



## **RESIDENTIAL ROOF-MOUNTED SOLAR PANEL ARRAYS**

Solar panel installations must be approved by the City of West Carrollton.

The City reviews the design of solar panel arrays for compliance with the Residential Code of Ohio. Apply online for your approval here:

[https://westcarrollton\\_permit.portal.iworq.net/portalhome/westcarrollton\\_permit](https://westcarrollton_permit.portal.iworq.net/portalhome/westcarrollton_permit).

### **To obtain approval:**

- Provide completed Building and Electric Permit Applications.
- Provide the correct address on the applications and the plans.
- Provide (3) copies of drawings stamped by a design professional (an architect or engineer) for the structural and electrical plan reviews. Print the drawings to scale.
- Solar panels must be roof-mounted.
- Permit documents must specify structural design loads and include either:
  - a certification from the design professional that the roof structure is currently adequate to support the new solar panels, or
  - construction details to show how to reinforce the existing structure.
- Permit drawings must show the solar panel sizes and the panel layout on the roof, and the distances from the panels to the roof ridge and all roof edges.
- Panels cannot block egress from bedroom windows. Show that a clear path, 36" wide minimum, is provided from egress windows to the nearest roof edge.
- Only UL-listed and labeled Solar Panel components and systems are permitted. Submit (2) copies of the manufacturer's complete set of installation instructions, showing roof mounting details and all electrical requirements for the installation.
- Please call **937-859-5783** with any questions.

**We support renewable energy opportunities for residents and businesses.**



## **BUILDING CODE PROVISIONS:**

- The applicable Building Code is the **Residential Code of Ohio (RCO)**. Detailed requirements for “Solar Energy Systems” are in RCO Section 324.
- RCO 324 requires pathways for access to and around roof-mounted solar panels for firefighters. RCO 902.4 requires compliance with UL 1703 and 2703 for roof-mounted systems. The National Electrical Code (NFPA 70) and the Ohio Fire Code are also applicable.
- As with all permit approvals, a copy of the approved drawings must be kept and made available at the job site for use by the Building Inspector. Inspectors verify that the actual installation is consistent with the approved drawings.
- The street address of the project site must be clearly and legibly posted at the site.
- The contractor must provide safe and secure access to the work area for Building Inspection purposes (with ladders anchored as required, for example).
- Solar panels must be anchored to the roof as required by the manufacturer and as detailed by the design professional (fastener sizes, spacing, and embedment must be specified on the drawings, rather than “anchorage as required”).
- The panel installation must be flashed properly to be weathertight, not interfering with roof drainage or attic or roof ventilation.
- Existing roof trusses cannot be modified in any way without providing stamped drawings for approval of the modifications (pertains to drilling, notching, etc.).