

Checking and Restoring Electrical Service

It is highly recommended that you have the electrical system in your home or business inspected by a licensed electrician. Having the inspection performed by a professional is the only safe way to ensure that your electrical system is not damaged and is safe for use. After a hurricane, it is sometimes difficult to schedule a professional in a timely manner and the following information is provided if you choose to perform your own inspection and **temporary repairs. **You must follow these safety procedures to insure your safety.** All permanent repairs must be permitted and inspected by a local building official and will probably require the services of a licensed electrician.

Caution: Always wear rubber gloves and rubber soled shoes or boots for all work with and around electrical circuits. Rubber is an insulator. It will help protect you from electrical shock.

Flooding:

Turning The Power Off

When touching any switches, stand on a dry board and use a dry stick or rubber gloves to pull handles.

1. Turn off the main breaker or pull the main fuse, and any other breakers or fuses that control outbuildings.
2. Remove or unscrew all branch circuit fuses or turn all circuit breakers off to insure that all power is off. **This should be done on the inside electrical panel as well as the outside electrical panel.**
3. Disconnect all plug-in equipment and turn off the switch at each piece of permanently installed equipment. Turn off all light switches and unscrew all light bulbs.

Clean And Dry The System

If flood water covered your any of your first floor, electrical outlets and switches are probably wet. Outlets and switches must be replaced before service can be restored.

4. Make sure all electrical power is off as described above.

5. Remove the covers from switches, convenience outlets, and other electrical connections.
6. Clean out mud and dirt with clean water using a garden hose and nozzle. Allow wires to dry. Replace all devices with the same type. Make sure if you house has aluminum wiring that you replace all devices with new ones that are made for aluminum wire.

7. Use extreme caution in cleaning mud and dirt from the outside main power box. Since the power lines enter here, and the **only** way to insure that the power is off is to have the meter removed or disconnected by the local power company, this is the most dangerous part of the electrical system. Turning off the main breaker **will not** turn off all of the electrical power in this circuit box and the box may be hot. Always assume that the power lines are hot, even if a test light shows the power is off. Never hose out a hot switchbox, therefore you should only hose out the main outside power panel if the meter has been removed and capped, or if the power company has disconnected your service from the main line. **Do not try to remove the electric meter.** This must be done by a licensed electrician or the power company. Always wear rubber gloves and rubber soled shoes or boots. **Do not touch anything wet or stand in water while working on the electrical panel.**
8. Allow electrical wires and connectors to dry completely. This may take days, depending on how wet the system is and if any heat is available.

Other Damage:

Checking The System For Electrical Shorts And Other Damage

If the building has been damaged by wind, it must be inspected for damage to the electrical system. This inspection should be performed by a licensed electrician. If an electrician is not available, the following information is provided to assist you in performing the inspection yourself. **You must follow all of these safety tips to insure your safety.**

9. Some damage may be obvious. There may be exposed, loose or dangling wires. Always consider these wires hot until all of the procedures outlined in “Turning Off The Power” above, have been completed. **If there is obvious damage, loose, exposed or dangling wires, do not attempt to make repairs or perform any of the checks below. Repair work must be permitted, inspected and performed by a licensed electrician.** If there is damage to wires that enter your building, past the point where the power company service wires connect, it is your responsibility for repair. The power company is not responsible for the entry service to your building.
10. **If there is no obvious damage, exposed, loose, or dangling wires, it may be safe for you to perform your own inspection and testing of your electrical system.** Always wear rubber gloves and rubber soled shoes or boots when performing these tasks.
11. To begin the inspection and test, make sure that all breakers are turned off or all fuses are removed from the electrical panel inside the home. Turn the main breaker on or plug in the main fuse on the outside main electrical panel and look for sparks or smoking wires, which would indicate a short. **If you see any evidence of shorts, turn the main breaker off or pull the main fuse, and terminate the inspection and test now.** You will need to have a licensed electrician make repairs and perform an inspection before power can be restored.

12. If there are no problems after turning on the main breaker or plugging in the main fuse, you may proceed with the test. If you have fuses instead of breakers, pull the main fuse and replace or screw in all branch fuses that were removed or unscrewed when you turned the power off. Now plug in the main fuse again and proceed with the test as directed below.
13. If you have breakers and there is a main breaker in the inside electrical panel, make sure all of the branch breakers are off and turn the main breaker on.
14. Screw in one fuse or turn on one circuit breaker. If the fuse doesn't blow or the breaker does not trip, wait at least 15 minutes to check for other problems. Smoking wires and sparks will indicate trouble. If there is any problem or if the fuse blows or breaker trips, the circuit should be turned off until repairs can be made by a licensed electrician. If there are still no signs of a problem, carefully inspect all parts of the circuit you are checking (ie. Plug an appliance into each outlet and turn on all lights on the circuit).
15. Repeat step 6 for each branch circuit, one at a time.
16. If you had flooding and performed the cleaning measures above and have checked all the circuits and found them in good condition, once again remove all fuses or turn off all breakers and remove the main fuse or turn off the main breaker. Replace wires in electrical receptacles, switches and junction boxes. Replace covers and then check each branch circuit again (step 6) after replacing the main fuse or turning the main breaker back on.
17. For the next 24 hours, be careful when using receptacles and switches. There may be delayed problems that could cause electrical shocks. Do not plug in electrical appliances that have been flooded until they have been checked or repaired by a professional.
18. If some of the circuits are faulty, they should be turned off and not used. Use only undamaged circuits. Do not overload undamaged circuits with too many lights or appliances until normal capacity is restored. All faulty or damaged circuits must be repaired by a licensed electrician.