

# 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 =	6850	4950
		Highest Additional 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
I need a generator that p at least total wa and total startin	produces atts ag 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.



Required



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

\* Please consult an electrician for your particular AC requirements.



**Amp Service)** 

## **ON-SITE ESTIMATE WORKSHEET**

Date	Quote Number		
Customer Information	:	Dealer Information:	
Customer Name		Dealer Name	
Address		Address	
Home Phone No		Home Phone No.	
Work Phone No		Work Phone No	
Cell Phone No		Cell Phone No.	
E-Mail		E-Mail	
		Web Address	

Existing Circuit Box Number	Circuit Description	Wattage Used
	Total Wattage	
	Starting (Surge) Wattage	



## **UNIT POSITIONING GRAPH**

#### **Local Permits**

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

Fuel Selection -		Natural Gas		Liquid Propane
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### Is Fuel Supply Adequate? If no, fill in chart

Condition	Corrective Action	<b>Projected Cost</b>

**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.

#### **Remote System Status Indicator -**

Draw location where LED status indicator should be placed in 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.