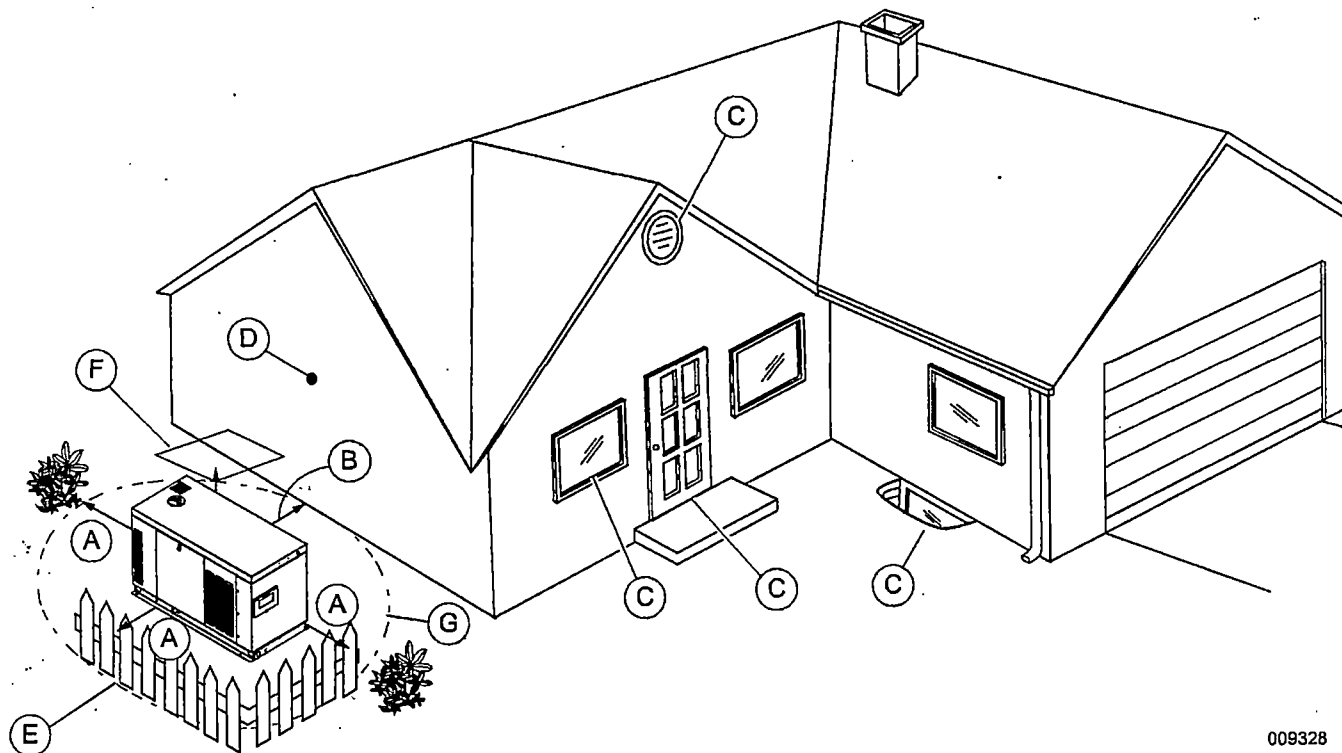


Fire Prevention

The generator must be installed at a safe distance away from combustible materials. Engine, alternator, and exhaust system components become very hot during operation. Fire risk increases if unit is not correctly ventilated, is not correctly maintained, operates too close to combustible materials, or if fuel leaks exist. Also, accumulations of flammable debris within or outside the generator enclosure may ignite.

Distance Requirements

See **Figure 3-2**. Minimum clearances must be maintained around the generator enclosure. These clearances are primarily for fire prevention, but also to provide sufficient room for removing front and end panels for maintenance purposes.



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Figure 3-2. Generator Distance Requirements

ID	Description	Definition
A	Front and end clearance	Minimum clearance from the front and ends of generator must be 3 ft (0.91 m). This includes shrubs, bushes, and trees.
B	Rear clearance	<p>For products NOT showing SWRI on the data plate:</p> <ul style="list-style-type: none"> • 5 ft (1.52 m) minimum distance if the wall is not fire rated. • 3 ft (0.91 m) minimum distance if the wall is one hour fire rated. <p>If the data plate indicates the product is SWRI rated: 18 in (47.7 cm) minimum distance from a combustible wall.</p>
C	Windows, vents, and openings	No operable windows, doors, vents, window wells, or openings in the wall are permitted near any point of the generator. See Potential CO Entry Points for more information.
D	Existing wall	The generator should not be placed closer than 18 in (457 mm) from existing walls.
E	Removable fence	A removable barrier (non-permanent; without footings) installed as a visual surround. Removable fence panels for servicing cannot be placed less than 3 ft (0.91 m) in front of the generator.
F	Overhead clearance	5 ft (1.52 m) minimum distance from any structure, overhang, or projections from wall.
G	Maintenance and servicing	Maneuvering space around generator for performing routine maintenance tasks such as battery replacement and engine service. Do not attempt to conceal generator with shrubs, bushes, or plants. See NEC Article 110.26 for more information.

