



**Boulder County  
Community Planning  
& Permitting  
Publications**

# Generator Checklist Residential

**Community Planning & Permitting**  
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303-441-3926

**Plan Review & Building Code Questions:**  
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## Generator Checklist – Residential

Per 2020 NEC (National Electrical Code)

Generator applications are reviewed by the county electrical inspectors. The following checklist shall be submitted with your plans. Each item on the list shall be marked to verify it is part of the submittal. Incomplete information may result in plan rejection or delay in the approval of your project.

### Residential Generator Checklist Submittal Requirements

Provide the following information:

- A completed application form. Include the proposed generator size in KW, type of fuel source, and whether system is an automatic transfer switch or manual transfer switch, portable or fixed.
- A deposit (the balance of fees is due at the time of permit issuance).
- Electronic PDF files are to be submitted to Building Safety & Inspection Services through the Online Application Submittals webpage at [www.boco.org/CPP-application-submittal](http://www.boco.org/CPP-application-submittal). Minimum drawing scale is 1/4" per foot.

### Site Plan – Equipment Outside a Building

- Show the location of the generator and distance to adjoining property lines and buildings.
- Show the location of the fuel tank or gas hookup at the house. If a new fuel tank is proposed, provide the tank size and dimension the distances to the parcel boundaries. Note: Fuel tanks must be placed out of the setbacks.
- Show the location of all electrical service equipment and transfer switch.
- Show clearances of the equipment.
- If a new propane tank is necessary and not included as part of the generator application, then the new propane tank will require a separate permit.
- If a new propane tank is needed, a separate building permit is required.

### Wiring Requirements

- Load calculations as per Article 220 for automatic transfer systems. If calculated loads exceed the listing of the generator, load shedding provisions will be required.

Provide a one-line diagram for generator and electrical service that includes the following information:

- Conductor sizes
- Conductor insulation types (i.e., THHN, THWN, direct burial cable, etc.)
- Conductor material (i.e., copper/aluminum)
- Conduit sizes
- Conduit material (i.e., non-metallic, EMT, etc.)
- Overcurrent device ratings

### Provide product information:

- Product listing sheet for the generator, transfer switch, load shedding devices, and, if applicable, diesel fuel tanks.

Note: The manufacturer's installation instructions must be on-site for inspections.

If you have any questions, please contact:

Building Code Line: 303-441-2640  
Email: [building@bouldercounty.org](mailto:building@bouldercounty.org)