



CITY OF PHILADELPHIA
DEPARTMENT OF LICENSES & INSPECTIONS

Permit Services Division
Municipal Services Building - Concourse Level
1401 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19102

**STANDARD FOR ONE AND TWO FAMILY
DWELLING SOLAR PV SYSTEM
INSTALLATIONS**

For installations made on One and Two Family Dwellings.
Deviations from these standards require submission of construction plans
and a building permit.

All solar photovoltaic system installations require building and electrical permits to ensure compliance with the respective codes unless they meet this Solar PV Installation Standard.

SOLAR PV SYSTEM INSTALLATIONS WITH AN ELECTRICAL PERMIT ONLY

If the Licensed Electrical Contractor can commit to meeting the following installation conditions, limitations and requirements in the installation of the solar PV system, the Department will waive the requirement for a separate building permit and allow the electrical permit to apply to the full installation.

A separate building permit application with construction plans must be obtained if the following conditions and requirements cannot be met or the Electrical Contractor performing the electrical installation is not willing to accept responsibility for the structural installation of the system.

Conditions:

- Installation must be on the roof of a one- or two-family dwelling.
- Installation may not occur on roof systems comprised of engineered trusses. These systems will require building permits.
- Property is not designated historical by the Philadelphia Historical Commission.
- Electrical Contractor must agree to accept responsibility for the structural installation of the roof-top equipment.
- If the contractor finds the installation cannot meet these requirements, a separate building permit must be obtained.

Installation Limitations and Requirements

- Equipment weighs less than 5 pounds per square foot (psf).
- Equipment imposes less than 45 psf point load in any location.
- The height of the system is less than 18 inches above the adjacent roof.
- A three (3) foot clearance must be provided around all equipment.
- Installation includes a pre-engineered ballasted or mounting structure with attachments both designed for a wind load of 90 mph.
- The equipment must be installed as per manufacturer's instructions.

Electrical Permit Limitations and Requirements

Specifically, the system must be 10kW or less, be composed of four or less series strings, and have a total inverter capacity of less than 13.44kW, with all materials, devices and equipment labeled and listed by a certified testing agency.

Solar PV system electrical permit applications must include the following information:

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|------------------------------|----------------------------------|
| • Detailed riser diagrams | • Electrical service information |
| • Conduit and wiring details | • Module information |
| • Grounding detail | • Inverter information |

Electrical Permits

Systems that meet the electrical limitations detailed above may be eligible for a streamlined permit review. For more specific information on the electrical permit requirements above, please see our "Permit Checklist for Solar PV Systems."

Zoning Requirements

Solar PV systems installed on the roof of a one- or two- family dwelling do not require a zoning permit.

Application Process

When Licensed Electrical Contractors apply for a permit related to the electrical work required to properly install a solar PV system on one or two family dwellings, they may agree to meet the conditions, limitations and requirements of the Building Code established in this **Solar PV Installation Standard**.

This agreement to meet the limitations and requirements above must be noted in the "Brief Description of Work" field on a standard electrical permit application and the application signed by the Electrical Contractor.

Applications for electrical permits must be submitted to the Department's Mechanical Services Unit in the Concourse of the Municipal Services Building, 1401 J.F.K. Boulevard.

Interpreter services available. | خدمات الترجمة الفهنية متوفرة لدينا | மொழிபெயர்ப்பு சேவைகள் கிடைக்கின்றன | 提供口译服务 | Services d'interprétation disponibles. | 통역이 제공됩니다 | Предоставляются услуги устного переводчика | Se brindan servicios de interpretación. | Có sẵn dịch vụ thông dịch.