



RESIDENTIAL SOLAR PHOTOVOLTAIC SYSTEMS B-13

Development Services

Building Division

1635 Faraday Avenue

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www.carlsbadca.gov

The following information and requirements are necessary for the issuance of permits for residential solar photovoltaic electrical systems.

- A. Approval from the Planning Division for the photovoltaic panel arrays.
- B. All solar photovoltaic plans will be required to have the following items:
 - a. Provide plans and specification for the photovoltaic modules, panel, arrays and framing supports.
 - b. Submit two (2) sets of plans for the photovoltaic module array.
 - c. Two (2) copies of a plot plan showing the location on the property of the photovoltaic array in relationship to the lot property lines with required setbacks dimensions and locations of all disconnects, inverters and existing electrical meter(s).
 - d. Specify conduit size, location (inside and outside of the building) and wire sizes.
 - e. Details for roof-mounted solar panel support and attachment, or for ground-mounted solar panel supporting structure and attachment. Specify roof dead load and wind uplift values.
 - f. For a roof-mounted array weighing more than six (6) lbs/sq.ft.:
 - Show the array weight that will be added to the roof.
 - Show the array supports, the roof penetrations and the connection to the roof-framing members.
 - Identify the method of flashing and sealing of the roof penetrations.
 - Provide engineering calculations for the increased loads on roof framing due to the array and the detail framing supports.
 - g. An electrical one-line diagram showing the number of photovoltaic panels with voltage and kilowatt output ratings, the size of the main electrical panel bussing in amperes, and the size of the photovoltaic circuit breaker in amperes.
 - h. Show the location of the main building electrical disconnect as required by NEC Article 690.14.
 - i. Show and specify the building directory signage required by NEC Article 225.37 and 690.56
 - j. Provide the manufacturer's information brochures for the inverter, the photovoltaic modules and mounting system.