



CITY PLANNING & DEVELOPMENT

Electrical Service Permit Application Requirements

www.kcmo.gov/planning

Information bulletin no. 160

City Planning and Development will issue electrical permits for replacement/upgrade of existing electrical services and new electrical services (including temporary) as follows:

1. Electrical services less than 400 amps and where none of the below apply – no drawings required. Submit permit application through [CompassKC](#).
2. Electrical services of 400 amps to 799 amps, and generators on 1-2 family residential services not exceeding 799 amps – a line drawing **with a completed checklist** shall be submitted for review through [CompassKC](#) as a permit application. The permit applicant is responsible for the content of the line drawing. See Page 2 for checklist and see Page 3 for example of standard acceptable line drawing formats.
3. Any electrical service involving electrical transformer, generator (see 1-2 family exception above), fire pump, wind turbine, etc. – plans prepared and sealed by a Missouri Registered Engineer shall be submitted as a [CompassKC](#) plan case for plans review. See page 2 for checklist of items required to be on plans.
4. Any solar panel installations, plans are required be submitted as a [CompassKC](#) plan case for plans review; please see [IB162](#) and see page 2 of this document for checklist of items required to be on plans.
5. Electrical services of 800 amps to 1199 amps – a line drawing prepared and sealed by a Missouri Registered Engineer shall be submitted as a [CompassKC](#) plan case for plans review. See page 2 for checklist of items required to be on plans.
6. Electrical services of 1200 amps or greater, and all services over 600 volts – complete engineered drawings, including floor plans and equipment layout plans, prepared, and sealed by a Missouri Registered Engineer shall be submitted as a [CompassKC](#) plan case for plans review. See page 2 for checklist of items required to be on plans.

Note: *that for an addition to an existing electric service, the total size of the electric service shall be considered (example: adding a 200-amp service switch to an existing 400-amp service creates a 600-amp service).*

Plans Review for Items 3, 4, 5, and 6 (above) *may* be eligible for a scheduled express review. See [Information Bulletin IB115](#).

Contact the Code Questions line at 816-513-1511 or codequestions@kcmo.org for further clarifications.

Electrical Service Permit Checklist

The following information shall be shown on all drawings submitted for electrical service permit application. This checklist shall be submitted along with any drawings as outlined in points #2 through #6 above:

Included	Not Applicable	
<input type="checkbox"/>	<input type="checkbox"/>	System voltage.
<input type="checkbox"/>	<input type="checkbox"/>	Number of Phases.
<input type="checkbox"/>	<input type="checkbox"/>	Type of service transformer if 3-phase (wye; grounded-B phase delta, etc.).
<input type="checkbox"/>	<input type="checkbox"/>	Amperage rating of each service disconnect switch.
<input type="checkbox"/>	<input type="checkbox"/>	Amperage rating of each service overcurrent device.
<input type="checkbox"/>	<input type="checkbox"/>	Available Fault Current (AFC) at utility transformer (or the AFC available at the equipment's line terminals).
<input type="checkbox"/>	<input type="checkbox"/>	Ampere Interrupting Capacity (AIC) rating of the overcurrent device - must be no less than the AFC available at the equipment's line terminals or the transformer.
<input type="checkbox"/>	<input type="checkbox"/>	Conductor size, material (Cu or Al), and insulation type (suitable for wet location, when applicable).
<input type="checkbox"/>	<input type="checkbox"/>	Conduit/raceway size and type.
<input type="checkbox"/>	<input type="checkbox"/>	Complete grounding electrode system, including conductor sizes, and electrode types.
<input type="checkbox"/>	<input type="checkbox"/>	Ground-Fault Protection of service where required due to service amperage/voltage.
<input type="checkbox"/>	<input type="checkbox"/>	There shall be not more than six sets of disconnects per service and they shall be grouped.

The acceptance of drawings for electrical service permit application is based on the following limitations (unless the drawings specifically address the item otherwise):

1. Equipment located on the exterior of the building does NOT encroach upon any portion of the public right of way or other property line. Equipment must be designed and located to not impede pedestrian, bicycle, or wheelchair movement or create safety hazards on circulation paths.
2. Equipment is entirely exterior or is located immediately at the point of entrance into the building.
3. Equipment access, clearance, and workspace are provided as required.
4. The service shown is the ONLY electrical service that serves the building.
5. Equipment is listed and labeled.
6. Clearance to grade, structure, building openings, etc., for overhead service conductors is provided based on the site conditions.
7. Service equipment is protected against physical damage where required.
8. All grounding electrodes available in the building are shown.
9. Installation complies with all requirements of standards established by the serving utility company in addition to the NEC.

I certify that the submission provides all items, as applicable, from checklist above and that the project complies with the limitations listed above:

Signature: _____ Date: _____

Format Examples

(Line drawings must contain all information from the checklist on page 2)

