

Permanent or Portable Generator Install for Non Separately Derived Systems

NEC 702 for Optional Standby Power

General Notes and Definitions:

- Portable generators are recommended to be 10 feet from combustibile construction.
- Permanent generators are to be 5 feet from combustibile construction measured from the enclosure.
- Non-Separately Derived – This term means the house neutral is carried through to the generator circuit. If the neutral wire is not broken via a disconnect then the system is a non-separately system.
- In sight, within sight, within site from, means visible and not more than 50 feet from the other.

Install / Inspection:

- No additional ground rod required at generator (NEC 702.10 B) It can be permitted per manufacture install instructions (NEC 110.3(B)). Grounding achieved through grounding electrode system of building.
- Separate ground and neutral at generator NEC 250.24 (A) (5).

NOTE 1: The permanent models may or may not be already separated. There may be language stating “floating neutral” indicating that the neutral and ground are separated. In a portable generator this is not the case, it is set up to be a standalone unit. The ground and neutral are bonded together with a bonding jumper, this jumper must be removed.

NOTE 2: This bonding jumper must be reinstalled for the generator to be used as a standalone unit (Not connected to the house, like a job site).

- Disconnect required at building either inside or outside that is readily accessible, suitable for service disconnect (NEC 225.31, NEC 225.36) .

If the generator is equipped with its own readily accessible disconnect means located within site of the building being supplied, an additional disconnect is not required (NEC702.11)

Disconnect means must be rated for service disconnect (NEC 225.36).

- If the house panel has a service rated disconnect ahead of it, it is now a sub panel. A 3 wire with an equipment grounding conductor is required and the grounds and neutrals must be separated in the house panel. (NEC 250.32 (B)).
- Signage required at the panel stating secondary source of power (NEC 702.8 (A)).
- Signage at the grounding source stating that all optional and standard power sources utilize this ground. (NEC 702.8 (B)).
- Signage required at disconnects (230.2 (E), 225.37).

This is to provide guidance with the generator electrical portion of the install. For all other aspects of the installation follow the manufactures instructions and NFPA 37, NFPA 54, NFPA 58, & NFPA 70.