

## **Installation of Solar Photovoltaic Systems**

When applying for an electrical permit for a solar PV system, in addition to the standard electrical application, please include the expedited application form or equivalent available at [www.solarabcs.org](http://www.solarabcs.org). You will find all the information necessary to complete the form in its entirety here. For larger systems we need an engineered stamped set of drawings showing system design. Permits will only be granted upon review of all required information.

All equipment, devices, and fittings shall be listed and labeled by a Nationally Recognized Testing Laboratory (NRTL) and installed according to the manufacturer's installation instructions, in accordance with Article 110.3 (B) of the National Electrical Code.

You will also be required to provide specification sheets and installation manuals for all manufactured components including, but not limited to, PV modules, inverters, combiner boxes, disconnects, mounting systems, and grounding and bonding systems. Please provide copies by uploading the information to our electronic permitting system under "Required Documents".

Before completing plans for a PV system, the installer must understand that most PV systems will become part of the existing electrical service including the grounding electrode system. The existing systems, because of the addition of the PV system, code changes, or as a result of normal wear issues since it was installed, may no longer be compliant or safe. Additions or modifications under these conditions could create a code violation.

The applicant will be responsible for making the existing service and its grounding electrode system safe and in compliance with the current edition of the Massachusetts Electrical Code, before connection to the PV system is made.

For inaccessible roof mounted installations, clear photos MAY be accepted of the mounting system, module frame grounding, cable management and protection method, fittings at conduits and boxes, all conductor terminations, combiner boxes with cover removed, all labels including manufacturer labels at the modules and micro-inverters (if installed).

Please note that we require a rough inspection, which will include a visual inspection of the mounting structure with the grounding completed before any PV panels are installed, and any other wiring method that will be concealed. Photos are not a substitute for the required rough inspection.

Also, under the 2017 Massachusetts Electrical Code you are now required to provide a Rapid Shutdown Function per 690.12 and AFCI protection per 690.11. On 1&2 Family dwellings the initiation device must be outside. New labeling requirements will be enforced. See 690.56 for guidance.

Please remember to schedule the ROUGH inspection.

Thank You,

Norfolk Inspector of Wires

Contractor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
(I have received a copy of the above inspection procedures for solar installations)

Print Name: \_\_\_\_\_ License# \_\_\_\_\_