



**City of Elizabethtown, Department of Planning and Development**

200 West Dixie Ave – PO Box 550

Elizabethtown, KY 42702 (270) 982-3226

### Solar PV Installation Permitting Procedures

The installation of solar panels and systems in Elizabethtown is permitted through an Electrical Permit. Installation will be in accordance with the 2017 National Electric Code and the 2018 Kentucky Building Code, and all PV equipment must be listed by UL or an accepted national recognized testing laboratory. Free-standing systems must adhere to all zoning and local restrictions for placement.

If you are acting as the Owner/Builder, you will need to follow the steps below. If you are hiring an Electrical Contractor, the Contractor will make the application on behalf of the property owner.

The following items must be submitted with the electrical permit application:

- For free-standing systems, a site plan must be submitted showing the location of the panels and any other system elements in relation to the property lines, setbacks, any easements, and existing structures on the property. For commercial projects, this may require an amended development plan.
- For roof-mounted systems, documentation (signed and stamped by a licensed KY Professional Engineer) must be provided showing site assessment information, a description of the structure, loading criteria used (dead load, live load, ground snow load, wind load – see below for examples), and solar panel anchorage.
- The contractor must provide CAD or equivalent professional drawings of all work being performed. These drawings must provide locations of all PV equipment, submittals of all equipment being used, attachment details, accurate one-line diagrams of how the A/C and D/C circuits are to be installed, back feed rating calculations, and A/C feeder calculations. For systems of 100KW or larger, a licensed electrical engineer’s stamp is required.
- If the project involves updating previous PV installations, the contractor must provide detailed drawings of how the systems will integrate.

Solar installations typically require only a single on-site inspection. However, the contractor must provide pictures to the inspectors of the roof mounts and bonding prior to installing solar panels on a roof. When contractors perform line side taps, they will be required to provide torque ratings of the taps.

### Loading Criteria

Dead Load	Example: Existing roofing and framing = 7psf New solar panels and racking = 3 psf Total = 10 psf
Live Load	= psf (reducible) – 0 psf at locations of solar panels
Ground Snow Load	15 psf
Wind Load (ASCE 7-10)	Ultimate Wind Speed = 15 mph (based on Risk Category II) Exposure Category C