



CITY OF ALBUQUERQUE

Planning Department

Building and Safety

Building Permit Submittal Checklist

Photovoltaic Systems (Roof Mounted Systems Commercial and Residential)

Building and Electrical Permits are required.

Contents herein are minimum compliance requirements for Albuquerque Uniform Administrative Code, 2009 IRC, IBC and 2011 NEC.

PRE-REQUISITE-APPROVALS: The following pre-requisite approvals must accompany the building permit application if applicable:

- Historic Preservation District Approval- Please contact Ed Boles at (505) 924-3342.

ROOF MOUNTED PANELS-MINIMUM SUBMITTALS

1. Two (2) complete sets of plans meeting the minimum criteria of the Building Permit Submittal Checklist are to be submitted.
2. Building Permit Application: Complete all the required fields and answer all the questions on the application with blue or black ink. (The Application is the plan back sheet)
3. Site Plan to scale: (MUST BE LEGIBLE)
 - a. Official property address with street names.
 - b. Footprint of the building and North arrow
 - c. Site plan indicating location of major components on the property, must include PV array configuration
 - d. All supporting equipment including sub panels and the location of the main electrical service
 - e. Show dimensions and clearances for all equipment
4. Building Requirements:
 - a. Framing plan indicating location of the PV installation layout on the existing roof framing members that support the system
 - b. Existing roof information to include roofing type and the number of roof coverings
 - c. Proposed method and type of weather-proofing of roof penetrations resulting from PV installation
 - d. Manufacturer's specifications and installation instructions for all PV modules, inverter(s), solar panels, combiner box, disconnects and mounting system(s)
 - e. All mounting systems and attachments must be approved by a Nationally Recognized Testing Laboratory (NRTL) or reviewed and approved by a New Mexico Licensed Engineer.
 - f. Documentation of a New Mexico Engineer's review of existing roof structure (and stamp) when any of the following occurs:
 - There is more than one existing roof covering
 - Over-spanned trusses, rafters or roof joists
 - The total added dead load of the array is more than 5 lbs/sq. ft. on roof construction
 - The total added point load of the array is more than 45 lbs. on roof construction
 - The total added dead load exceeds 200 lbs on any one truss, rafter or roof joist
 - The mounting system is of unique design
5. Electrical Requirements for: (Both Ground and Roof Mounted)
 - a. Electrical one-line diagram is required; if the PV system exceeds 10 KW a three-line diagram is required.
 - b. PV systems that exceed 200 amp shall be prepared and stamped by a State of New Mexico licensed electrical engineer.
 - c. Show dimensions of required clearances of equipment. It must comply with Article 110-2011 NEC/NMEC
 - d. Photovoltaic (PV) array configuration, size, type and number of modules per string. Whether they are in series or parallel.
 - e. Grounding electrode and bonding for DC System.
 - f. Required Disconnects-AC and DC.

- g. Conductor sizes, types, temperature rating(s), and ampacity(s).
 - h. Utility-Interactive Inverter.
 - i. Point of connection to the utility, must comply with Article 690.64 2011 NEC/NMEC.
 - j. GFCI protection.
6. Albuquerque Fire Department Requirements:
- 1. Site Plan to scale of the structure, on which the photovoltaic systems are to be installed to include the following:
 - a. Access from street to the building.
 - b. Locations of arrays, disconnects and required signage
 - c. Locations of required access pathways.
 - 2. Plan and elevations views of the buildings clearly showing the following:
 - a. Array placement.
 - b. Roof ridgelines, eave lines.
 - c. Objects that may be present on the roof e.g. equipment, vent lines, skylights, smoke vents, roof hatches, fire department connections etc.