

Owner/Agent

Signature

# Commonwealth of Massachusetts Department of Fire Services

BOARD OF FIRE PREVENTION REGULATIONS

	Official Use Onl	у
Permit No.		
Occupancy a	and Fee Checked	
[Rev. 1/07]	(leave blank)	

PERMIT FEE: \$

# APPLICATION FOR PERMIT TO PERFORM ELECTRICAL WORK

All work to be performed in accordance with the Massachusetts Electrical Code (MEC), 527 CMR 12.00 (PLEASE PRINT IN INK OR TYPE ALL INFORMATION) Date: Norwell Town of: To the Inspector of Wires: By this application the undersigned gives notice of his or her intention to perform the electrical work described below. Location (Street & Number) Owner or Tenant Telephone No. Owner's Address Yes No Is this permit in conjunction with a building permit? (Check Appropriate Box) Purpose of Building Utility Authorization No. Overhead Volts Undgrd Existing Service Amps No. of Meters / Volts **New Service** Overhead Undgrd No. of Meters Amps Number of Feeders and Ampacity Location and Nature of Proposed Electrical Work: Completion of the following table may be waived by the Inspector of Wires. No. of Total No. of Recessed Luminaires No. of Ceil.-Susp. (Paddle) Fans Transformers KVA No. of Luminaire Outlets No. of Hot Tubs Generators KVA No. of Emergency Lighting Swimming Pool Above grnd. No. of Luminaires **Battery Units** No. of Receptacle Outlets No. of Oil Burners FIRE ALARMS No. of Zones No. of Detection and No. of Switches No. of Gas Burners **Initiating Devices** Total No. of Ranges No. of Air Cond. No. of Alerting Devices Tons Heat Pump | Number | Tons Totals: No. of Self-Contained No. of Waste Disposers **Detection/Alerting Devices** Local Municipal
Connection No. of Dishwashers Space/Area Heating KW Other Security Systems:\*
No. of Devices or Equivalent Heating Appliances KW No. of Dryers No. of Water No. of No. of Data Wiring: KW Ballasts Heaters Signs No. of Devices or Equivalent Telecommunications Wiring: No. Hydromassage Bathtubs No. of Motors Total HP No. of Devices or Equivalent OTHER: Attach additional detail if desired, or as required by the Inspector of Wires. Estimated Value of Electrical Work: (When required by municipal policy.) Work to Start: Inspections to be requested in accordance with MEC Rule 10, and upon completion. INSURANCE COVERAGE: Unless waived by the owner, no permit for the performance of electrical work may issue unless the licensee provides proof of liability insurance including "completed operation" coverage or its substantial equivalent. The undersigned certifies that such coverage is in force, and has exhibited proof of same to the permit issuing office. CHECK ONE: INSURANCE BOND OTHER (Specify:) I certify, under the pains and penalties of perjury, that the information on this application is true and complete. FIRM NAME: **Signature** LIC. NO.: Licensee: (If applicable, enter "exempt" in the license number line.) Bus. Tel. No.:\_\_ \_ Alt. Tel. No.:\_ \*Per M.G.L. c. 147, s. 57-61, security work requires Department of Public Safety "S" License: Lic. No. OWNER'S INSURANCE WAIVER: I am aware that the Licensee does not have the liability insurance coverage normally required by law. By my signature below, I hereby waive this requirement. I am the (check one) owner owner's agent.

Telephone No.



# **TOWN OF NORWELL**

DIVISION OF INSPECTIONS 345 MAIN STREET, P.O. BOX 295 NORWELL, MA 02061 (781) 659-8018 · Fax (781) 659-1892

# Per the Inspector of Wires All code references are 527 CMR 12.00

To all installers of Photovoltaic Systems

The Inspector of Wires for the Town of Norwell wishes 24 hour advanced notice of when all PV installations are to commence. This includes the assembly, installation and connections of the racks frames and modules. Failure to give notification to coordinate a site visit at the time of installation may result in a notice of non compliance. This office plans to conduct a minimum of a rough and final inspection. Note that each project will determine the number of inspections required. Failure to request inspections may result in the removal of installed modules. It is strongly suggested that you coordinate all phases of installation to insure progressive inspections and avoid unnecessary delays.

The inspector of wires is in the office most days Mondays thru Thursdays from 1:30 PM to 2:30 PM. Inspections are generally conducted after 3 PM. The inspector is not available on Fridays and weekends. Please see The Board of State Examiners of Electricians Policy on PV Installations.

All applications for permits to wire a PHOTOVOLTAIC SYSTEM must be accompanied with the following information:

#### **Cut Sheets**

- Installation Instructions for the frames racks and rails indicating the methods of grounding and interconnection of linear parts.
- The manufactures identified hardware and installations instructions for attaching equipment grounding conductors and fittings to array, modules and frames.
- Information for the inverter, include NRTL information and output current.
- Information for PV J Boxes and/or Combiner Boxes including NRTL Information.
- Listing information on Splicing Devices used on the module inter-connect cables (fine stranded Cable listing).
- Listing information on the Module Cables.
- Type of wire from combiners (J Boxes) to Inverters.
- Source and Output Disconnects information indicating listing for PV installation.
- A one line diagram of the installation that complies with the 2014 edition of 527 CMR 12.00.
- The manufactures instructions and NRTL listing for installation of the DC Arc Fault Protection
- The listing information for the Rapid Shutdown Equipment,

- The manufactures instructions for attaching the Grounding Electrode Conductors (690.47(D)) to the array,
- Please indicate if this is a grounded or ungrounded (690.35) system
- Show all calculations for conductor sizing and over-current protection.
- Submit listing information for any over current protection on the DC Source or Output Conductors.
- If installing a combiner box please submit listing information indicating inclusion of a load break capability or other code compliant method of disconnect and its location.

## **AC Micro-Inverter Systems**

- If installing a system utilizing micro-inverters please forward a detailed explanation of how this system will conform with section 705.12(D)(6) of the MEC.
- If installing micro-inverter systems please supply listing information certifying applicability of the termination method and or splicing devices at the transition of the AC Harness to the building wires.

### Diagrams

• One line diagram of installation indicating number of strings, operating voltage, maximum current, size of over-current protection, and point of interconnection to utility source.

#### **Calculations**

- Show calculations of conductor sizing
  - DC Source Conductors
  - DC Output Conductors
  - AC Inverter Output Conductors
  - If an AC Combiner, Feeders to Utility Disconnect and Point of Interconnection
  - Voltage Ambient Temp Corrections (690.7)
  - Indicate size of equipment grounding conductor (690.45)
  - Indicate size and method of grounding electrode conductor (690.47 (C), (1), (2) or (3))
  - Size over current protection devices

Keep in mind that this list is dynamic and subject to modifications as needed. If this is a poly phase system, please indicate the method in which compliance with 705.40 and 42 is to be achieved.

Please contact this office for further details

Charles Palmieri Inspector of Wires Town of Norwell: 781-659-8018