



Town of Killingworth  
Plumbing, Electrical, Mechanical Permit Application

Permit # \_\_\_\_\_

Location Of Building	Address:  _____	
	For Office Use Only: Map : _____ Lot : _____	

Applicant (Name of person signing application)	Name			Property Owner	Name				
	Agent of...				Mailing Address				
	Mailing Address				City			State	Zip
	City	State	Zip		Best Phone				
	Best Phone				Email				

Contractor Information	Business Name			Address			
	City	State	Zip	Email			
	Best Phone		Office Phone		Office Fax		
	License #			<input type="checkbox"/> Workman's Compensation Insurance – <b>submit copy with application</b>			

**PLUMBING**

Describe job :

**ELECTRICAL**

Describe job :

**MECHANICAL**

Describe job :

FEE	TOTAL JOB COST INCLUDING MATERIALS & LABOR \$
1.	First \$1000 of estimated cost is \$25.26 \$
2.	Each addition \$1000, you add \$15.26. Round up to next dollar. \$
Example: \$1025 = \$2000 value	
Add #1-2 = <b>TOTAL PERMIT FEES</b> \$	
Additional fees may apply if this application is for a job that includes a footprint change to your property. Please ask if you are unsure if this applies.	

PAYMENT-Office Use
Date _____
Total Paid _____
Building _____
Education _____
Check # _____

NOTES
<b>*INSPECTIONS*</b> Please note that the inspector has limited hours of availability. <b>Please plan accordingly.</b> Dial (860) 663-1765 x504 to schedule inspections.
You are welcome to mail in or drop off this application, but <u>verify fee amount- fee schedule online or call.</u>

**X** \_\_\_\_\_ Date: \_\_\_\_\_  
Signature of contractor or his representative making application.

\_\_\_\_\_ Date: \_\_\_\_\_  
Jerry Russ, Building Official



# KILLINGWORTH BUILDING DEPARTMENT

323 ROUTE 81, KILLINGWORTH, CT 06419

PHONE: (860)663-1765 X-504 FAX: (860)663-3305

## GENERATOR PERMIT REQUIREMENTS

**Due to recent issues with generator installations the following will be required for all generator permit applications**

To obtain a Permit for the installation of a generator, the APPLICANT shall first file an Application for a Permit, to INCLUDE the following information:

1. Submit an Electrical and Mechanical permit for the generator. One of these permits should include the cost of the generator and work associated with trade. (If not supplying generator- make note)
2. Provide the type, make, and model of the Generator & Transfer Switch to be installed along with the "cut sheet" or installation specifications documentation.
3. If an Automatic Transfer Switch is being proposed to be installed, a load calculation is required in order to show compliance with the capacity and rating requirements of the 2017 National Electrical Code. IF A WHOLE HOUSE TRANSFER SWITCH IS TO BE INSTALLED AHEAD OF THE CURRENT MAIN DISCONNECT, DETAILS ON THE GROUNDING AND BONDING ARRANGEMENT ARE TO BE PROVIDED.
4. A diagram to show, IN DETAIL, the location of the new equipment, any existing equipment, and the transfer switch location (before main on after main disconnect), wiring sizes and method. **Please note that the generator must be placed at a 90° angle with the exhaust facing away from the dwelling unit, not parallel with the house.**
5. Cement board or solid blocking must be used to seal any basement windows/openings. Plexiglas is not an acceptable material.
6. All required signage under the 2017 National Electrical Code must be installed and available for view at the time of final inspection by the Building Official.

## Section 3: Site Selection and Preparation

### Site Selection

Site selection is critical for safe generator operation. It is important to discuss these factors with the installer when selecting a site for generator installation:

- Carbon monoxide
- Fire prevention
- Fresh air for ventilation and cooling
- Water ingress prevention
- Proximity to utilities
- Suitable mounting surface

The following pages describe each of these factors in detail.

**NOTE:** The term "structure" is used throughout this section to describe the home or building where generator is being installed. Illustrations depict a typical residential home. However, instructions and recommendations presented in this section apply to all structures regardless of type.

### Carbon Monoxide



**⚠ DANGER**

Asphyxiation. Running engines produce carbon monoxide, a colorless, odorless, poisonous gas. Carbon monoxide, if not avoided, will result in death or serious injury.  
(000103)

**IMPORTANT NOTE:** Move to fresh air immediately and seek medical attention if you feel sick, dizzy, or weak while the generator is running or after it stops.

Generator exhaust contains carbon monoxide (CO)—a poisonous, potentially lethal gas that cannot be seen or smelled. The generator must be installed in a well ventilated area away from windows, doors, and openings. The selected location should not allow exhaust gases to be drawn into structures where people or animals may be present.

#### Carbon Monoxide Detectors

See *Figure 3-1*. CO detectors (K) must be used to monitor for CO and to warn individuals about the presence of CO. CO detectors should be installed and tested in accordance with the CO detector manufacturer's instructions and warnings. Contact local building inspection department for any applicable requirements concerning CO detectors.

**IMPORTANT NOTE:** Common smoke alarms do NOT detect CO gas. Do not rely on smoke alarms to protect residents or animals from CO. The only way to detect CO is to have functioning CO alarms.

