

Photovoltaic Panel Submittal Requirements for Residential

Ground Array

- Complete design of array mounting system.
- A site plan showing compliance with the St. Joseph zoning code, including visual screening requirements (Section 31-364, City of St. Joseph Code of Ordinances)
- Complete electrical design – stamped and signed by a professional engineer, licensed in Missouri, certifying compliance with the 2017 National Electrical Code, the 2018 International Fire Code, and the 2018 International Building Codes and all other applicable codes This will include meeting the requirement to make circuits in raceway “not readily accessible” (2017 National Electrical Code, EC 690.31), which may or may not be met by the below screening requirement.

Roof Array

- Complete design of array mounting system – stamped and signed by a design professional licensed in the State of Missouri certifying compliance with the 2017 National Electrical Code, the 2018 International Fire Code, and the 2018 and International Building Code and all other applicable codes and that the roof structure is capable of supporting the additional loads.
- Complete electrical design stamped and signed by a professional engineer licensed in Missouri, certifying compliance with the 2017 National Electrical Code.

Installation Requirements

- Reminder, **no** work is to commence prior to the required permits being issued. Application for a permit does not constitute issuance of such. Penalties shall be assessed as outlined in the City Ordinance.
- All work associated with the installation of structural supports and/or mounting equipment that is NOT integral to the electrical system may be performed by qualified individuals possessing a business license with the City of Saint Joseph. Such work may include the placement, attachment and securing of the individual solar panels to the support components AND the interconnection of panels via plug-in type connectors previously installed by the manufacturer.
- All work associated with the installation of the electrical system, connection of the plug ins, components, equipment, etc. shall be performed by individuals who possess an appropriate electrical license and business license with the City of Saint Joseph. Such work shall include but not be limited to: installation and connection of bonding and grounding components, conductors, and electrical equipment.

Inspection Requirements

- Roof mounted systems:
 1. First inspection: Rough frame: Attachment of rack/mounting system and flashing. Placement of the arrays, ridgelines for the roof, eave lines.
Rough Electrical, Pre-wire inspection, grounding, bonding required for all enphase micro-inverter type installations as well as installations where wiring must be done in the field under or in the module.
 2. Final Inspection: Final on all electrical and the entire system. Inspector will provide direction on what needs to be seen.
Access by ladder and under roof required.
- Ground mounted systems:
 1. First inspection: Footings shall be inspected prior to placement of concrete, set back requirements per the zoning code.
 2. Second inspection: Rough frame, inspection of array mounting system and module installation.
Rough electrical, underground raceways and cable shall be inspected before covering. Pre-wire inspection required for all enphase micro-inverter type installations where wiring must be done in the field under or in modules. This inspection shall be done before module inspection.
 3. Final inspection: Final inspection on all electrical and the entire system. Inspector will provide direction on what needs to be seen.