

Division of Building Safety 201 S. Rosalind Ave P.O. Box 2687, Orlando, FL 32802-2687 Phone (407)-836-5824

> <u>PermittingServices@ocfl.net</u> www.ocfl.net

## SOLAR SUBMITTAL CHECKLIST

# For Residential Rooftop Solar Photovoltaic Systems

## Is this the right Building Division?

 Yes, if a records search of the Property Appraiser's website <u>www.ocpafl.org</u> says "Un-Incorporated" under Municipality when the house's address is entered.

#### What type of permit is required?

- An Electrical permit if applying in person on our website, <u>www.ocfl.net</u> type "Application for Electrical Permit" in the search box and click the magnifying glass for the printable form.
- · A Sun permit if applying online

#### Who can obtain the permit?

- Electrical Contractors (EC,ER)
- Solar Contractors (CWC,CVC)
  - Note: if a Solar Contractor obtains the Electrical permit for the photovoltaic system, an Electrical Contractor is still required to obtain another Electrical permit for all wiring on the load side of the power conditioning unit (inverter).
- Please email <u>ContractorLicensing@ocfl.net</u> for details regarding licensing information required.

#### What other forms are needed besides the permit application?

 Florida Solar Energy Center (FSEC) "Photovoltaic System Approval Certificate" documentation.

http://www.floridaenergycenter.org/en/certification-testing/pv/index.htm

- If the value of the work is more than \$2500.00
  - Page 2 of the application with the contractor's and owner's notarized signatures must be included with the application package.

## Can application be made online?

 The process is under final development, and when complete, contractors in our database will be notifed by email.

## What codes are applicable?

- Florida Building Code, Residential, 5th Edition (6<sup>th</sup> Edition after Dec. 31, 2017), viewable online at www.floridabuilding.org
- 2011 National Electrical Code (2014 NEC after Dec. 31, 2017)

## What are the Structural plan requirements?

- For paper submittals, 2 sets of plans including but not limited to:
- Details signed and sealed by a Florida Engineer showing how the panels are attached to the roof.
- Structural plans must note and/or show
  - Building code edition and applicable sections
  - Wind speed
    - Search "ATC Wind Speed by Location"
  - o Exposure, Risk Category, and Minimum design loads
  - Roof height and slope
  - Roof covering
  - Roof plan showing module location
    - Installation is not allowed closer than 3 feet to valleys, ridges, or roof edges
  - Support rail and module dimensions, weights, materials, and methods of attachment (may be supplemented by product cut sheets)
  - Fastener type, material, diameter, length, and spacing (may be supplemented by product cut sheets)
  - Penetration flashing and waterproofing as applicable (may be supplemented by product cut sheets)

#### What are the Electrical plan requirements?

- For paper submittals, 2 sets of plans including but not limited to:
- Florida Solar Energy Center (FSEC) approval
  - o Photovoltaic system certification or
  - Plans created by GO SOLAR Solar Plans Design System (SPDS)
     http://www.broward.org/GoGreen/GoSOLAR/GoSolarFlorida/Pages/Default.aspx
- System description and operation; including but not limited to whether the system is:
  - Stand-alone, or non-grid connected system
  - o Utility interactive

- Battery backup
- o Fossil generator included in system
- Site plan showing locations of all new equipment and existing service equipment.
- Riser diagram showing how new PV system ties into existing service.
- Electrical schematic diagram showing
  - PV array configuration
  - Wire sizes and types
  - Junction boxes
  - Disconnects
  - Overcurrent protection
  - Grounding
  - Required signs
  - AC connection to building
- Electrical calculations showing
  - Wire sizing has been determined with proper ampacity
  - Temperature derating
  - o Conduit fill derating
  - Voltage drop for all DC and AC conductors
  - o Ambient temperature effects on PV array output
  - Sizes of disconnects and overcurrent protection
  - Input and output current
  - Voltage and power specifications for all major pieces of equipment
- Specification sheets and installation manuals for all manufactured components, including but not limited to
  - o PV modules
  - Inverters
  - Combiner box
  - o Disconnect
  - Mounting system
- For battery backup systems, a summary of all standby loads, including power ratings and estimated daily energy consumption for each load to show that inverter and battery selection will meet the standby needs.

## How much will the permit cost?

- The permit fee will be based on the total cost for all materials, labor, and fixtures installed.
- To view our Fee Schedule, on our website <u>www.ocfl.net</u> type "Orange County Fee Directory" in the search box and click the magnifying glass. Then see Section 3.

#### Can payment be made online?

Yes, by credit card or escrow account with Fast Track.

#### Please note:

- If the value of the work is more than \$2500.00, before the first inspection, a certified copy of the Notice of Commencement must be provided to our office and posted on the jobsite.
- The contractor is responsible for placing the inspection record card and approved stamped plans on the jobsite before inspections.
  - Paper submittals are given to the contractor in our office when the permit is issued.
  - Electronic submittals with embedded approval stamps are emailed to the contractor for printing when the permit is issued.

#### **How can the Notice of Commencement be recorded?**

• For the Building Division to assist, email <a href="mailto:OrangeNOC@ocfl.net">OrangeNOC@ocfl.net</a> for instructions

### What inspections are required?

- Electrical Rough and
- Electrical Final
  - See the back of the Inspection Record card for inspection code numbers.

## How can inspections be scheduled?

- Online <a href="https://fasttrack.ocfl.net/OnlineServices/default.aspx">https://fasttrack.ocfl.net/OnlineServices/default.aspx</a>
- By phone 407-836-5550

## What if the plans change during construction/after the permit is issued?

- If the original submittal was electronic, submit revised plans and supporting documentation electronically.
- If the original submittal was on paper, bring or mail revised paper plans and supporting documentation to our office.
- In either case
  - Structural plans must be signed and sealed as applicable.
  - o Electrical plans must be FSEC approved
  - The Revision must be approved by plan review
  - The contractor must place the stamped revised plans on the jobsite before applicable inspections.
    - There is no charge for Revisions.

#### How can I see plan review status or inspection results?

Plan review status, inspection results, and other permit information can be viewed on our Fast Track website at the link below. Click on Building permits and input the Electrical permit number. Everything in blue is a hyperlink to more information.

https://fasttrack.ocfl.net/OnlineServices/Permit\_Building.aspx