



City of Delray Beach

Building Division

Building Permit Submittal Checklist Photovoltaic Systems (Roof Mounted Systems Commercial and Residential)

Building and Electrical Permits are required.

Contents are minimum compliance requirements for the current edition of the Florida Building Code and related documents.

Pre-Requisite-Approvals: The following pre-requisite approvals must accompany the building permit application is applicable.

Roof Mounted Panels-Minimum Submittals

- Building Permit Application: Complete all the required fields and answer all the questions on the application with blue or black ink
- Two (2) complete sets of plans meeting the minimum criteria of the Building Permit Submittal Checklist are to be submitted
- Survey or Site Plan to include:
 - Official property address with street names
 - Footprint of the building and North arrow
 - Site plan indicating location of major components on the property on the property, must include PV array configuration
 - All supporting equipment including sub panels and the location of the main electrical service
 - Show dimensions and clearances for all equipment
- Building Requirements:
 - Framing plan indicating location of the PV installation layout on the existing roof framing members that support the system
 - Existing roof information to include roofing type and the numbers of roof coverings
 - Propose method and type of weather-proofing of roof penetrations resulting from PV installation
 - Manufacturer's specifications and installation instructions for all PV modules, inverter(s), solar panels, combiner box, disconnects and mounting system(s)

- All mounting systems and attachments must be approved by a Nationally Recognized Testing Laboratory (NRTL) or reviewed and approved by a Florida Licensed Engineer
- Seal Documentation from a Florida Engineer's review of existing roof structure
- Electrical Requirements for: (Both Ground and Roof Mounted)
 - Electrical one-lined diagram is required; if the PV system exceeds 10 KW a three-line diagram is required
 - PV systems that exceed 200 amp shall be prepared and stamped by a State of Florida licensed electrical engineer
 - Show Dimensions of required clearances of equipment. It must comply with Article 110-2011 NEC/FBC
 - Photovoltaic (PV) array configuration, size, type, and number of modules per string. Whether they are in series or parallel
 - Ground electrodes and bonding systems for DC System
 - Required Disconnects-AC and DC
 - Conductor sizes, types, temperature rating(s), and ampacity(s)
 - Utility-Interactive Inverter
 - Point of connection to the utility, must comply with Article 690.64
 - GFCI protection
- Florida Fire Department Requirements:
 - Site Plan to scale the structure, on which the photovoltaic systems are to be installed to include the following:
 - Access from street to building
 - Locations of arrays, disconnects and required signage
 - Location of required access pathways
 - Plan and elevation views of the building clearly showing the following:
 - Array placement
 - Roof ridgelines, eave lines
 - Objects that may be present on the roof e.g. equipment, vent lines, skylights, smoke vents, roof hatches, fire department connections etc.
 - Compliance with NFPA 1, Section 11.12, as applicable