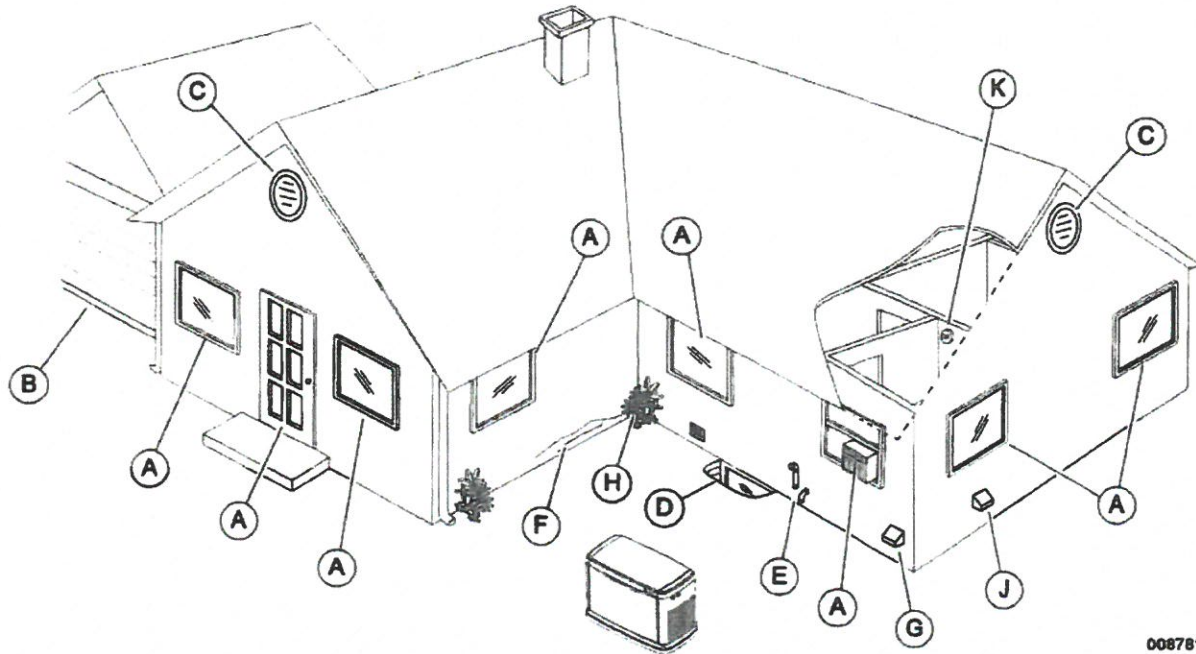
**Potential CO Entry Points**

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**

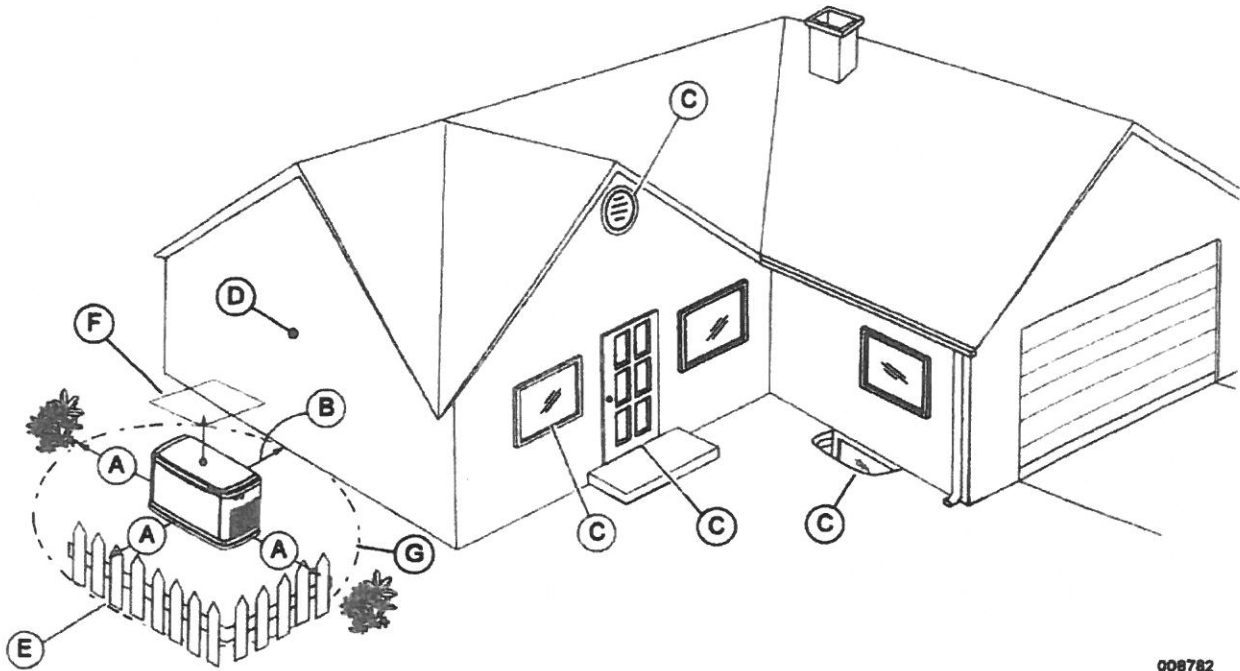
ID	Entry Point	Description / Comments
A	Windows and doors	Architectural details which can be (or are) opened to admit fresh air into the structure.
B	Garage door	CO can leak into garage if door is open, or does not seal correctly when closed.
C	Attic vent	Attic vents, ridge vents, crawl space vents, 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	<b>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.</b>

## Fire Prevention

The generator must be installed at a safe distance away from combustibles 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 combustibles 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 ensure sufficient room for removing front and end panels for maintenance purposes.



**Figure 3-2. Generator Distance Requirements**

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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	Fuel and electrical connections are made here. 18 in (457 mm) minimum clearance per NFPA testing, labeling, and listing, unless state or local codes dictate otherwise.
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 <i>Potential CO Entry Points</i> 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. <b>DO NOT</b> install under wooden decks or structures.
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.