

# HOMEOWNER'S SURVIVAL GUIDE

As a homeowner, it is easy to forget about upkeep for your new purchase. Many people don't generally think of a home as requiring much in the way of maintenance. After all, we don't drive it around everyday, cut the lawn with it or take it to the park and play fetch with it. Unfortunately, most home owners take better care of their vehicles than they do their homes, even though a vehicle represents a fraction of the investment that a house does. Giving your house a periodic check-up can save up to thousands of dollars. And when it comes time to sell, a home that is well maintained will sell for a higher price. The following information is an overview of some major things a homeowner should know about a house, what damages it, how to save on energy costs and general preventive maintenance.



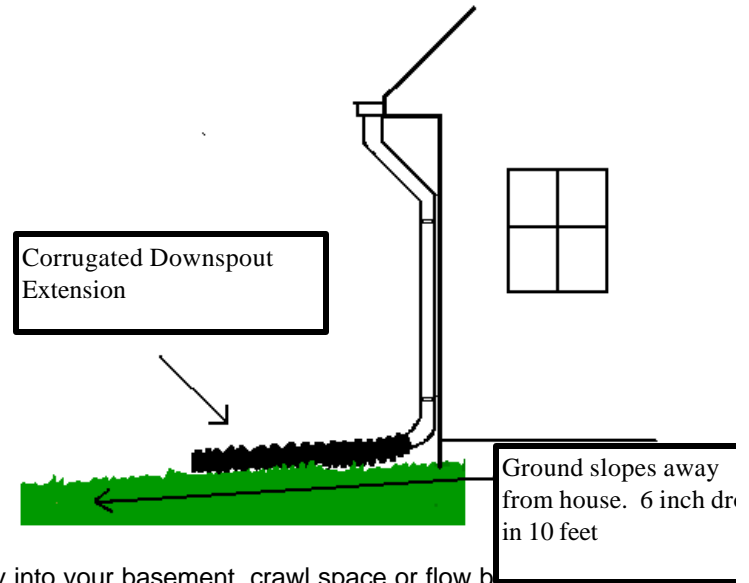


## WATER: *A Home's Greatest Enemy*

It's true; water can cause a great deal of damage to a home. Water damage is often very subtle and usually occurs over a long period of time. Before you know it, you've got rotted wood and/or water in your basement.

### The following tips will help:

- Keep a positive soil grade to drain water away from your house (a slope of at least 6" in 10'). This requires extra attention on a new home as it may take years for the soil to fully settle. One of the biggest problems in the Atlanta metro area is when the finish grade is too high and the grade does not slope away from the house. Given that one must maintain a gap of 6" between the soil and any siding (or 4" from the top of the top of the foundation with masonry cladding – brick, stucco, stone etc) it is not possible to build up the soil against the house. One solution is to remove soil that is several feet from the house in order to create the proper slope. There are also situations when the only realistic or effective option involves the installation of a drain. In this case, one should contact a foundation waterproofing contractor.
- Keep your gutters clean otherwise, overflow could find its way into your basement, crawl space or flow behind the gutters.
- Extend the downspouts to drain away from the house - the further the better. If using splashblocks, keep them properly positioned and sloping away from the house. However, extending the downspouts is generally more effective.
- Fill in any low spots around your house where water might seep in.
- Keep your house well painted! Frequently thought of as an aesthetic element only, quality paint is very important for repelling water. Paint is not only for wood; a metal handrail, for example, will quickly rust if not protected.
- Keep wood siding and trim from touching the soil. Not only will termites enjoy the free meal, but moisture in the soil will rot the wood.
- Replace any caulk that is cracking or deteriorating.



## Vegetation

Keeping your vegetation under control is more important than you probably realize. Here are some helpful pointers.



- Keep trees from overhanging your roof. Not only can they cause damage if knocked over during a storm, but overhanging limbs cause premature aging of shingles. Also keep any bushes or shrubs well trimmed. This allows sunlight and air to help dry out any moisture around the foundation.
- Cut down any trees that are too close. A tree's roots can exert tremendous pressure on foundation walls, retaining walls and underground utilities.
- Remove any vines that are growing on your house. They even cause brick siding to deteriorate.
- Grow grass and/or other ground cover on any areas of bare soil on your property to deter soil erosion.

