

## Average electrical usage of many common appliances

### AC Appliances

- Blender - 350 watts
- Coffee Maker - 1200 watts
- Dishwasher - 1200 watts
- Evap Cooler small - 240 watts
- Freezer - 450 watts
- Hair Dryer - 500 to 1500 watts
- Iron - 1000 watts
- Lights, fluorescent - 8 to 40 watts
- Lights, incandescent - 40 to 150 watts
- Microwave - 600 to 1000 watts
- PC Computer and monitor - 250 watts
- Power Drill - 240 watts
- Radio - 10 watts
- Refrigerator, 14 cu ft. - 350 watts
- Stereo - 40 to 100 watts
- Television, 19 inch color- 150 watts
- Toaster - 1100 watts
- Vacuum Cleaner, large - 1250 watts
- Washing Machine - 450 watts

### DC Appliances

- Blender - 80 watts
- Ceiling Fan - 25 watts
- Fan, 8 inch - 15 watts
- Lights, fluorescent - 8 to 40 watts
- Radio, Tape Player - 35 watts
- Refrigerator, high efficiency- 65 watts
- Television, color 10 inch- 60 watts
- Submersible Pump - 150 to 1200 watts



Change a few habits and use Energy Efficient Lights and Appliances and save BIG \$\$

## DC WIRE SIZING ( The sizes are approximately correct )

AMPS	Wire Size									
	14 GA	12 GA	10 GA	8 GA	6 GA	4 GA	2 GA	1/0.	2/0	4/0.
	.292	.292	.292	.292	.292	.292	.292	373	.419	528
1	45	70	115	180	290	456	726			
2	22.5	35	57.5	90	145	228	360	580	720	1060
4	10	17.5	27.5	45	72.5	114	180	290	360	580
6	7.5	12	17.5	30	47.5	75	120	193	243	380
8	5.5	8.5	11.5	22.5	35.5	57	90	145	180	290
10	4.5	7	9.5	18	28.5	45.5	72.5	115	145	230
15	3	4.5	7	12	19	30	48	76.5	96	150
20	2	3.5	5.5	9	14.5	22.5	36	57.5	72.5	116
25	1.8	2.8	4.5	7	11	18	29	46	58	92
30	1.5	2.4	3.5	6	9.5	15	24	38.5	48.5	77
40			2.8	4.5	7	11.5	18	29	36	56
50			2.3	3.6	5.5	9	14.5	23	29	46
100					2.9	4.6	7.2	11.5	14.5	23
150							4.8	7.7	9.7	15
200							3.6	5.8	7.3	11

This chart is for sizing stranded wire for a 2% voltage drop in 12 volt systems. Double the lengths for 24 volt systems and quadruple it for 48 volt systems. Although a 5% voltage drop is acceptable for AC systems, 2% is the standard for PV systems due to the savings of efficiency.