PERMIT REQUIREMENTS GENERATOR

Applying for a residential optional stand-by generator permit:

Forms can be downloaded from the Schuylkill Township website. An application should include a Building Permit Application, appropriate permit inserts, typical clearances, a single line diagram, and a worksheet

Please supply the information as outlined below:

1. A Building Permit/UCC Application
2. An Electrical Permit Insert
3. A Mechanical Permit Insert
4. The size and type of generator and transfer switch
5. The interconnection of all equipment. Include details such as wiring methods (cable, conduit and conductors), size of conductors and type of insulation. "Single Line Worksheet" or similar drawing. Include over-current protection devices and disconnects (size and location).
6. A diagram showing the proposed location of the generator. Include setbacks and clearances. Include all building openings and overhangs in the vicinity of the proposed location.
7. Manufacturers' specifications (installation manual) for generator and transfer switch.
8. Indicate the type of fuel (LP or natural gas), and provide information for the materials being installed and details of the installation.

If the transfer switch is automatic and does not contain "load shedding" then the worksheet must be completed. The generator must be sized to carry the full load that is transferred by the automatic transfer equipment

If the transfer switch incorporates load management, please submit documentation outlining how this is to be accomplished.

Transfer equipment must be designed and installed so as to prevent the inadvertent interconnection of normal and alternate sources of power supply in any operation of the transfer equipment.

IMPORTANT: There are specific requirements such as a mandatory interlock and proper cord connections for portable generators connected to the service panel (back feeding). Please contact the Township Building Inspector at building@schuylkilltwp.org for further information and guidance on this type of installation.

If an inspection fails, an $80.00 re-inspection fee is due prior to rescheduling.

APPROVED SPECIFICATIONS MUST BE KEPT ON-SITE DURING INSTALLATION

BACK UP GENERATOR LOAD CALCULATIONS **(SAMPLE*)**

(ALL LOADS TO BE PICKED UP BY AUTOMATIC MEANS MUST BE INCLUDED)

		QUANTITY		RATING			
Lighting Fixtures			X		watts each	=	watts/VA
Sump/well pumps	1/3hp		X	750	watts/VA	= 750	watts/VA
	1/2hp		X	1100	watts/VA		watts/VA
Refrigerator		1	X	1400	watts/VA	= 1400	watts/VA
Microwave (built-in)			X	1630	watts/VA	=	watts/VA
Dishwasher			X	1030	watts/VA	=	watts/VA
Water heater		1	X	4500	watts/VA	= 4500	watts/VA
Clothes washer		1	X	1140	watts/VA	= 11400	watts/VA
Clothes dryer			X	500	watts/VA	=	watts/VA
Other: (list)							
20 amp branch circuit		2	X	1500	watts/VA	= 3000	watts/VA
			X		watts/VA	=	watts/VA
			X		watts/VA	=	watts/VA

Subtotal	----------→		10790	watts/VA
First 10000 watts @ 100%	----------→	(A)	10000	watts/VA
Remaining watts @ 40%	----------→	(B)	316	watts/VA
Air conditioning 1380 VA	Heating equipment		5760	VA
Larger of heating or air conditioning	----------→	(C)	5760	watts/VA

Total (Add A+B+C) 16076 /1000 = 16.076 KW (17KW Minimum size generator

Total watts/VA 16076 / 240 = 66.9 Amps required

***SAMPLE only. Please calculate with actual load requirements and considerations.**

BACK UP GENERATOR LOAD CALCULATIONS

(ALL LOADS TO BE PICKED UP BY AUTOMATIC MEANS MUST BE INCLUDED)

		QUANTITY		RATING			
Lighting Fixtures		_____	X	_____ watts each	=	_____	watts/VA
Sump/well pumps	1/3hp	_____	X	_____ watts/VA	=	_____	watts/VA
	1/2hp	_____	X	_____ watts/VA		_____	watts/VA
Refrigerator		_____	X	_____ watts/VA	=	_____	watts/VA
Microwave (built-in)		_____	X	_____ watts/VA	=	_____	watts/VA
Dishwasher		_____	X	_____ watts/VA	=	_____	watts/VA
Water heater		_____	X	_____ watts/VA	=	_____	watts/VA
Clothes washer		_____	X	_____ watts/VA	=	_____	watts/VA
Clothes dryer		_____	X	_____ watts/VA	=	_____	watts/VA
Other: (list)							
_____		_____	X	_____ watts/VA	=	_____	watts/VA
_____		_____	X	_____ watts/VA	=	_____	watts/VA
_____		_____	X	_____ watts/VA	=	_____	watts/VA

