

How to Calculate Power Requirements

To understand the total amperage (amps) required to supply power to a group of workstations, calculate the total you'll need by adding up the amps required for each piece of equipment that will actually be used in the workstations. Keep in mind that if the devices will be typically used continuously for three or more hours at a time (lights, computers, etc), you must, according to the National Electric Code, "de-rate" the total circuit capacity by 20 percent. For example, for each 20 amp circuit, 16 amps (20 amps X .80 = 16 amps) is the maximum "available", rather than the full 20 amps.

Amperages for Common Office Equipment

Equipment Type	No. Amps Required
Clock	.03
Radio	.05
Adding Machine	.05
Answering Machine	.08
Calculator	.25
Pencil Sharpener	.25
Task Lights	.20 to .50
Fan	1.00
Coffee Maker	10.00
Computer	.08 to 12.00
Printer	1.00 to 12.00
Microwave Oven	8.00 to 12.00

Additional Notes:

1. If you don't know the exact amperage a device will require but do know its wattage, you can calculate the number of amps by dividing the watts by 120 (e.g. a light fixture with a 100 watt bulb requires .833 amps— $100 / 120 = .833$).
2. The National Electric Code allows a maximum of 13 electrical outlets for each 20 amp circuit.
3. The table above should be used as a guide only. The actual equipment should be used to determine the power requirements.
4. Codes and regulations vary by jurisdiction. Be sure to check your local Code regulations before determining your actual needs.