

## City of Pompano Beach Department of Development Services Building Inspections Division

100 W. Atlantic Blvd Pompano Beach, FL 33060

**Emergency Generators Requirements** 

Phone: 954.786.4669 Fax: 954.786.4677

Requirements for Permitting and Installation

Generators shall conform to local zoning requirements. For specific Zoning requirements call (954)786-4679.

□ Building Permit Application is required if a new slab is to be formed and concrete placed.

- A. One (1) copy of a plan showing location of proposed generator and fuel tank.
- B. A new slab shall be a minimum of 4" thick and comply with standards set forth by FBC 1808.6.2
- C. If the slab is permitted and existing a Building Permit will not be required provided it complies with the F.B.C. 1808.6.2
- D. If a pre-fabricated slab is used, one (1) copy of a signed and sealed document is required showing compliance to ASCE 7-10.
- E. Specifications of anchorage showing compliance to FBC 1620.2 and ASCE 7-10.
- F. Any other support for permanent generator must be approved by the Building Official or designee.
- G. Verification that the generator will be installed at current base flood elevation or above. City Ordinance 152.20 & FEMA Reg.

□ Electrical Permit Application is required for all permanent generators.

- A. One (1) copy of the Electrical Riser Diagram
  - 1) Riser diagram should show entire service, including transfer switch, all conduit and wire sizes, and over current protection of generator and equipment.
- B. One (1) copy of Generator Specifications (usually supplied by manufactured). Specifications must provide length, width and height of generator used.
- C. All loads connected to the generator shall be identified.
- D. 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 no-current carrying), the receptacle shall be sized for the corresponding over current protection at the generator or other over current device in front of the receptacle.
- E. Generator shall be sized for the load served. NEC Article 220 shall be to calculate the existing load.
- F. Transfer Switch or other listed transfer device: Required for all generators shall be rated for the connected load.
- G. Manual Transfer switch: (Options)

Sized for the intended load on the electrical service or Sized for optional standby panel(s) which maybe built into the panel(s) and transfer switch(s).

- H. Automatic Transfer Switch: (Options)
  - 1) Size to transfer the entire load on the electrical service or
  - 2) Pre-select the loads to be served with an optional standby panel(s) and transfer switch(s) or
  - 3) Provide Automatic load shedding equipment to reduce total load imposed on generator.
- I. Sign:

1) A permanent sign shall be placed at the electrical service entrance equipment that indicates the location of on-ite optional standby power sources.

2) A permanent sign shall be placed at the transfer switch location indicating the sequence of operation to start the generator and the transfer the electrical loads.

2014 National Electrical Code (NEC) Article 702

- or latest edition of NEC adopted by FBC
- J. One (1) Copy of plans showing locations of all operable windows and doors near generator exhaust. (Generator spacing from building shall meet manufacturer's specifications from all openings and operable doors, including those of neighbor's house).
- □ Plumbing Permit Application is required from a licensed contractor if natural or LP gas is to be used.
  - A. One (1) copy of a plans view with Isometric Riser Diagram required. Show total length and type of piping and chart used to size gas system. Show generator BTU rating.

<u>Note</u>: Portable generators will be reviewed on a case-by-case basis.

This Checklist is based on:

Florida Building Code 2017 6<sup>th</sup> Edition

2014 National Electrical Code (NEC) or the latest edition of NEC adopted by FBC Broward County Board of Bulac, & Appendix Bolicy #06.02 (Attached)

Broward County Board of Rules & Appeals Policy #06-03 (Attached).

## MINIMUM CODE REQUIREMENTS FOR PERMANENT RESIDENTIAL TYPE STAND-BY GENERATORS

1. Generators (Engines) shall be installed at least 5 feet from openings in walls and at least 5 feet from structures having combustible walls unless there is an adjacent wall that has a fire resistance rating of at least 1 hour between the structure and generator.

2. The generator shall be installed in compliance with floodplain management construction standards (same elevation above grade as the interior 1st floor of the building).

3. Generators that are exposed to wind shall be installed to resist the wind pressures according to ASCE (American Society of Civil Engineers) 7 – 2010.

4. Generators installed at grade level shall be supported on a level minimum 4 inch nominal (3.5 inch actual) concrete slab or other approved material extending a minimum of 2 inches above adjoining finished grade. Such slabs shall be placed on clean, thoroughly compacted sand or crushed rock free from organics, debris or other deleterious materials.

5. Generator exhaust shall be located so as not to create a nuisance. Exhaust termination shall be a minimum of 10 feet from any openable openings (doors, windows, vents, etc.) or air intakes.

6. Generators shall be listed and labeled. Generators shall be installed according to the manufacturer's recommendations and by the terms of their approval, in accordance with the conditions of the listing.

Where conflicts between 1) the code, 2) the conditions of listing or, 3) the manufacturer's installation recommendations occur, the most restrictive of the three alternatives shall apply.

7. When applicable, the following Standards shall apply: NFPA 54-12 - National Fuel Gas Code NFPA 58-08 - Liquefied Petroleum Gas Code, NFPA 37-06 – Stationary Combustion Engines and Gas Turbines, NFPA 30-08 – Flammable and Combustible Liquids Code, ANSI/ASME B31.3 Process Piping, 2002 and the Florida Fuel Gas Code.

8. Installations shall comply with the Florida Fire Prevention Code

9. Maximum allowable sound levels and property setbacks shall comply with local jurisdiction's requirements.