Subtotal	----------→			_____	watts/VA
First 10000 watts @ 100%	----------→		(A)	_____	watts/VA
Remaining watts @ 40%	----------→		(B)	_____	watts/VA
Air conditioning	_____ VA	Heating equipment		_____	VA
Larger of heating or air conditioning	----------→		(C)	_____	watts/VA

Total (Add A+B+C) _____ /1000 = _____ KW (17KW Minimum size generator

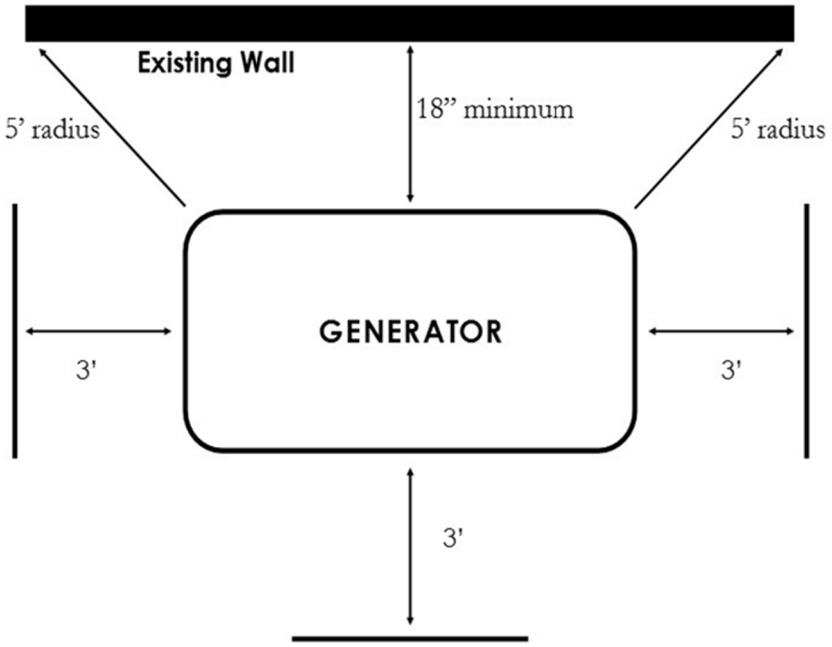
Total watts/VA _____ / 240 = _____ Amps required

Typical Clearances for Stand-By Generators

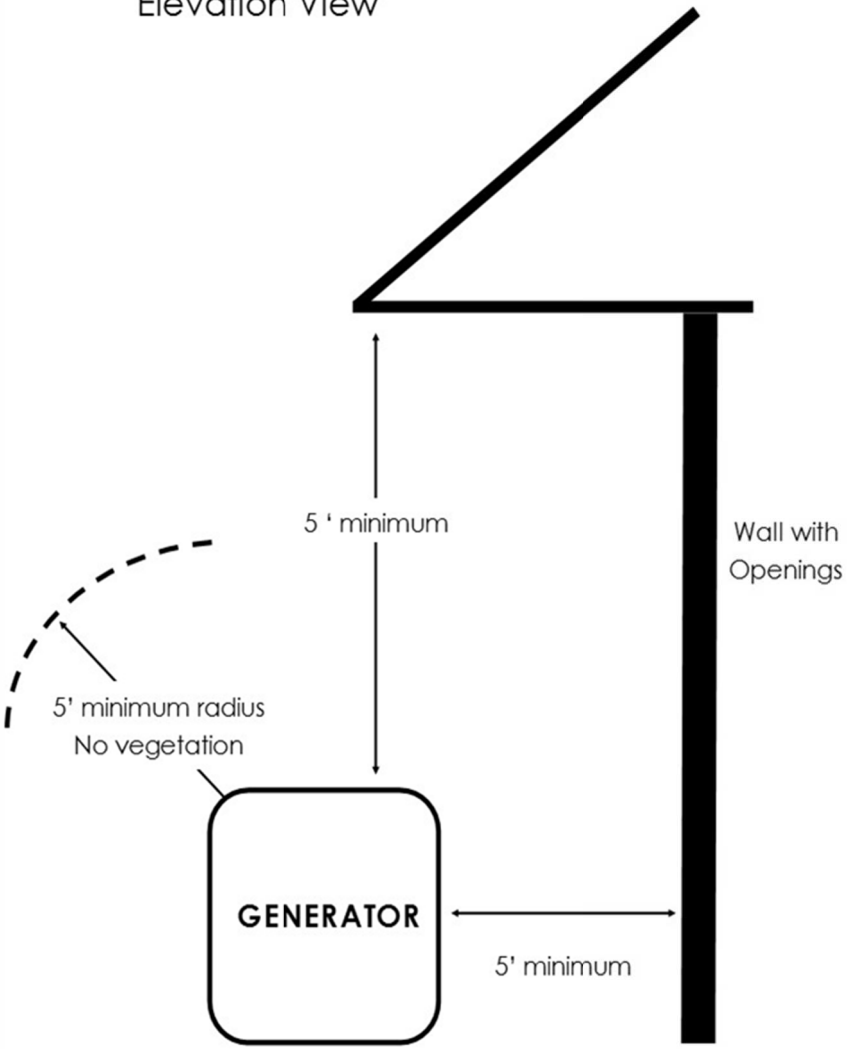
(follow manufacturers' specifications)

