



## CITY OF EDWARDSVILLE

### **Solar Panel Permit Requirements**

The City of Edwardsville requires building permits for all residential and commercial solar installations. A building permit must be obtained prior to beginning any work. The permit application must be submitted through the City of Edwardsville Public Works Department during the posted business hours. The following items must be included as part of the application:

#### **SUBMITTAL REQUIREMENTS:**

1. Plat of Survey or Site Plan. Indicate the location of the building(s) and the proposed system including modules, inverter(s), combiner boxes, disconnects, utility disconnect and meter(s), and service panel board. For ground mounted systems, include the number and configuration of the modules and provide dimensions to property lines and adjacent buildings.
2. Proposed Roof Plan. For roof mounted systems, the roof plan must clearly indicate the following:
  - a. A dimensioned layout plan drawn to scale including the number and configuration of the modules.
  - b. The structure must be capable of supporting the weight of the proposed system. Provide a sealed analysis/drawing by an Illinois licensed architect or structural engineer.
  - c. Indicate the size and spacing of roofing structural elements
  - d. Indicate the type of roof covering, i.e. asphalt shingle, steel, etc. and existing roof slope.
  - f. Indicate the number of existing roofing layers and estimated date of last roofing installation. Where the existing roof has two or more application of any type of roofing, new roof coverings shall not be installed without first removing all existing layers of roof coverings.

Please be advised: It is the responsibility of the property owner to assess the lifespan of the existing roof versus the solar panels; the life span of the solar panels may be greater than that of the existing roof. Once installed, there would most likely be an increase in costs for a roof replacement with photovoltaic panels in place.

- g. Show the access pathways to allow for support of fire fighters accessing the roof; the pathways shall be located in areas with minimum obstructions.

#### Residential (permanent residential occupants):

*Not fewer than two 36" wide pathways on separate roof planes, from lowest roof edge to ridge; not fewer than one pathway shall be on the street or driveway side of the roof for each roof plane with an array, not fewer than one 36" wide pathway shall be provided on the same roof plane as the array, on an adjacent roof plane, or straddling the same and adjacent roof planes.*

*For arrays occupying 33% or less of the plan view total roof area, a setback of not less than 18" wide is required on both sides of a horizontal ridge (greater than 33% requires 36" wide on both sides). Alternatives exist for sprinklered structures.*

Commercial (projects other than Residential):

6-foot-wide clear perimeter around edges of roof (4 feet when 250 feet or less); interior pathways of not less than 4 feet every 150 feet or less; 4' wide around roof hatches and to roof edge or parapet.

Note: For commercial properties, where equipment requiring access is located on the roof such that persons will have to climb higher than 16 feet, an interior or exterior means of access shall be provided (no portable ladders above 16 feet).

- h. Provide details for array mounting to the supporting structure; include rail/racking system manufacturer specifications. The details must show the total mounting height of the system.
  - i. Indicate fire classification rating of proposed solar panels.
4. Electrical Plan The plan shall include the following information:
- a. A one line diagram including all circuitry, types/sizes of conduits and conductors, lengths of runs, array wiring, equipment, fusing, points of connection, disconnects, and equipment grounding.
  - b. Specifications from the panel manufacturer, the inverter manufacturer, and the battery manufacturer (as applicable)
  - c. System power rating
  - d. Panelboard ampere rating: \_\_\_\_ Amps      Main Breaker: \_\_\_\_ Amps  
Backfeed Breaker: \_\_\_\_ Amps
  - e. Means of system disconnection
  - f. All required labeling and warning signs must be installed (See included example)
- \* Must follow current NFPA 70 Electrical Code

**5. FOR PROPERTIES IN THE EDWARDSVILLE HISTORIC DISTRICT**

- a. All solar panels installed on principle structures requires a Certificate of Appropriateness (COA) by the Historic Preservation Committee.
- b. The owner will need to complete a COA Application and follow all application requirements before obtaining a building permit.