



WATTAGE WORKSHEET

When selecting a Home Generator System, you need to calculate both your watts and starting wattage requirements. Watts, or running wattage, is the amount of electricity necessary to run your appliance continually. Starting wattage is the additional amount of electricity needed for 2-3 seconds to start electric motors commonly found in household appliances (such as a furnace fan or refrigerator). Since appliances rarely start up at the same time, you will only need to factor in the appliance with the highest additional surge watts.

Follow these simple steps to estimate your particular wattage requirements.

1. Select the items you wish to power at the same time. Using the chart on the back page, fill in the watts and additional starting watt requirements on the “Your Power Needs” worksheet.

2. Add the **WATTS** of the items you wish to power. Enter this number in the **TOTAL WATTS** column.

3. Select the **ONE INDIVIDUAL ITEM** with the highest number of additional starting watts. Take this **ONE NUMBER**, add it to your **TOTAL WATTS**, and enter the total in the **TOTAL WATTS** box.

EXAMPLE

TOOL OR APPLIANCE	WATTS	STARTING WATTS
1. Refrigerator/Freezer	800	1600
2. 1/2 HP Furnace Fan	800	1300
3. Deep Freezer	500	500
4. Television	500	-
5. Lights (6 x 75 watts)	450	-
6. Central AC 24000 BTU	3800	4950
7.		
8.		
9.		
10.		

TOTAL WATTS =

Highest Additional Starting Watts

+

Total Watts

=

Total Watts Required

With this example you need a generator that produces at least 6850 total watts and 11,800 total starting watts.

YOUR POWER NEEDS

TOOL OR APPLIANCE	WATTS	STARTING WATTS
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

TOTAL WATTS =

Highest Additional Starting Watts

+

Total Watts

=

Total Watts Required

I need a generator that produces at least _____ total watts and _____ total starting watts.



WATTAGE WORKSHEET

What if I can't determine the watts or the starting watt requirement for a tool or appliance?

If the running/starting watts are not indicated on the tool or appliance, you may estimate using the following equation: $WATTS = VOLTS \times AMPS$. Only motor-driven items will have an additional starting requirement. The additional starting watts required may be estimated at 1 - 2x the rated/running watts.

Why is only one additional starting watt item used to calculate your total starting watt requirement?

Unlike regular (running) watts, starting watts are only needed during the first few seconds of operation. In most cases, only one item will start or cycle at the same time, therefore this is the most accurate estimate. The guide below lists running and starting watt totals separately to help you determine which tool or appliance represents your total wattage requirements.

TOOL OR APPLIANCE	RUNNING WATTS	ADDITIONAL STARTING WATTS	TOOL OR APPLIANCE	RUNNING WATTS	ADDITIONAL STARTING WATTS
Home			Office Equipment		
Light Bulb - 75 Watt	75	-	Personal Computer with 17" Monitor	800	-
Deep Freezer	500	500	Fax Machine	65	-
Sump Pump	800	1200	Laser Printer	950	-
Refrigerator/Freezer	700	1500	Inkjet Printer	80	-
Water Well Pump 1/3 HP	1000	2000	Copy Machine	1600	-
Heating/Cooling			Other		
Space Heater	1800	-	Security System	180	-
Table Fan - 14"	200	400	AM/FM Clock Radio	100	-
Ceiling Fan	800	1200	Garage Door Opener - 1/2 HP	480	520
Furnace Fan Blower 1/2 HP	800	1300	Hair Dryer - 1250 Watt	1250	-
Window AC - 10,000 BTU	1200	3600	Electric Water Heater - 40 Gallon	4000	-
Window AC - 12,000 BTU	3250	9750	Do-It-Yourself Jobsite		
*Central AC - 10,000 BTU	1500	4500	Quartz Halogen Work Light	1000	-
*Central AC - 24,000 BTU	3800	4950	Airless Sprayer - 1/3 HP	600	1200
*Central AC - 40,000 BTU	6000	18000	Reciprocating Saw	960	-
Heat Pump	4700	4500	Electric Drill - 1/2 HP	1000	1000
Kitchen			Circular Saw - 7 1/4"	1500	1500
Microwave Oven - 1000 Watt	1000	-	Miter Saw - 10"	1800	1800
Coffee Maker	1500	-	Planer/Joiner - 6"	1800	1800
Electric Stove - Single Element	2100	-	Table/Radial Arm Saw 10"	2000	2000
Dishwasher - Hot Dry	1500	1500	Air Compressor - 1 1/2 HP	2500	2500
Family Room			<i>The above are estimates only. Check your tool or appliance for exact wattage requirements. The wattages listed in our reference guide are based on estimated wattage requirements. For exact wattages, check the data plate or owner's manual on the item you wish to power.</i>		
DVD/CD Player	100	-			
VCR	100	-			
Stereo Receiver	450	-			
Color Television - 27"	500	-			
Laundry Room					
Iron	1200	-			
Washing Machine	1150	2250			
Clothes Dryer - Electric	5400	1350			
Clothes Dryer - Gas	700	1800			

* Please consult an electrician for your particular AC requirements.



UNIT POSITIONING GRAPH

Local Permits

Type	Agency Responsible for Permit	Permit Number
Building		
Electrical		
Fuel		
Local		
Utility		

Fuel Selection - Natural Gas Liquid Propane

Is Fuel Supply Adequate? If no, fill in chart

Condition	Corrective Action	Projected Cost

Unit Location - Draw building and placement of Home Generator unit. Indicate any special objects or items that require caution. **Note: Minimum of 5' from building or combustible materials.** If propane tank is required, indicate location.



COMPONENT PLACEMENT PLANNING

Transfer Switch Location -

Draw new or existing main circuit breaker panel. Indicate placement of transfer switch or other accessories.

A large rectangular grid for planning the transfer switch location. The grid consists of 30 columns and 40 rows of small squares, providing a detailed area for drawing the main circuit breaker panel and indicating the placement of the transfer switch or other accessories.

Remote System Status Indicator -

Draw location where LED status indicator should be placed in building.

A large rectangular grid for planning the remote system status indicator location. The grid consists of 30 columns and 40 rows of small squares, providing a detailed area for drawing the location where the LED status indicator should be placed in the building.



ELECTRICAL LOAD WORKSHEET

Priority	120VAC Electrical Appliances	Priority	240VAC Electrical Appliances
	Window Air Conditioner 1		Central Air Conditioner 1
	Window Air Conditioner 2		Central Air Conditioner 2
	Window Air Conditioner 3		Range/Stove
	Refrigerator 1		Dryer
	Refrigerator 2		Well Pump
	Freezer 1		Dryer
	Freezer 2		Hot Tub
	Microwave		Water Heater
	Bathroom		Other:
	Auxiliary Heater		Other:
	Home Theater System		Other:
	Garage Heater		
	Sink Water Heater		
	Sewage Lift Pump		
	Other:		
	Other:		
	Other:		

IMPORTANT: DO NOT connect furnace and sump pump to power management system.