



Make sure your extension cord is the right one for the job

Overloaded, misused extension cords create serious safety hazards

Not all extension cords are created equal. In fact, even cords that look alike might have been designed with entirely different uses in mind. Using an extension cord just because it's long enough or because its plug happens to fit the nearest electrical outlet might be convenient, but it also might be creating a shock or fire hazard.

The safety professionals at Underwriters Laboratories Inc. (UL) encourage consumers to ask themselves three important questions before plugging in any extension cord:

Will I use the cord indoors or outdoors?

What is the total wattage rating of the appliances I'll use with the cord?

How far is the nearest outlet from where I'll be working?

Extension cords are labeled with valuable information as to the use, size and wattage rating of the cord. Cords are offered in many lengths and are marked with a size or "gauge." The gauge is based on the American Wire Gauge (AWG) System, in which the larger the wire, the smaller the AWG number. For example, a 12-gauge wire would be larger and can power larger wattage appliances than a 14-gauge wire.

Before deciding which extension cord to use, read the manufacturer's instructions for the power tools you will be using. These booklets contain important information about your tools and provide helpful tips on their use and care. The booklets also indicate whether the tools are suitable for use outdoors.

Likewise, the first step in determining which extension cord you need is to decide whether you are using the appliance indoors or outdoors. Extension cords that can be used outdoors are clearly marked "Suitable for Use with Outdoor Appliances." Never use an indoor extension cord outdoors; it could result in an electric shock or fire hazard.

To determine what size -- or gauge -- cord you need, you also have to determine how long you need the cord to be. A cord, based on its gauge, can power an appliance of certain wattage only at specific distances. As the cord gets longer, the current carrying capacity of the cord gets lower. For example, a 16-gauge extension cord less than 50 feet long can power a 1625 watt (W) appliance. A 16-gauge cord that is longer than 50 feet long can power an appliance up to only 1250W.

All appliances indicate how much wattage is consumed when operated; that rating can be found on the appliance itself and often within the instruction manual that accompanies the product. Other appliances will indicate power usage in amps, rather than watts. Quick tip: If your appliance indicates that it uses 5 amps at 125 volts, then its wattage rating is 625W (5x125).

If you are going to use the extension cord with two or more appliances, you must add together the wattage rating for all appliances used on the cord. The total of those wattage ratings will help you determine which gauge size you will need.

Follow these additional safety tips when using extension cords with power tools and garden appliances.

- Look for the UL Mark on extension cords you purchase. The UL Mark means that representative samples of the cord have been tested for foreseeable safety hazards.
- Store all cords indoors when not in use. Outdoor conditions can deteriorate a cord over time.

- Never keep an extension cord plugged in when not in use. The cord will still conduct electricity until it is unplugged from the outlet.
- Most newer, indoor cords with more than one outlet have covers for the unused openings - use them. Children and pets face serious injury if they chew on unused outlets or stick sharp metal objects into the openings.
- Do not use extension cords that are cut or damaged. Touching even a single, exposed strand of wire can give you an electric shock or burn.
- Never file or cut the plug blades or grounding pin of an extension cord or appliance to plug it into an old outlet.
- As a safety feature, extension cords and most appliances have polarized plugs (one blade wider than the other). These special plugs are designed to prevent electric shock by properly aligning circuit conductors. If a plug does not fit, have a qualified electrician install a new outlet.
- By using extension cords properly, you and your family can enjoy longer, safer use of your power tools and garden appliances.

For more consumer safety information, visit <http://www.ul.com/regulators/pubedu.html>

Underwriters Laboratories Inc. (UL) is an independent, not-for-profit testing and certification organization that has been working for a safer world by evaluating products, materials and systems for more than a century.