

# SOLAR COLLECTOR INSTALLATION

## **Regulations**

The Raymore Unified Development Code includes regulations for the siting and installation of solar energy systems. Solar energy systems may include solar photovoltaic (PV) panels and solar thermal systems such as solar water heaters. The UDC regulations strive to let property owners take full advantage of available solar resources and properly address safety and aesthetics.

The UDC provides regulations to address systems that are mounted on building roofs and systems that are mounted on the ground. Regulations for solar collectors mounted on pitched roofs vary depending on which roof face the collector is mounted; however, solar collectors may never extend above the ridge (top) of the roof. Solar collectors located on flat roofs may not extend more than four feet above the top of the roof or parapet. Regulations for solar collectors installed on the ground vary by the size of the property on which they are located.

## **Permit Requirements**

If you are considering installing a solar energy system, contact the Development Services Department to determine the regulations and how they apply to your property. Next, the application included in this packet should be completed and returned to the Development Services Department for review. If the City determines that the proposed solar collector requires approval of a Conditional Use Permit, a separate application must be filed. Conditional Use Permits require review and approval from the Raymore Planning and Zoning Commission and City Council; notification to surrounding properties and a public hearing are also required. After zoning compliance is demonstrated, a building permit application can be filed.

Interconnection of solar collectors to the utility grid must be approved by Kansas City Power and Light. The City will not issue a building permit until approval from the utility is granted.

# Photovoltaic System Application and Checklist – For Residential Systems\* ≤ 15 kW

Project Name: \_\_\_\_\_ Contact Name: \_\_\_\_\_

Contractor Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone/Cell: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Project Location: \_\_\_\_\_

I, \_\_\_\_\_ have read the information below and acknowledge that all required documents have been provided. I understand that omissions in the required information will result in delays in the review process.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## ***How to complete this permit application:***

- A | Fill out an electrical permit application.
- B | Complete Photovoltaic System Application and Checklist.
- C | Include site plan showing location of major components on the property. This drawing need not be exactly to scale, but it should represent relative location of components and show elevation. The site plan must also show compliance with International Fire Code minimum access and pathways. *Additionally, include a photo that shows the proposed access point to verify compliance with IFC 605.11.3.1.*
- D | Include electrical diagram showing PV array configuration, wiring system, overcurrent protection, inverter, disconnects, required signs, and AC connection to building.
- E | Include specification sheets and installation manuals (if available) for all manufactured components including, but not limited to PV modules, inverter(s), combiner box, disconnects, and mounting system.
- F | Two (2) copies of components A-D should be submitted.

## ***Steps to completing a photovoltaic project:***

- Step 1 | Concurrently submit this permit application (see all necessary components, above) and the Net Metering/Interconnection Application to electric utility.
- Step 2 | Work can begin after the electrical permit is approved. Note: Some contractors will not begin work until the Net Metering/Interconnection Application is approved by the utility, although this is not a requirement.
- Step 3 | Notify Building Inspection Division at (816) 331-7916 when ready for inspection.
- Step 4 | Notify electric utility when inspection is passed.
- Step 5 | Electric utility will schedule its inspection and meter exchange.
- Step 6 | Electric utility will provide Permission to Operate (PTO).

\* Or equally small commercial systems