

Get to Know Your Sump Pump

Loss Control, Water Damage Prevention, 7

A sump pump is used to remove water that has accumulated around your building into a basin, typically installed in a basement. The water may enter through perimeter drains funneling into the basin or because of rain or natural ground water, if the basement is below the water table level. Sump pumps send water away from a building to any place where it is no longer problematic, such as a storm drain or dry well. Usually hardwired into a building's electrical system, sump pumps should have a battery backup. Your church may also want to consider a sump pump monitoring system that will notify you should a problem occur. During a rain storm when a sump pump is most needed, it is not unusual to experience power failure. Without a battery back up, the sump pump cannot do its job and may result in flooded basements as the water accumulates into the basin and overflows.

Sump pump systems must be maintained. Typical recommendations suggest examining equipment every year. Pumps running frequently should be examined more often. Sump pumps, being mechanical devices, will fail eventually, which could lead to a flooded basement and costly repairs. Contact a local plumber for system checks.

Signs your sump pump may need to be replaced:

1. Makes strange noises
2. Vibrates excessively when running
3. Infrequent pump usage
4. Runs all the time
5. Irregular cycling on and off
6. It runs for a long time
7. Visible rust
8. Seven years old or older
9. The motor gets stuck sometimes
10. Motor failure
11. Frequent power outages

Common causes of sump pump failures:

- **Overwhelmed sump pump.** If your sump pump is not the correct size to handle the volume of water, you may experience flooding. If your sump pump is more than you need, it can wear it out too soon. Check with your local municipality and a local plumber for guidelines and recommendations.
- **Pump burn out.** A sump pump can burn out because of a faulty switch, an overworked, under-powered pump, or a frozen/clogged discharge line.

All newer sump pumps have thermal protection to protect the motor. If the motor becomes too hot, a thermal relay will shut off power to the motor. Unplug the pump and let the motor cool. The thermal relay should reset in 15 to 30 minutes. While you wait, make sure the pipe is clear of ice.

- **Power loss/outage.** There are several reasons why a pump might lose power. It could be a tripped circuit breaker, unplugged pump or power outage. No matter what the reason, a normal sump pump doesn't function unless there's power.
- **Clogged intake.** When the intake becomes clogged, the pump cannot properly extract water.
- **Life expectancy.** The life expectancy of a sump pump depends on use, but averages 10 years.* Some manufacturers recommend replacing the switch and float every two years and the pump every five. If you do not know the age of your pump but it tested OK, buy a backup pump. Prepare the backup pump with necessary fittings so it can be installed quickly if needed.

* According to the [US Department of Housing and Urban Development](#)