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# SOLAR PHOTOVOLTAIC SYSTEMS PERMIT SUBMITTAL REQUIREMENTS

The City of Westminster requires a permit for the installation, modification, removal and replacement of a solar photovoltaic system.

All permits are to be submitted through the City's electronic permitting system - eTRAKiT.

### **GENERAL REQUIREMENTS**

- Submit permit application through the City's eTRAKiT portal.
- Attach a site plan to the permit application. Locate all equipment on the drawing
- Address in application and reflect on the roof layout drawing whether there are any plumbing, mechanical, or building vents that will have to be relocated or affected. Panels are not allowed to cover low profile attic vents, dryer vents, or bathroom exhaust vents either these items will have to be relocated or the panels do not get installed at those locations)
- Specify if the system is a stand alone or interactive (grid-tied) system
- Provide the following information on the submittal drawings:
  - Type of roof structure, i.e., roof trusses or rafters
  - Provide mounting details. All permanent standoffs shall be mounted to structural members, mounted to deck, and properly flashed to accommodate re-roofing without removal of standoffs.
  - Indicate in "Description" field on application or on the drawings how many layers of roofing will exists once the system is installed.
- Roof systems to be designed to meet the wind and snow requirements for the location. Refer to City of Westminster published design criteria.

#### WIRING REQUIREMENTS

Provide a three-line diagram that includes the following information:

- Conductor size and type i.e., copper, aluminum
- Series and parallel configuration of the module connections
- Main over current device ratings
- Existing and new panel busbar amperage ratings

Provide a schematic drawing that includes the following:

- The location of all modules, inverters, disconnects, and service equipment
- The location of all batteries
- The location and connection of all grounding electrode conductors
- The clearances around all equipment noted above

Conduit or cable type and size, i.e., nonmetallic, EMT, direct burial cable etc.

Provide all calculations from modules to inverter and inverter to point of connection. Updated 5/7/2018

Provide all applicable warning and marking labels for AC and DC is connects as required.

### EQUIPMENT REQUIREMENTS

Provide the following equipment information:

- Module short circuit current ratings
- Module open circuit voltage ratings
- Module series fuse ratings
- Inverter maximum output current rating
- Inverter maximum over current protection output /input per manufacturer
- Inverter U.L. File number, listings and remaining specifications
- Provide <u>all</u> associated documentation/cut sheets, and installation instructions on equipment, i.e., inverters, disconnects, modules, charge controllers, over current devices, etc.

## FIRE DEPARTMENT REQUIREMENTS

Per the Fire Departments amendments to the 2015 IFC, PV solar systems must meet the following requirements:

- 611.1 Roof Clearances for Installations
  - Panels shall not be placed closer than 2'0" to the ridge of any roof
  - Panels shall be placed no closer than 2'0" to the head wall at the top of any roof slope
  - Panels shall be placed no closer than 18" from any roof valley.
  - Additional roof access may be required based on unique site conditions as determined by the Fire Department.
- 611.2 Direct Current (DC) Wiring
  - Direct current (DC) conduit, wiring, and raceways shall be located below the solar array or a minimum of 24" below the roof sheathing.
- 611.3 Labeling
  - For residential applications, a label stating "CAUTION, SOLAR PHOTO VOLTAIC SYSTEM ON PREMISES" shall be placed at or within the main electrical service disconnect.

### Applicants are encouraged to review Department of Finance Sales Tax Division TAX COMPLIANCE GUIDE - CONSTRUCTION Topic 370 SOLAR SYSTEMS

http://devwww2.cityofwestminster.us/Government/Departments/CommunityDevelopment/ApplyforaPermitorProject