

**GENERAC**<sup>®</sup>  
POWER SYSTEMS, INC.

**GENERATOR  
INSTALLATION  
PROGRAM**



life is **better** with power

[www.SuperiorAtHome.com](http://www.SuperiorAtHome.com)

**Superior**<sup>®</sup>  
**HEARTH, SPAS & LEISURE**

353 West Main Street (Route 44), Avon • Toll Free: (888) SPAS-288  
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## THE BEST STANDBY GENERATOR ON THE MARKET

“GENERAC AND ITS PARTNERS ARE COMMITTED TO ENSURING OUR CUSTOMERS PEACE OF MIND BY DELIVERING A SUPERIOR PRODUCT AND OWNERSHIP EXPERIENCE.”

### Partner With The **GENERATOR EXPERTS**

When it comes to protecting your family and your property from power outages, you want nothing less than the best. That's why 4 out of 5 homeowners turn to Guardian by Generac Power Systems when purchasing an automatic home standby generator for their homes. We didn't get to be number one by being like everyone else. Power generation is our only business, and it has been for half a century. Our generators provide the highest quality, the best reliability, the most advanced features and the best value in the industry. Our Generator Installation Program assures you the same high quality ownership experience.



### Generac's Customer **COMMITMENT**

Generac's commitment to its customers extends beyond the generator purchase. A nationwide dealer network, staffed with factory trained technicians, provides unsurpassed service and support. Our dealers also maintain inventories of Generac replacement parts and accessories so your home continues to be protected from power outages for years to come.

# GENERATOR INSTALLATION PROGRAM



## What is the Generac Generator Installation Program?

The Generac Generator Installation Program was designed to align the homeowner or purchaser of Generac generators with a local authorized installer of Generac products. When you purchase an installation package along with the generator and transfer switch, you will be ensured a timely and proper installation of your newly purchased automatic home standby system by a qualified local authorized installer. Generac factory-authorized installers are knowledgeable in all aspects of the generator installation. Depend on our experts to get the job done!

## How does the program work?

It's easy! When you purchase a Generac installation package, we automatically assign your installation to a qualified local authorized installer. They have factory trained technicians on staff experienced in the proper installation techniques to install your standby generator system. They are experts in their field and will guide you through everything from site preparation, electrical connections and installation to any additional costs that may arise from a non-typical installation. They will also discuss scheduled maintenance and warranty options to help you protect your investment.

## What's included?

Your Generac installation package includes installation preparation, electrical connections, and materials. It does not include permits and fuel connection. While the functions of an automatic standby generator may be basic for the average do-it-yourselfer, we recommend the installation be completed by a licensed electrical professional to ensure warranty eligibility. Your installation package includes:

- Consultation
- Job Site Preparation
- Generator Placement
- Basic Electrical Installation
  - Installation of transfer switch within:
    - 2 feet of main electrical panel
    - 30 feet of generator
  - Connection of selected circuits determined by consultation
- Basic Materials
- Testing & Startup
- Job Site Cleanup
- Final Walk-through





## CHOOSING YOUR GENERATOR

### Which Generator is Right For You? **SELECT YOUR SYSTEM**

The most important aspect of your generator purchase is identifying the correct size. To avoid inaccuracies when accounting for the number of circuits and voltage requirements, take the time to perform the following power outage simulation and complete the worksheet on the following page.



### How to determine your backup power requirements

#### **Select the circuits or appliances you want to back up.**

Start by simulating a power outage. Turn off all of your electrical panel circuit breakers in your home and walk through each room (with a flashlight if needed) to determine what you will want to power in the event of an outage. Using the Generator Sizing worksheet provided, record the areas/items you selected to back up, match them to the appropriate circuit breaker on your main distribution panel and record the amp rating. A main distribution panel diagram is provided for reference. Then compare your selections with the product selection table to identify the system that is right for you.

#### **Information for your installer**

If you want to back up your air conditioner, furnace, well or sump pump, or other motor-driven devices during a power outage, record the appliance starting and running power requirements listed by the manufacturer on the data plate mounted to the exterior of the unit. This information will be useful to your installer.

#### **The difference between starting watts and running watts**

Running watts refers to the power required to keep an item running continuously after it starts. Starting watts refers to the additional power required for two or three seconds to start motor-driven items such as air conditioners, refrigerators and well pumps.

