



TOWN OF CHESTER

Building Department

84 Chester Street

Chester, NH 03036

Office- 603.887.3636 Cell- 603.370.0175

www.chesternh.org



Residential Generators Guidelines for Proper Installation and Inspections

PURPOSE

This handout was created to aid residents and installers with understanding the permit and inspection process to install a residential standby generator. Included are the required permits, items that must be available to the inspector at the construction site, and the items that the inspector will be verifying in the field during the inspection process.

Permits Required

Generator Permit- to include:

- Site plan showing location of generator (to scale), lot lines, wetlands (if applicable), setbacks, house and other structures.
- The manufacturer's installation manual and the permits must remain on the job site at all times.

Electrical Permit- to include:

- Load analysis (calculations) identifying the electrical loads selected, to verify generator and transfer switch is appropriately sized for the designated loads.
- One line diagram for wiring installation and conduit size.

Gas Permit (obtained from Fire Dept.)

General Requirements

- Generators are considered structures per Chester Zoning Ordinance and therefore must adhere to structural setbacks.
- Must be at least five feet (5') from combustibles and building openings (doors, windows, vents, etc.)
- Electrical conduit must be a minimum of 18" below grade.
- Gas line must be a minimum of 12" below grade.

(continued on reverse)

Inspections

PRIOR TO ANY BACKFILLING. Trades are responsible for scheduling and attending their own inspections.

Rough Inspection:

Electrical underground-

- Generator placed as shown on plan.
- Pad for generator as proposed.
- All conduit shall be placed a minimum of 18" below grade.
- Conduit to be laid on a bed of sand.
- Backfill to be sand for a minimum of 6" above conduit.
- Warning Tape available for placement during backfill.
- Conduit approved for use.

Gas pipe install & pressure test must be approved by Fire Dept prior to backfill.

Final Inspection:

Electrical-

- The electrician [or his representative] must be on site to open all equipment to allow for the proper inspection.
- 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 sign indicating the type and generator location.
- A warning sign shall be installed at the normal power source equipment stating: "WARNING-SHOCK HAZARD EXISTS IF GROUNDING ELECTRODE CONDUCTOR OR BONDING JUMPER CONNECTION IN THIS EQUIPMENT IS REMOVED WHILE ALTERNATE SOURCE(S) IS ENERGIZED." (non-separately derived system)
- 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.

Gas- must be approved by Fire Dept

- Black iron pipe must be protected from corrosion.



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GENERATOR PERMIT APPLICATION

Today's Date

24 Hour Notice for Inspections

Street Address of Project	Zoning	MAP	LOT
PROPERTY OWNER(S)			
NAME			
ADDRESS			
CITY/STATE/ZIP			
PHONE		EMAIL ADDRESS	
APPLICANT			
NAME			
COMPANY			
ADDRESS			
CITY/STATE/ZIP			
PHONE		EMAIL ADDRESS	
COST OF JOB		Loads Calculated (Per NEC 220)	
TYPE OF SYSTEM			
___ <u>Non-separately derived system (in accordance with 702.11(B): neutral not switched</u>			(Portables Only)
___ <u>Separately derived system (in accordance with 702.11(A): neutral switched or opened</u>			
Amps:	Kw:	Load Shed Amount:	
Generator <input type="checkbox"/> Stand by <input type="checkbox"/> Portable		Fuel Type:	
Automatic or Manual Transfer Switch <input type="checkbox"/> Automatic <input type="checkbox"/> Manual		Interlock Kit <input type="checkbox"/> Yes <input type="checkbox"/> No	
Site Plan (required) Showing location of all structures, gas facility, wetlands, property lines, setbacks, etc.			
All work must conform to the State of NH Building and Fire Codes (2015 International Residential & Building Code), 2017 NEC, and current Chester building and zoning regulations. Articles: 110.16, 225:30, 225:31, 225:34B, 225:36, 225:37, 225:52F, 230.2(E), 250.35(A), 250.35(B), 300.5(D)(4), 300.(7)(B), all of 702; NFPA 37 and 54, UL2200 (Stationary Engines, Generators), UL2201 (Portable Engine Generators), NH Department of Safety Technical Bulletins. Inspections required.			
APPLICANT SIGNATURE			
I acknowledge that I am responsible for conformance to the New Hampshire Building and Fire Code and to the Chester building code and zoning ordinance.			
Applicant		Date	

**** OFFICE USE ONLY****

Application Received By _____

Date _____

Building Inspector _____

Date _____

Approved

Denied

PERMIT NO. _____

Amt \$ _____ Ck # _____

Date _____ Rec By _____