Flexible Cords
Before using flexible cords inspect them to make sure they are in good condition.

The cord to the right has at least 4 things that are wrong with it, any of which warrant not using the cord. Can you identify them?
The outer insulation is missing or has been penetrated. To repair a cord like this a qualified individual would need to restore the cords’ insulation, outer sheath properties, and usage characteristics (e.g. waterproof, strength, flexibility, etc.).

Don't use black “electric tape” or duct tape on cords. Placing such tape on a cord makes it so that you can't perform a proper visual inspection. Also, the tape can change the impedance characteristics of the cord & does not maintain a water tight seal.
Splices

Don’t splice cords. Doing so can create a fire and/or shock hazard.

If spliced incorrectly the polarity may be reversed or the ground circuit damaged.

And, if the wrong gage wire is used the cord may heat up and catch on fire.

29 CFR 1910.305(g)(2)(ii)
Exposed Conductors

Cord connections are bare.

Using bare connections like this presents shock and fire hazards.

29 CFR 1910.305(g)(1)(ii) - the flexible cord shall be equipped with an attachment plug and shall be energized from an approved receptacle outlet.
Non-metallic flexible wiring such as this is intended for use as residential wiring. This is the type of wiring found within the walls of your home and is stamped with markings such as NMC or NMB.

Using it as an extension cord can present a fire hazard because the internal wires can break if the cord is flexed enough. A shock hazard can also be present if the jacket becomes brittle.
Other Things To Look For

Don’t use flexible cords if:

The cord was manufactured with a ground pin but the pin is no longer intact or it has been bypassed. (Shock Hazard)

And / Or

The outer insulation is pulled from the plug end. (Fire Hazard)
Self made cords may:

1. Be wired wrong and result in:
   - Reverse polarity;
   - An interrupted ground circuit

2. Consist of the wrong components like:
   - Wire (gage)
   - Plug ends
   - Boxes (like that pictured)
If you must pass a cord through a door (for a temporary application) then the cord must be protected from being pinched and stepped on. This can be done by fastening the door open, positioning the cord properly, and if necessary using a protective cord cover.

Never place a heavy or sharp object on electrical cords, and don’t place electrical cords under carpets or rugs (they need to dissipate heat).

Use protective cord covers if cords would be stepped on and/or create a trip hazard.
Improper Machines, refrigerators, microwaves, etc. must be plugged directly into structure wiring (e.g. fixed receptacle).

Using a multioutlet strip like that pictured allows more load to be placed on the circuit thus increasing the likelihood of overloading the circuit and causing a fire.

29 CFR 1910.305(g)(1)(iii)
Multi-outlet strips with surge protection can be used to protect electronic equipment (e.g. computers) that need surge protection.
Use extension cords to power portable powered hand tools, or temporary lighting.

As a general rule, use for 90 days or less is considered temporary.

All extension cords used outdoors, or in damp or moist locations, must be protected by a ground fault circuit interrupter (GFCI)
Never plug in or unplug an electric cord with wet hands.

http://www.cdc.gov/niosh/face/in-house/full8417.html - Documented fatality. Individual was plugging in a 110 VAC toaster. Preparations were being made to prepare the restaurant for business the following day, the floor had just been mopped, and the worker had wet hands.