

# Electrical Systems and Appliances

## GENERAL CLEAN-UP AND WHAT TO DO BEFORE THE ELECTRICIAN ARRIVES

Restoring the electrical system and evaluating damage to appliances are high priorities after a flood. But before your electrical system is turned on, it should be thoroughly checked for short circuits by an electrician or other competent person. Ask your power supplier for advice and assistance.

Before entering your home after the flood, be sure that the electricity has been completely shut off. Appliances should not be operated until they have been thoroughly cleaned and reconditioned. Running equipment before it is properly cleaned could seriously damage it and may cause electrical shock.

## ELECTRICAL CIRCUITS AND EQUIPMENT

Things to do before the electrician arrives:

- ◆ Have electricity shut off at both the meter and in the buildings. When touching switches, stand on a dry board and use a dry stick or rubber gloves to pull handles.
- ◆ Remove covers from all switches, convenience outlets, light outlets and junction boxes that have been under water.
- ◆ If a box is filled with mud, remove the screws that hold the receptacle or the switch in place. Pull receptacle, switch and wires out about two inches from box. Clean out all mud and dirt. Do not remove electrical connections. Leave boxes open for electrician.
- ◆ Remove all fuses and covers from entrance panel. Clean out all mud. Wires can be moved, but *do not disconnect*.

For some equipment, such as pumps, a temporary line can be installed by an electrician until the permanent wiring has a chance to dry.

## ELECTRICAL APPLIANCES

Here are some general rules to follow:

- ◆ *Television sets and radios.* Professional cleaning is recommended for these types of appliances. There is a danger of shock because certain internal parts can store electricity even when the appliance is unplugged. Check the back for a warning label. Get a cost estimate before repairs to see if the appliance is worth saving.
- ◆ *Motorized appliances.* These include the washing machine, dryer, dishwasher and vacuum cleaner. Professional cleaning of the motor and other parts is recommended. However, you can clean the exterior surfaces in the meantime.
  - a) Use a heavy-duty cleaner and hot water to remove stains and silt deposits. Follow up with a rinse solution of 2 tablespoons chlorine bleach to each quart of water.
  - b) When removing gritty deposits, rinse your cloth in water frequently to avoid scratching enamel or metal surfaces.
  - c) Clean and disinfect dishwashers, washing machines and dryers only with water that has been declared safe to drink.

- ◆ *Refrigerators, freezers and ovens.* These appliances may have foam insulation and sealed components that suffer little water damage. But since they hold food, they should be cleaned, disinfected and checked by a professional or replaced. If replacement is recommended, get the opinion in writing and discuss it with your insurance adjuster before money is spent for a new appliance.
- ◆ *Heating appliances.* Disconnect hot water heaters and remove all panels and any flood-soaked insulation. Have an electrician or professional repair person clean and restore the unit to working order.
- ◆ *Lights and lamps.* Remove fixtures that were submerged. Clean outlet boxes, sockets and wiring. Floor or table lamps should be completely disassembled and cleaned. Damaged cords and plugs should be replaced. Consider taking lamps to an appliance shop unless you are familiar with these repairs.

## GROUNDING

All metallic appliances that have been flooded should be properly grounded to prevent electric shock. Mud or dirt in a grounded outlet or adapter may prevent the grounding system from working, and you could be electrocuted. If you are unsure if your electrical system is properly grounded, call an electrician.

### **Additional resources:**

Your county family living agent, your local emergency government office, the American Red Cross, the Federal Emergency Management Agency

### **Related publications:**

"Repairing Your Flooded Home," the American Red Cross/Federal Emergency Management Agency, 1992.