#### **Should I consider the starting power requirements for every motor-driven item in the house?**

No. You only need to consider the motor-driven item with the highest starting requirement. Residential electrical loads are highly cyclical and typically, only one significant item will start or cycle at any given time. If the generator has enough power to start your largest motor load, it will certainly start the smaller ones. However, if you are backing up the whole house, we recommend that you select a generator that is 15-20% larger than your current requirement. That will ensure sufficient power in the unlikely event that two or more motor-driven items attempt to start simultaneously and will accommodate the addition of new appliances. For applications that require a higher than average number of motor-driven items, a 20 kW system with our load shedding transfer switch may be recommended.

# GENERATOR SIZING GUIDE



Select each of the following items you wish to power. Record the amp rating for each item by referring to the corresponding circuit breaker located in your main distribution panel. (see example)

**120V Circuits:** 120 volt circuits are normally protected by a 15 or 20 Amp rated circuit breaker.

	Back Up	CIRCUIT BREAKER AMPS	
		15 Amps	20 Amps
Kitchen Lights/Outlets <sup>1</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Refrigerator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Freezer (additional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Window Air Conditioner <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family Room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Living Room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Master Bedroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bedroom 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bedroom 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bathroom 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bathroom 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Garage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Home Office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Basement Lights/Outlets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Furnace	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sump pump	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**240V Circuits:** Appliances and equipment powered by 240 volt circuits normally have amp ratings ranging from 20 to 50 Amps. The items you want to back up may have circuit breaker amp ratings which, in total, may significantly increase the size of the generator required. 240V circuits are connected in the middle and utilize two circuit breakers.

	Back Up	CIRCUIT BREAKER AMPS			
		20 Amp	30 Amp	40 Amp	50 Amp
Central Air Conditioner <sup>3</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electric Water Heater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electric Dryer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electric Range	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Well Pump	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Garage Heater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electric Heat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Total Breaker Count	120V		240V			
	15 Amp Breaker	20 Amp Breaker	20 Amp Breaker	30 Amp Breaker	40 Amp Breaker	50 Amp Breaker

Compare your total breaker count for each amp rated circuit breaker to the table below and select the generator size that corresponds to your circuit breaker amp requirements.

**Product Selection Table**

Generator System		120 Volts <sup>1</sup>		240 Volts (consists of 2 breakers)			
kW	# of breakers	15 Amp	20 Amp	20 Amp	30 Amp	40 Amp	50 Amp
8	8	5	1		1		
10	10	3	3	1	1		
14	14	4	4	1		1	1
17	16	5	5	1		1	1
20*	16	5	5	1		1	1
20**	LTS Load Shedding Transfer Switch	Whole House*					

\* Consult with your authorized installer to ensure local code compliance

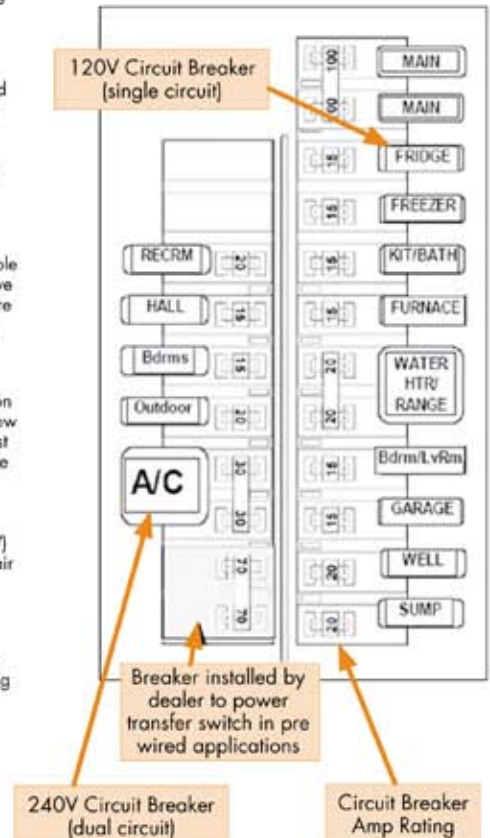
\*\* System comes with a load shedding transfer switch and is required to back up your entire circuit panel. The LTS Switch meets 2008 NEC requirements adopted in various states and municipalities.

<sup>1</sup> Most kitchens require multiple circuits. Items like microwave ovens and coffee makers are covered by the outlets they are plugged in to.

<sup>2</sup> Although it is not normally on a dedicated circuit, a window air conditioner may use most of the available power of the circuit the outlet is on. The window A/C may be an option for use with smaller generators (8 kW to 10 kW) where coverage of central air is not possible.

<sup>3</sup> Central Air Conditioner. Check your air conditioner's starting requirements. Starting requirements for older and/or less efficient equipment may exceed recommended generator capability. For backing up central air conditioning, systems of 17 kW and up are recommended.

