

When asking yourself whether or not you need a whole house generator, consider this: 3.5 million Americans are left without power in any given week. Many households experience up to five power outages annually.

Power outages can wreak havoc with your home: burst pipes, freezing or sweltering temperatures, loss of lighting, spoiled food – all puts family members at risk as does loss of safety alarms. Add to that the possibility of a home-based business going dark for a few days and computer data loss, and the result can be costly and frustrating.

A loss of electricity can be particularly hard on older adults, who are susceptible to hypothermia -- below normal body temperature -- as well as hyperthermia -- exceptionally high fever -- during temperature extremes. A loss of power also can prevent older people from using relied-upon medical supplies such as nebulizers. In addition, a power outage can result in spoiled food and busted pipes -- as well as no TV, phone and computer service -- for all people.

Whole house generators kick in automatically in the event your home goes off the grid. They supply the energy your family needs to keep operating normally until the power is restored. They also add value to your home. All things considered, they're worth their weight in gold.

How it works

Whole house generators work off fuels such as natural gas or liquefied petroleum gas (LPG). Your fixed standby generator is connected to your home's electrical wiring (usually indoors) and the fuel source. It may be started automatically or manually. The advantages of an automatic system are obvious. The 'auto transfer switch' detects a power outage and starts itself. When the grid voltage is restored, the system will connect you back to the utility lines and turn itself off. The process should be seamless with a transfer time of about 30 seconds or less.

Choosing Your Whole House Generator

Standby generators are connected and ready to go. They may be started by the push of a button or set on automatic. Standbys come in a variety of sizes and workload capacities. Rating ranges from five kilowatt up to hundreds of kW. This makes them far superior to portables and the best choice for long-lasting outages.

Look for generators with a built-in transfer switch. This will ensure that you do not have to turn the unit on by hand in the event of an outage.

Durability is important. Generators made from stainless steel resist corrosion better than those made from aluminum or carbon steel.

Inquire about fuel efficiency. Units using a revolving field to generate power operate near 25 percent more efficiently than units using a revolving armature. This reduces fuel costs and saves you money. Your choice of fuel is important too. What fuel is readily available in your area? Which is cheapest?

Standby generators require professional installation. Standbys come with their own platform but larger sizes may require a concrete foundation for stabilizing. Fuel tanks are usually placed 3 to 5 feet from the house. And as generators will produce some sound while operating, you will want to place the unit near a garage or at least away from bedroom windows should it have to run overnight.

Your generator choice will depend on the size of your house and the amount of electrical appliances you want to keep operating during an outage. Installing a generator before the next big storm will ensure you'll worry less as we go through the summer. Plus you'll enjoy peace of mind that your home and family is safe.

What else do you need to know?

1. Before you go shopping for a generator, decide what critical elements in your home you are trying to back up -- things like refrigerators, freezers, and furnaces -- because that will determine what you wind up buying.
2. Don't forget that most portable generators under 5,000 watts use a pull cord to start the engine. If this will be hard for you physically, you might want to consider a model with an electrical start.
3. Whole house generators operate with the use of fuels such as natural gas or liquefied petroleum gas. Permanent standby generators can be connected to your natural gas service or propane tanks can be put in to provide the fuel.
4. Most people prefer generators with a built-in transfer switch so that you don't have to turn the unit on by hand when and if your power goes out.
5. Remember that installation will require a large space to place the unit, near the electrical service into the house.