## Attic

Just a place to store things? Not quite. Ignoring it can cost you.

- When it comes to attic ventilation, you almost can't have too much. Inadequate ventilation can cause moisture problems, increase utility bills and shorten the life of your shingles. Fans and vents can make a BIG difference in ventilation. The ventilation device pictured is just one of many options.
- Make sure you have adequate insulation. This can make a significant difference in energy costs.

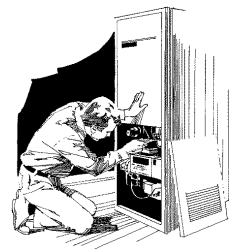


## Pests

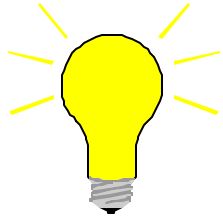
Squirrels, mice, termites, carpenter bees, scorpions, ants, roaches...the list goes on and on. Not only will many pests do physical damage to your home, they can also carry diseases. A squirrel in the attic may seem harmless but aside from diseases they will chew through almost anything and often will compress loose-fill attic insulation thereby greatly reducing its efficiency. If you have any problems with pests its a good idea to call a professional or you could find yourself playing cat and mouse with a rodent for months! (no pun intended)

## HVAC (heating, ventilation, and air conditioning)

Have your HVAC systems serviced twice a year by a qualified, licensed HVAC contractor. Once in the spring to check the cooling system(s) and once in the fall to check the heating system(s). *This is particularly important if your heating system burns fuel. HI-TECH may check for holes in heat exchangers, however, it is not possible to perform a thorough examination without partially dismantling the furnace. Therefore, existing holes may be hidden from view. HI-TECH is not responsible for holes in the heat exchanger which are hidden from view. This why it is important to have your fuel burning furnace examined by a licensed, qualified HVAC contractor. Such a specialist is capable of a thorough examination for heat exchanger holes.*



Another important aspect of HVAC maintenance is cleaning the filters. Depending on which type of filter you have, it should be replaced or cleaned every one to three months. A dirty filter reduces efficiency and can even damage your expensive HVAC equipment, so clean or replace your filters! If you currently have the inexpensive fiberglass filters (commonly blue or pink), consider replacing these filters with electrostatic filters. These filters greatly reduce the amount of dust inside your home. The cheap fiberglass filters perform poorly in general. Electrostatic filters are made of charged fibers that attract dust and particles and although are much more expensive (\$20-\$30), can be cleaned and re-used for years. Cleaning is easily accomplished by running a hose over the surface and then rubbing the face of the filter. The debris rolls into clumps for easy removal.



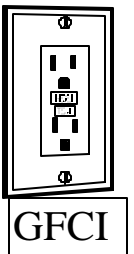
## Electrical

The only thing many people know about the electrical system in their home is that when they plug something into an outlet they get power. A basic understanding of your electrical system is important for safety reasons. Here is some basic information:

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- Become familiar with the components of your electrical system and their location. The main body of the report provides this information in the electrical section. You will eventually have to reset a breaker or replace a fuse so know the location of your service panel.
- If you plug too many appliances into the same circuit you could trip a breaker or blow a fuse. This means that the appliances were trying to "pull" too much current through that circuit. Too much current can cause wires to become hot and this could lead to a fire. Breakers and fuses prevent this situation by opening the circuit and breaking the connection. This cuts power to that specific circuit. In order to restore power to that circuit you must reset the breaker or replace the blown fuse.
  - √ Go to your electrical service panel, open the panel door, look for a burnt out fuse (if you have fuses) or for a breaker that is not aligned with the others. It will be in the trip position
  - √ FUSES Unscrew the blown fuse and replace it with a new compatible fuse (one of equal amp rating).
  - √ Keep a supply of compatible fuses handy.
  - √ BREAKERS - Flip the tripped breaker to the "off" position - then flip it back to "on".
  - √ You may want to flip your breakers off and back on once a year to prevent sticking which can occur from corrosion buildup or mechanical failure. (you will probably have to reset some alarm clocks afterwards!)