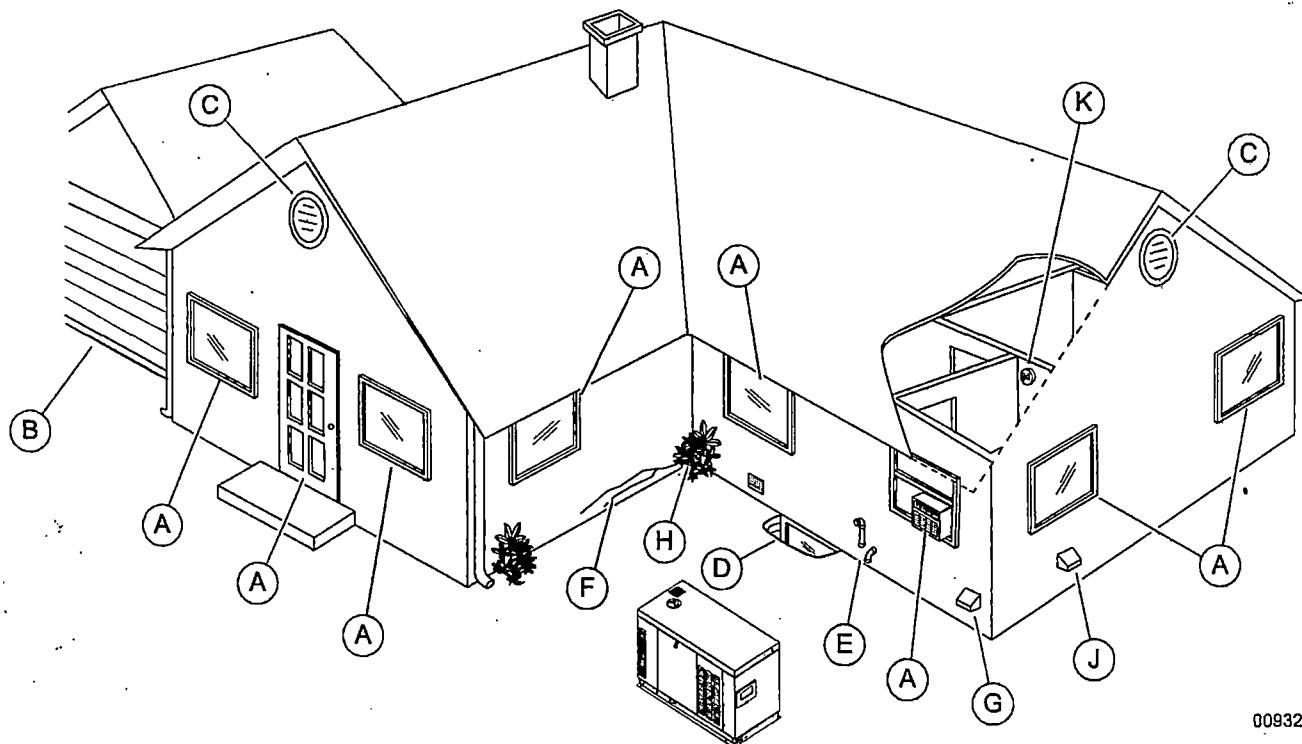
Potential CO Entry Points

See **Figure 3-1**. Generator exhaust can enter a structure through large openings, such as windows and doors. However, exhaust and CO can also seep into the structure through smaller, less obvious openings.

Protect the Structure

Verify structure itself is correctly caulked and sealed to prevent air from leaking in or out. Voids, cracks, or openings around windows, doors, soffits, pipes, and vents can allow exhaust gas to be drawn into the structure.

Some examples of potential entry points are described and included in, but not limited to, the accompanying table.



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Figure 3-1. Carbon Monoxide—Potential Entry Points

ID	Entry Point	Description / Comments
A	Windows and doors	Architectural details which can be (or are) opened to admit fresh air into the structure.
B	Garage door	CO can leak into garage if door is open, or does not seal correctly when closed.
C	Attic vent	Attic vents, ridge vents, crawl space vents, and soffit vents can all admit generator exhaust.
D	Basement windows	Windows or hatches allowing ventilation to or from lower level of a structure.
E	Furnace intake / exhaust vent	Air intake and exhaust pipes for furnace.
F	Wall cracks	Includes (but not limited to) cracks in wall, foundation, mortar, or air gaps around doors, windows, and pipes. See <i>Protect the Structure</i> .
G	Dryer vent	Exhaust duct for clothes dryer.
H	Airflow restrictions	Structural corners and locations with heavy vegetation restrict airflow. Exhaust gases can collect in such areas.
J	Make up air system	IMPORTANT NOTE: Mechanical and gravity outdoor air intake openings for HVAC supply air systems shall be located not less than 10 feet (3048mm) horizontally from the generator enclosure. See Section 401 in the ICC Mechanical Code for any additional requirements.