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## **New Installation Guidelines for Generac Stationary Air-Cooled 8, 10, 12, 14, 16, 17 and 20 kW Generators.**

The National Fire Protection Association has a standard for the installation and use of stationary combustion engines. That standard is NFPA 37 and its requirements limit the spacing of an enclosed generator set from a structure or wall.

*NFPA 37, Section 4.1.4, Engines Located Outdoors. Engines, and their weatherproof housings if provided, that are installed outdoors shall be located at least 5 ft. from openings in walls and at least 5 ft. from structures having combustible walls. A minimum separation shall not be required where the following conditions exist:*

- 1. The adjacent wall of the structure has a fire resistance rating of at least 1 hour.*
- 2. 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.*

### *Annex A — Explanatory Material*

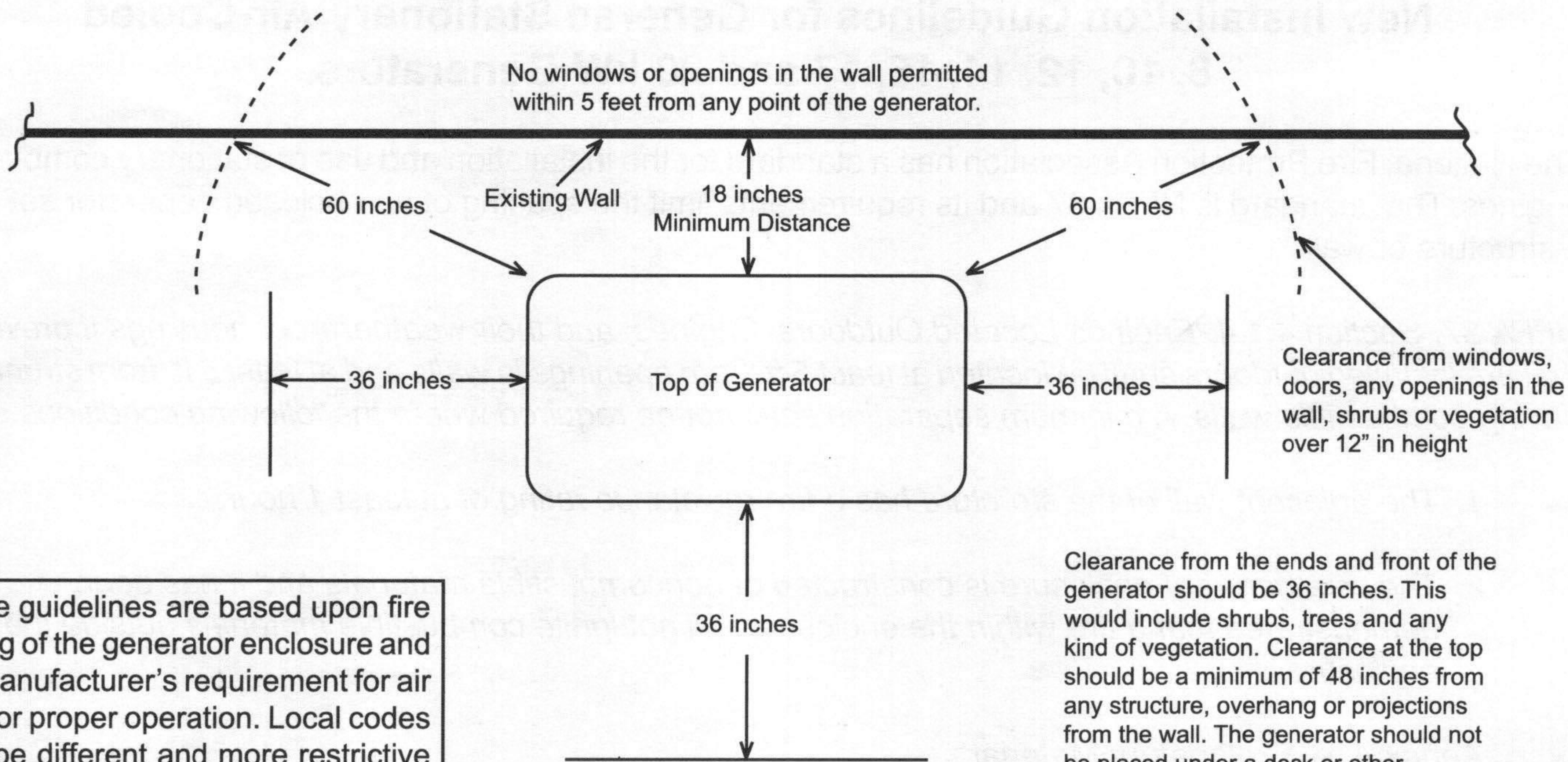
*A4.1.4 (2) Means of demonstrating compliance are by means of full scale fire test or by calculation procedures.*

Because of the limited spaces that are frequently available for installation, it has become apparent that exception (2) would be beneficial for many residential and commercial installations. With that in mind, Generac contracted with an independent testing laboratory to run full scale fire tests to assure that the Generac enclosure would not ignite combustible materials outside the enclosure.

The criteria was to determine the worst case fire scenario within the generator and to determine the ignitability of items outside the engine enclosure at various distances. The Generac enclosure is constructed of non-combustible materials and the results and conclusions from the independent testing lab indicated that any fire within the generator enclosure would not pose any ignition risk to nearby combustibles or structures, with or without fire service personnel response.

Based on this testing and the requirements of NFPA 37, Sec 4.1.4, the guidelines for installation of the generators listed above are changed to 18 inches (457mm) from the back side of the generator to a stationary wall or building. For adequate maintenance and airflow clearance, the area above the generator should be at least 4 feet with a minimum of 3 feet at the front and ends of the enclosure. This would include trees, shrubs and vegetation that could obstruct airflow. See the diagram on the reverse of this page and the installation drawing within the owner's manual for details.

Generator exhaust contains DEADLY carbon monoxide gas. This dangerous gas can cause unconsciousness or death. Do not place the unit near windows, doors, fresh air intakes (furnaces, etc.) or any openings in the building or structure, including windows and doors of an attached garage.



These guidelines are based upon fire testing of the generator enclosure and the manufacturer's requirement for air flow for proper operation. Local codes may be different and more restrictive than what is described here.

