



Environmental Protection and Growth Management Department
BUILDING CODE SERVICES DIVISION
1 North University Drive, Box #302 • Plantation, Florida 33324
954-765-4400 • Broward.org/building

APPLICATION INFORMATION FOR INSTALLATION OF PERMANENT RESIDENTIAL AND COMMERCIAL STAND-BY GENERATORS

The permit application for installation of permanent stand-by generators must be submitted as a package to Building Code Services Division

1. Two sets of plans required for residential and three sets of plans required for commercial sites. Permits will be required for Building, Electrical, Mechanical, Plumbing and Zoning, and must include the following:
 - The location of the generator.
 - Location of the fuel tank.
 - Location of all windows and doors near the generator exhaust including those in any nearby buildings.
 - Setbacks of generator from all windows and doors from all surrounding buildings.
 - Verify that the generator will be installed at current base flood elevation or above. (FBC 3110.1)
 - An electrical riser diagram, along with the location of the transfer switch, all conduit wire sizes and over current protection.
 - Slab to be a minimum to comply with the standards set forth by FBC 1820 and manufacturer specifications as well as anchorage details for wind loads.
 - If natural or LP gas is to be used, a plan indicating isometric riser diagram is required, also show piping material, length of piping, BTU demand and shut off valve location.
 - If a diesel fuel generator is proposed, the fuel piping, piping size, piping material, tanks specifications, for inside of a building, and make-up air and exhaust termination (FMC 915.1) must be shown.
 - Two (2) copies of the Generator Manufacturer Specifications and Installation Instructions of generator to be used.
 - Verification is required that the soil beneath will support the slab and generator for all loads per High Velocity Hurricane Zone. (FBC 1818.2)
2. All commercial applications must first be routed to the Broward County Sheriff's Office, Department of Fire Rescue and Emergency Services, the Environmental Monitoring and Enforcement Division (EMED), and to the appropriate Zoning Department, (Unincorporated Zoning review will be performed at BCSD), submitting at BCSD. (setbacks and noise ordinances may vary)
3. Design plans are to comply with standards in the Florida Building Code (FBC), the Florida Mechanical Code (FMC 915.1), the National Fire Protection Association (NFPA 37), the 2002 National Electric Code (NEC, Article 220, and Article 702) and the National Gas fuel code as found in the NFPA.
4. Signage is required upon installation of generator as per the National Electric Code.

Minimum Standards for Permanent Residential Stand-By Generator Permitting Electrical Checklist

2005 National Electrical Code (NEC) Article 702

Effective 12/8/06

Site Plan:

- Indicate generator and fuel tank locations.
- Indicate location of all operable windows and operable doors near generator exhaust (Generator spacing from the building shall meet manufacturer's specifications for all openings and operable doors, including those in the neighbors' house).
- The Location of the generator shall conform to local Zoning requirements and shall be mounted above the base flood level.

Slab Drawing:

- Provide applicable structural plans. These plans shall indicate at a minimum:
 1. The size and depth of the slab and the type of reinforcement used.
 2. Generator anchoring details.

Electrical Riser Diagram:

- Provide electrical riser diagram. These plans shall indicate the service, panel(s), transfer switch(s), main disconnect(s), generator installation, overcurrent protection, grounding, conduit sizes and wire sizes.

Generator:

- Provide information for the generator showing KW rating, ampacity, voltage, phase, fuel source and dimensioning.
- All loads connected to generator shall be identified.
- Provide load calculations for the generator. NEC Article 220 shall be used to calculate existing loads. Where the Generator is connected to the load through a cord-and-plug (Exposed Metal Parts shall be non-current carrying), the receptacle shall be sized for the corresponding overcurrent protection at the generator or other overcurrent protection device in front of the receptacle
- Generator shall be sized for the load served. NEC Article 220 shall be used to calculate the existing load.
- Provide dbA sound rating if required per local ordinance.

Transfer Switch:

- Required for All Generators, shall be rated for the connected load.

Manual Transfer Switch (options):

- Sized for the intended load on the electrical service or
- Sized for optional standby Panel(s) which may be built into the panel(s) and transfer switch(s)

Automatic Transfer Switch (options):

- Sized to transfer the entire load on the electrical service or
- Pre-select the loads to be served with an optional standby panel(s) and transfer switch(s) or
- Provide automatic load shedding equipment to reduce total load imposed on generator.

Sign:

- A permanent sign shall be placed at the electrical service entrance equipment that indicates the location of on-site optional standby power sources.
- A permanent sign shall be placed at the transfer switch location indicating the sequence of operation to start the generator and transfer the electrical loads.