



CITY OF CONCORD
NEW HAMPSHIRE
Community Development Department
Code Administration Division

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STATIONARY GENERATOR INSTALLATIONS

In many cases property owners have chosen to install a stationary generator. In addition to the above mentioned items, stationary generators used for an alternate source of power require additional considerations. Along with the National Electric Code (NFPA 70-2008) the requirements of other documents, that are either adopted directly or by reference by the State of New Hampshire, must be adhered to. Examples of these documents and the types of requirements they contain are:

- NFPA 37, Standard for the Installation and Use of Stationary Combustion Engines & Gas Turbines (2002 Edition)
- NFPA 54, National Fuel Gas Code (2003 Edition)

NFPA 37 requires stationary generator engines and their weatherproof housings if provided, that are installed outdoors to be located at least 5 feet from openings in walls. This standard recognizes the potential danger of deadly carbon monoxide gas entering the structure and injuring the occupants. Building openings could be, but are not limited to the following:

- Basement doors & bulkhead openings
- Basement windows
- Exit doors or sliding glass openings
- Windows
- Dryer vents
- Kitchen appliance vents
- Mechanical exhaust vents for heating or hot water appliances
- Air intake openings or screens

NFPA 37 also requires stationary generator engines and their weatherproof housings, if provided, that are installed outdoors to be placed a minimum of five feet from structures having combustible walls. The minimum separation is not required where:

- (1) The adjacent wall of the structure has a fire resistances rating of at least 1 hour **or**
- (2) The weatherproof enclosure is constructed of noncombustible materials, which has been listed and approved in accordance with NFPA 555, verifying that a fire within the enclosure will not ignite combustible materials outside the enclosure.

These allowances apply directly to the separation from the combustible wall surface and in no case shall reduce the minimum distance to a building opening.

The fuel gas piping must be installed in accordance with both NFPA 37 and NFPA 54 (National Fuel Gas Code). These documents require that the second stage system regulator be placed a minimum of five feet from any building opening and ignition source. Care must be given in placement of both the generator engine and delivery system piping to address the minimum separation distances.

Unless you are the owner of, and are occupying a single family residence, or meet one of the exceptions in RSA 319-C, a license is required to perform the electrical installation for connection of a stationary generator to premises wiring. Therefore, a properly licensed master electrician must perform the electrical installation. In all cases, the electrical installation must meet the minimum requirements of the National Electrical Code (NFPA 70-2008).

Unless you are the owner of an existing single family stand-alone structure that is used as your primary residence, Saf-C 8003.01 requires a license to perform the installation of the fuel gas supply system. In all cases the installation of the fuel gas supply system must meet all the applicable standards and codes.

Installation permits and inspections may be required by the local jurisdiction for the installation of electrical wiring and equipment for connecting the generator to the premises wiring and for the fuel gas fitting portion of the installation. Therefore, it would be prudent to contact the local jurisdiction to ascertain whether a permit(s) is required.