## What is a GFCI?

A GFCI is a safety device which is designed to guard against electrocution. GFCI stand for Ground Fault Circuit Interrupter. They are commonly found in an area that is likely to be damp or wet. They are currently required in kitchen outlets within 6' of the sink, bathrooms, unfinished basements, garages, and outdoor receptacles. If you do not have GFCI's in your home, installing them is not expensive and is a very good idea. These devices work by constantly measuring for current leakage. If a ground leak of more than 5 milliamps is detected, the flow of electricity will be shut off in 1/40 of a second.

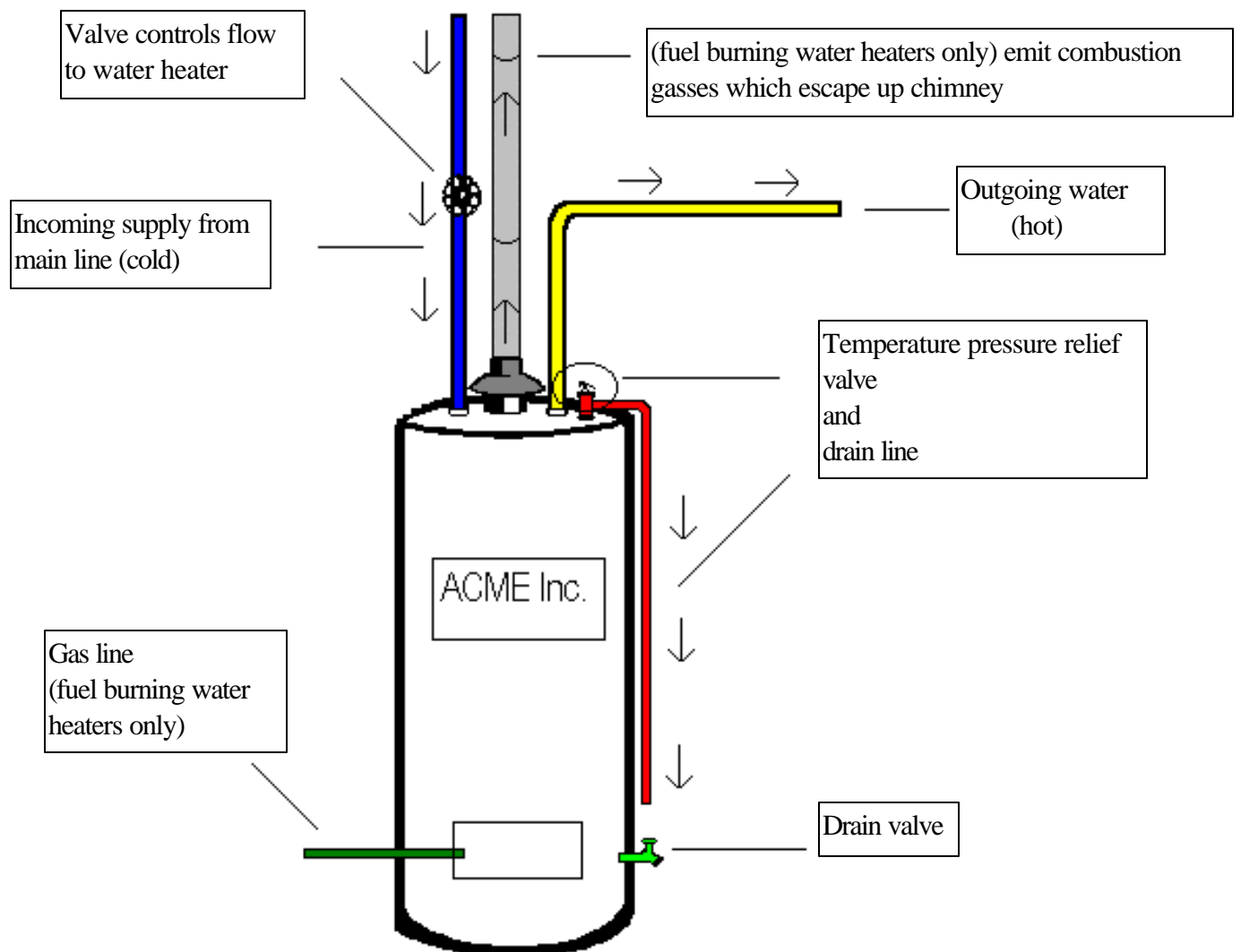


There are three basic methods of GFCI protection:

