



RESIDENTIAL GENERATOR INSTALLATION

ELECTRICAL

Option Standby Systems

Generator installations are to comply with Article 702 of the 2017 National Electric Code.

Guidelines for Portable Generators with Manual Transfer Equipment:

Permanently installed equipment for the connection of a portable generator must comply with Section 702.5 of the 2017 National Electrical Code (NEC). The manual transfer equipment will require an interlock device suitable for the intended use. This device must be installed to prevent the inadvertent interconnection of the normal and the optional system supply. The connection device must be a UL Standard 231 Listed Power Outlet. The back feeding of electrical outlets within the home is not permitted. Manufacturer's installation information for all equipment is required to be on-site for inspections.

Guidelines for Permanent Generators with Manual Transfer Switches:

Permanent/Portable installed generators with permanently installed manual transfer equipment must comply with Section 702.4 (B) (1) of the 2017 National Electrical Code (NEC) for permanent/portable generators or use a Listed Transfer Switch or Panel Board. The equipment must be installed to allow the user to select the connected loads upon manual transfer. Manufacturer's installation information for all equipment is required on-site for inspections and installed according to the manufacturer's instructions. See Generator Installation Check List.

Note: Generator/Electrical; NEC70, Article 110, Table 110.26(A)(1): Working Space, Minimum 36".

Guidelines for Permanent Generators with Automatic Transfer Switches:

Permanently installed generator with automatic transfer equipment must comply with the provisions of Section 702.4 (B) (2) of the 2017 National Electrical Code (NEC). The calculated load as determined by Article 220 of the 2017 National Electrical Code must not exceed the rating of the generator output. Manufacturer's installation information for all equipment is required to be on-site for inspections and installed according to the manufacturer's instructions. See Generator Installation Check List.

Note: Generator/Electrical; NEC70, Article 110, Table 110.26(A)(1): Working Space, Minimum 36".

Required permanent signs for all installations:

702.7 Signs

(A) Standby. A sign shall be placed at the service-entrance equipment that indicates the type and location of on-site optional standby power sources. A sign shall not be required for individual unit equipment used for standby illumination.

(B) Grounding. Where removal of a grounding or bonding connection in normal power source equipment interrupts the; grounding electrode conductor connection to the alternate power source(s) grounded conductor, a warning sign shall be installed at the normal power. *[The warning sign(s) or label(s) shall comply with NEC70, Article 110.21(B).]*

Fuel Gas

Section 616.1 Power equipment. Permanently installed equipment powered by internal combustion engines and turbines shall be installed in accordance with the manufacturer's installation instructions and NFPA 37.

NATIONAL FIRE PROTECTION ASSOCIATION

(NFPA 37) 3-1.4 Engines Located Outdoors. Engines, and their weatherproof housings if provided, that are installed outdoors shall be located at least 5ft. (1.5m) from openings in walls and at least 5ft. (1.5m) from structures having combustible walls. Exception No.1: Where the adjacent wall of the structure has a fire resistance rating of at least 1 hour. Exception No.2: Where the weatherproof enclosure is constructed of noncombustible materials, and it has been demonstrated that a fire within the enclosure will not ignite combustible materials outside the enclosure.

(NFPA 38) Container Location; LP tanks are to be located in accordance with NFPA 58. See attachment for diagrams.