

Residential Generators

Guidelines for Proper Installation and Inspections

Effective for permits applied for on or after March 15, 2012
Or Permit numbers over 12-1000

The following are guidelines for proper generator installation. Compliance with these items will improve the chances of receiving an approval during the inspection process.

General Requirements:

- Generators are required to be placed a minimum of 5'-0" from any combustible wall, Sect. 4.1.4, NFPA 37.
 - Exception – If the manufacturer's specs allow a minimum clearance that is closer than 5'-0" a copy of the manufacturer's specs along with test data must be submitted with the application for the permit for review and approval.
 - Currently the only manufacturer that has submitted the proper test data is Generac, therefore, permit applications for these generators will not require the submittal of the test data. However, a copy of the specs for the Generac model to be installed is still required. This copy of the specs **MUST** be on site for all inspections.
- Generators are required to be placed a minimum of 5'-0" away from any opening in a building. Openings are defined as windows, doors, and vents [dryer, bathroom, kitchen hood exhausts, etc;]. Units that are permitted to be placed closer than 5'-0" per the manufacturer's specs and test data are still required to be 5'-0" from these openings.

Inspections:

The electrical permit is the main permit and the plumbing permit for the gas (if gas) will be issued under the electrical permit using the same permit number (ie; electrical permit number 15-1234 – plumbing permit 15-1234P). All inspections shall be requested under the electrical permit number 15-1234.

Inspections are to be requested by the contractor or owner by using our automated phone system at 203-622-7772. You will need the following information to request same:

- Electrical permit number
- House or street number (ie; 24 Main St. use just the number 24)
- Inspection type (312 or 298 – explained below)
- The system will then ask you to select a date that you wish to schedule the inspection. If that date happens to be booked it will ask you to choose another date.
- After all the above has been entered you will be given an authorization number. You will then know the inspection request has been accepted.

There are only 2 inspections that are required. A **Rough Generator Inspection** and a **Final Generator Inspection**. It is the responsibility of the contractor who is managing the installation to call and schedule these inspections when the work is completed and ready for each inspection.

Both the required electrical and plumbing permits must be issued prior to requesting the Rough Generator Inspection.

- **Rough Generator Inspection** – Inspection Code – 312

All of the below will be inspected as part of the **Rough Generator Inspection**. Separate electrical or gas pipe inspections will not be permitted. Please have both the electrical and gas pipe ready for inspection on the day you have scheduled same.

This inspection shall not be scheduled until all of the following are completed and ready for inspection :

- **Electrical underground** – [if applicable]
 - All conduit shall be placed a minimum of 18” below grade and left exposed for inspection.
 - **Gas pipe underground** – [if applicable]
 - All piping shall be placed a minimum of 12” below grade and left exposed for inspection.
 - A Tracer Wire [18 AWG minimum] is required to be placed in the trench with all plastic UG gas piping.
 - Plastic gas pipe shall not enter a building through a foundation wall or be installed under a slab.
 - Trac pipe is not permitted to be UG.
 - **Gas pipe pressure test** –
 - Plumber is required to leave a note on the pressure gauge indicating the original applied test pressure and the date the pressure was first applied.
- **Final Generator Inspection** – Inspection Code – **298**

This final inspection shall not be scheduled until the generator installation is complete – this includes both electrical and gas work.

A copy of the manufacturer’s specifications and installation instructions are required to be on site for the inspection. Failure to have these on at the site will be cause for refusal of inspection.

- **Electrical** –
 - The electrician [or his representative] who holds the electrical permit for the generator must be on site at the time of this **Final Generator Inspection** to open all equipment to allow for the proper inspection and testing.
 - All electrical panels connected to generator shall be clearly labeled as the “Emergency Panel”.
 - The electric meter and the main electrical panel are required to have a “plaque” indicating the generator location.
 - If the manufacturer’s specs indicate that CO detectors are to be installed then an inspection of the house shall be made to verify that they are installed per these manufacturer’s specs.
 - It is strongly recommended that the smoke detectors [if hard wired] and the alarm system [if dwelling has one] be tied into the generator panel to protect the occupants in case of an emergency.
- **Plumbing** –
 - All new and existing yellow CSST pipe that is not bonded will be required to have a #6 wire bond.
 - Gas pipe “drip tees” are not allowed outside where subject to freezing.

- A “sediment trap” is required and should be the last fitting before the generator housing and located as close to the generator unit as possible, Sect. 2419.4, IRC.
- Black pipe must be coated with a rust proof paint.

The following Inspection Codes will no longer be valid for Generator permits:

- 215 – Electrical Underground
- 255 – Generator
- 299 – Final Electrical
- 310 – Plumbing Underground
- 375 – Gas Pipe Test
- 399 – Final Plumbing
- 475 – Gas Pipe Test

Generator Information and Load Breakdown

Job Address: _____

Residential___ Commercial___ (check one)

Property owner: _____

Generator Manufacturer:_____ Generator Size: _____kw

Type of Transfer Switch: Automatic___ Manual___ (check one)
(If automatic transfer switch, load breakdown required)

Fuel Type: Natural Gas ___Propane___ Diesel___ Other___(check one)

Cooling System: Air Cooled ___Liquid Cooled___ (check one)

LOAD BREAKDOWN FOR RESIDENTIAL GENERATOR

Watts

Kitchen Appliances

Refrigerator....._____

Freezer....._____

Dish washer....._____

Garbage disposal....._____

Range....._____

Microwave....._____

Misc Loads

General Lighting....._____

Kitchen Receptacles....._____

Smoke/Carbon Monoxide/Fire alarm (required)....._____

Well pump....._____

Sewer Ejector pump....._____

Sump pump....._____

Washer....._____

Dryer....._____

Other loads....._____

Heating/Cooling

Central A/C....._____

Room A/C....._____

Furnace/Boiler....._____

Water Heater....._____

Elec. Heat....._____

Total Watts_____ Total Generator Watts_____

Total Amps_____ Total Generator Amps_____

Prepared by_____ Date_____

Signature_____

Company Name_____

CT E1 License No._____