1. The first is protecting an entire circuit by installing a GFCI breaker in the electrical service panel. This is identified usually by a red "test" button on the breaker itself. These are reset the same way you reset a normal breaker.
2. The second is by using GFCI outlets. These outlets have a black "reset" button and a red "test" button (picture at right). If the GFCI trips, you can restore power by pressing the reset button (correct the situation which you think caused the GFCI to trip).
3. The third method uses the same system as the previous but instead of each GFCI protected outlet having its own controls, more than one outlet may be connected to only one outlet with the GFCI device. That means that you could trip the GFCI from your bathroom, even if the outlet looks like a standard outlet. However, in order to restore power to your bathroom, you will have to find the GFCI outlet and push its reset button. These are usually on the same floor, but they can be as far away as the garage. Familiarize yourself with the specific details of your own home.
4. **IF YOU DO HAVE GFCI'S, IT IS RECOMMENDED THAT YOU TEST THEM MONTHLY** Simply push the test button, the reset button should pop out and power should be cut. If not, call an electrician or replace the GFCI. To reset, simply press the reset button.

# WATER HEATER BASICS

1. One of the most important things to know about your water heater is what is referred to as the **temperature pressure relief valve (red)**. This device is a safety device that trips when the water temperature reaches 210° F or when the pressure reaches 150 psi. This valve should be tested periodically throughout the year. To do this, lift the lever and hold it open for a few seconds (the valve should open with moderate pressure - if not, *do not force it*, otherwise it could start leaking and not stop. Have it replaced promptly) You should hear water flowing through the valve. Many drain lines terminate outside; if yours does not, you may want to place a bucket at the end of the drain line when testing the valve to catch the water. If your drain line does not flow down to its termination point, you should drain the line after testing. This is not possible on some systems; however, you might see a small screw or valve along the drain line. Open this over a large bucket to drain the line and your done. Although uncommon, water heaters have exploded in the past due to faulty valves and have destroyed entire sections of houses - so check your temperature pressure relief valve!
2. In case of an emergency (burst water heater), water supply to the water heater can be stopped by simply closing the **valve on the incoming supply line**.
3. Manufacturers recommend draining three or four gallons of water from your water heater using the **drain valve** at the bottom of the unit to prevent sediment buildup which can reduce efficiency and eventually clog the drain line. This should be done at least twice a year.



# Septic Tanks

If you have a septic tank, there are a few considerations to be aware of.

- The system is dependent on the beneficial bacteria that live in the tank and break down the waste that goes to the tank. The result is finer solids that settle to the bottom and liquid that flows through the drain fields. Harsh chemicals can hurt or destroy these bacteria, so be careful. Kitchen sink garbage disposers are not recommended. The large pieces of food that get into the tank are not easily digested by the bacteria. This causes the tank to fill quickly. Enzyme additives are available commercially that supposedly aid the bacteria in doing their job; however, there seems to much debate as to the need or effectiveness of such additives. Septic tanks should be pumped every 3 to 5 years.

# Smoke Alarms



These devices have saved many lives. Get one for every level of your home and one in each sleeping area. They should be interconnected, that is when one detects smoke, they all sound. Test them monthly and **CHECK OR CHANGE THE BATTERIES AS NEEDED**. Doing this every daylight savings day will help insure safety.

Remember to be good to your home and it will be good to you. Keep water away from your house, let sun and air dry out the moisture. Get to know your water heater , your electrical and your HVAC systems. HI-TECH hopes that this guide will be helpful and wishes you happy home ownership. Good Luck!

Sincerely,

Alex Rosenthal  
CEO  
HI-TECH Home Inspections, Inc.