Plan View

* No openings in the wall permitted within 5 feet of the generator



Elevation View



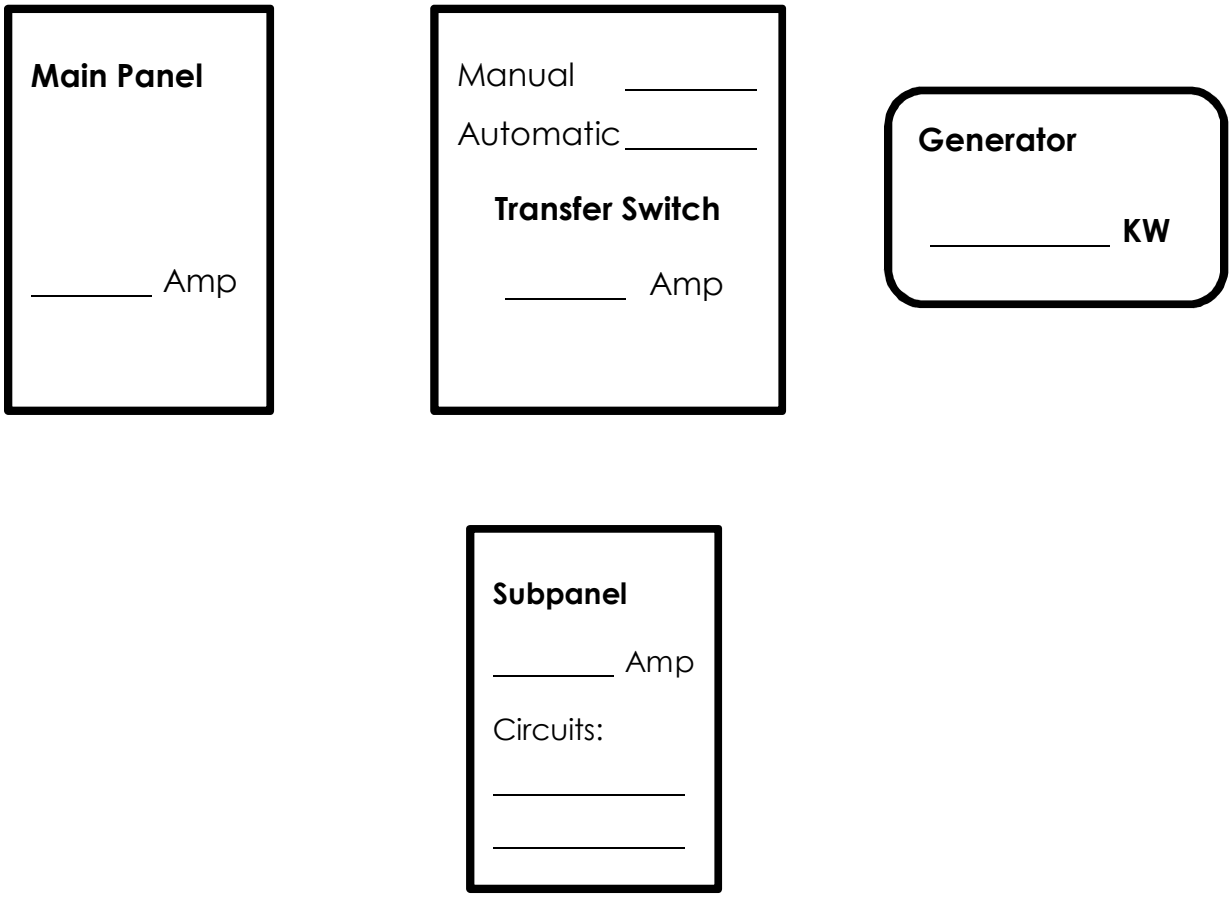
3' Clearance from ends and front of generator.

This includes vegetation 12" and shorter.

Vegetation taller than 12" must have a clearance of 5'.

GENERATOR SINGLE LINE

Service Size: _____



- Connect all applicable components.
- List size and type of cable, or conductors and wiring method.
- Indicate grounding/bonding.