**Main Distribution Panel**





## IMPORTANT DETAILS TO DISCUSS

### What Should You **DISCUSS WITH THE INSTALLER?**

Once you purchase your Guardian automatic standby generator system and the Generac installation package, your factory authorized installer will contact you to review important details regarding the installation. Understanding the installation process will ensure an efficient, timely installation and an accurate breakdown of installation costs. Remember to discuss these important details with your authorized installer:

#### **List of Circuits You Want to Protect**

Provide the installer with the worksheet listing the circuits you have chosen to protect during a power outage.

#### **Main Distribution Panel Brand**

Provide your installer with the main distribution panel brand (i.e. Siemens, Square-D) so your installer can supply the proper breaker for your system.

#### **Fuel Connections**

Your generator will be fueled by either natural gas or liquid propane. Fuel connections and any required meter upgrades must be completed by your local fuel supplier prior to the generator installation, as they are not included in the Generac installation package.

All associated fuel connection costs are the responsibility of the customer. Your authorized installer can help you obtain a quote and submit the proper paper work. Your installer can also schedule the fuel supplier. Charges will be billed directly to you for this service by our factory-authorized installer or fuel provider, whichever is agreed upon.

#### **Clear Level Site for Generator Placement**

A clear and level site for generator placement must be provided prior to installation. Discuss the proper generator location with your authorized installer. They can help you determine the ideal setting for your generator and ensure that it complies with all applicable codes.

The work area must be clear on the day of installation or you may incur additional fees from your authorized installer.

#### **Permit and Inspection Fees**

Your local authorized installer can facilitate permit and inspection applications. Fees for any applicable permit and inspections vary by municipality and are the responsibility of the homeowner.

Customers may be requested to be present for these installation steps:

- Fuel line installation
- Electrical installation/start-up and training
- Gas/electric final inspections, as required
- Gas meter upgrade/propane tank installation, as required

#### **Extended Warranty and Maintenance Contracts**

Extended warranty and scheduled maintenance contracts provide added protection for your automatic standby generator. Motorized equipment requires maintenance to ensure optimal performance. Your generator is no different. An extended warranty assures you additional protection covering parts and labor for four years and parts only in the fifth year. Protect your investment with scheduled maintenance and an extended warranty.

**5** year extended warranty

# GENERATOR INSTALLATION PROGRAM



## What additional costs may be incurred?

Costs and local code requirements vary resulting in additional expenses that are not included in your installation package. Average additional costs may range from \$500 and up due to fuel requirements and the adherence of local, state and national codes. Your authorized installer will assist you in obtaining quotes and coordinating these additional services:

- Additional interior/exterior wiring for generator installations that exceed placement of transfer switch 2 feet from electrical panel and 30 feet from generator
- Additional materials to meet local installation codes
- Custom labor (i.e. trench work)
- Landscaping
- Additional work and materials to comply with all applicable building codes
- Additional equipment rental (i.e. crane for generator placement)
- Additional sub-panels and/or NEMA 3R outdoor/indoor rated transfer switch

## How do I schedule my generator installation?

Once you have purchased the installation package, your installation is assigned to a local authorized installer, who will contact you in five business days to review the installation details. Your authorized installer will assist with everything from sizing and site preparation for a typical installation, to detailing and coordinating additional services and costs that may be associated with a non-typical installation. Your installer will review the following:

- Circuits you have selected to protect
- Motor starting and running requirements for select appliances
- Generator placement location
- Building and local code requirements and permits
- Fuel source requirements
- Generator startup and testing procedures, including the simulation of a power outage to monitor proper transfer of power to and from the generator to the utility

## What happens after installation and start-up?

Your authorized installer will review the work completed, clean the installation site, and perform a walk-through demonstration of the system to ensure that you understand how the entire system functions. They will coordinate any required inspections of the installation to validate code compliance and obtain the necessary approvals.

### Remember to:

- Schedule annual maintenance and inspection of your automatic standby generator to assure optimal performance.
- Complete the product registration to maintain your product warranty and qualify for our monthly drawing to win a **free** maintenance kit. Click on "**Product Registration**" on the **generac.com** home page or mail the registration card found in the owners manual. You will be eligible for the monthly drawing when you submit your registration.

Tell friends and neighbors and receive a \$50 "Protect Your Neighbor Referral Rebate" for every referral that results in the purchase of a Generac home standby generator. Your neighbor receives a \$50 rebate too! Rebate forms are included with your generator manuals and documents upon delivery.

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