

- (1) To connect appliances to facilitate their frequent interchange or to prevent the transmission of noise or vibration.
- (2) To facilitate the removal or disconnection of appliances that are fastened in place, where the fastening means and mechanical connections are specifically designed to permit ready removal for maintenance or repair and the appliance is intended or identified for flexible cord connection.
- (3) All cord-and-plug-connected electrically heated appliances that produce temperatures in excess of 121°C (250°F) on surfaces with which the cord is likely to be in contact shall be provided with one of the types of heater cords listed in Table 400.4.

(B) Specific Appliances.

Δ (1) Electrically Operated In-Sink Waste Disposers. Electrically operated in-sink waste disposers shall be permitted to be cord-and-plug-connected with a flexible cord identified as suitable in the installation instructions of the appliance manufacturer where all of the following conditions are met:

- (1) The length of the cord is not less than 450 mm (18 in.) and not exceeding 900 mm (36 in.).
- (2) Receptacles are located to protect against physical damage to the flexible cord.
- (3) The receptacle is accessible.
- (4) The flexible cord has an equipment grounding conductor and is terminated with a grounding-type attachment plug.

Exception: A listed appliance distinctly marked to identify it as protected by a system of double insulation shall not be required to be terminated with a grounding-type attachment plug.

All cord-connected waste disposers are covered by this requirement whether they are in a sink at a kitchen, prep area at a deli counter, or a bar. The kitchen waste disposer illustrated in Exhibit 422.2 is an example of a cord-and-plug-connected appliance with mechanical connections designed to permit removal.

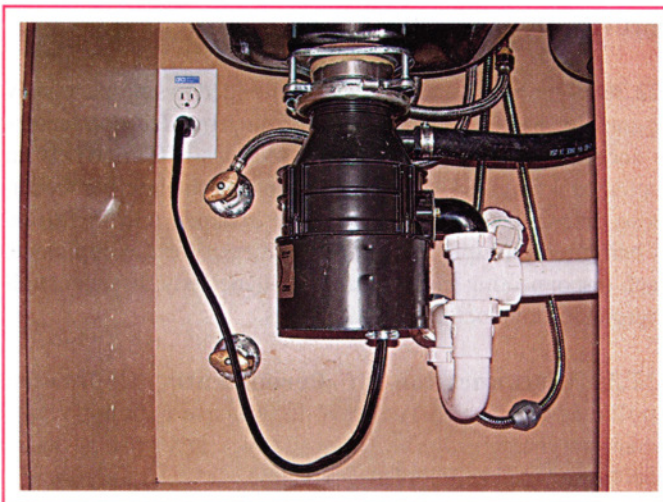


EXHIBIT 422.2 A cord-and-plug-connected kitchen waste disposer. (Courtesy of the National Electrical Contractors Association)

To facilitate control of the waste disposer from a wall location, the receptacle is permitted to be switched by a general-use snap switch as long as the load does not exceed the requirements of 404.14(A)(4). Because the waste disposer in Exhibit 422.2 is located in a kitchen, the 120-volt receptacle feeding the waste disposer requires GFCI protection based on 210.8(A)(6) requirements.

(2) Built-in Dishwashers and Trash Compactors. Built-in dishwashers and trash compactors shall be permitted to be cord-and-plug-connected with a flexible cord identified as suitable for the purpose in the installation instructions of the appliance manufacturer where all of the following conditions are met:

- (1) For a trash compactor, the length of the cord is not less than 0.9 m (3 ft) and not exceeding 1.2 m (4 ft) measured from the face of the attachment plug to the plane of the rear of the appliance.
- (2) For a built-in dishwasher, the length of the cord is not less than 0.9 m (3 ft) and not exceeding 2.0 m (6.5 ft) measured from the face of the attachment plug to the plane of the rear of the appliance.
- (3) Receptacles are located to protect against physical damage to the flexible cord.
- (4) The receptacle for a trash compactor is located in the space occupied by the appliance or adjacent thereto. If a flexible cord passes through an opening, it shall be protected against damage by a bushing, grommet, smoothed edge, or other approved means.
- (5) The receptacle for a built-in dishwasher is located in the space adjacent to the space occupied by the dishwasher. If a flexible cord passes through an opening, it shall be protected against damage by a bushing, grommet, smoothed edge, or other approved means.
- (6) The receptacle is accessible.
- (7) The flexible cord has an equipment grounding conductor that is terminated with a grounding-type attachment plug.

Exception: A listed appliance distinctly marked to identify it as protected by a system of double insulation shall not be required to be terminated with a grounding-type attachment plug.

(3) Wall-Mounted Ovens and Counter-Mounted Cooking Units. Wall-mounted ovens and counter-mounted cooking units complete with provisions for mounting and for making electrical connections shall be permitted to be permanently connected or cord-and-plug-connected with a flexible cord identified as suitable for the purpose in the installation instructions of the appliance manufacturer.

A separable connector or a plug and receptacle combination in the supply line to an oven or cooking unit shall be identified for the temperature of the space in which it is located.

(4) Range Hoods and Microwave Oven/Range Hood Combinations. Range hoods and over-the-range microwave ovens with integral range hoods shall be permitted to be cord-and-plug-connected with a flexible cord identified as suitable for use