three-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.
- Specify the PV module's nameplate short circuit current and open circuit voltage relative to the work performed.
- Provide calculations used to determine wire sizes, fuse/breakers; which include temperature derating factors per NEC Table 690.312(C). Roof mounted systems should use worse case ambient temperature of 56-60 degrees C.
- Provide calculations to show that the PV system voltage does not exceed the maximum rated DV inverter input voltage or connected equipment.
- Plans shall include all grounding on three-line diagram. Show calculations used to size equipment grounding conductor per NEC 690.43 & 690.45.
- Plans shall show location of all disconnecting means. Installation of equipment and panels with reference to house and service equipment. Clearly identify if wiring run on interior or exterior of house. The PV system disconnecting means shall be grouped together per NEC 690.14(C) (5).
- Provide manufacturer's cut sheets and listing information for PV equipment and electrical equipment.
- Provide a signed and approved copy of Xcel Energy's Solar Rewards Contract. Provide a contract that indicates the before rebate price for installation and material.
- Plans shall be submitted in minimum size of 11ins. X 17ins. Provide stamped drawings by electrical engineer.**

STRUCTURAL

- Plans to show load path elements.
- Plans shall show means of attachment in installed on roof.
- Provide analyzed & stamped drawings by structural engineer of the PV system and the existing structure to support the additional loads.**

NOTE INSPECTIONS

- Rough Electrical and Framing inspections.
- Final Electrical and Building inspections.
- ONLY 25% OF PANELS MAY BE INSTALLED PRIOR TO ROUGH INSPECTIONS.