



## **Home Maintenance**

Dallas is known for its highly plastic clay soils. These soils expand and contract according to the moisture content of the soil. There are three factors that account for almost eighty percent of all foundation movement on expansive soil. Controlling these factors can help in reducing differential movement of your foundation.

### **Foundation Maintenance**

1. Water the foundation equally in a systematic manner.
  - a. Never water directly into a crack in the soil. Watering directly into a crack can cause the water to settle at the bottom of the concrete and make the soil too wet to support the wall. Watering every other day for approximately 10 minutes should be enough to keep the soil moist. Keep a close eye on the soil directly next to the foundation. If the soil starts to pull away from the foundation, more water is needed. Be careful not to over-water and create a muddy condition.
  - b. Sprinkler systems work great for achieving uniform watering. The ideal time to water is between 4:00 & 5:00 in the morning. You should inspect the sprinkler system in the manual mode at least once a month to ensure that all heads are spraying properly and are not leaking.
  - c. Soaker hoses work great in place of a sprinkler system. Simply place the hose approximately 18 inches from the foundation and water for 20 minutes every other day. Note: You may have to water more often when temperatures are hot and dry with little rainfall.
2. Drainage plays an important role in keeping the soil from being excessively moist.

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- a. The soil should slope gently away from the foundation and into a swale that is between two properties.
  - b. In some cases where there is not adequate space for a gentle slope, drains will need to be installed to drain surface water. A landscaped drainage professional should be consulted if you have this situation.
  - c. Weep holes are small openings in the bricks found at the lower section of the wall where the brick veneer and concrete slab meet. Often times these weep holes are covered by high soil in the flowerbeds. Covering these weep holes creates a conducive condition for termites and traps moisture in the wall. Ideally, there should be two inches of slab exposed above the soil line.
3. Planting certain types of trees and shrubs too close to the foundation causes foundation failure.
- a. Trees should not be planted closer than their expected mature height. Roots will extend out to the drip line of the tree. Roots seek moisture from under the slab and can cause either an upheaval or settlement.
  - b. Red-tipped photinias grow fast and consume large amounts of water. This type of a bush has been associated with the cause of foundation movement.

### **Roof Maintenance**

1. All roofs require periodic maintenance. Some maintenance and repairs require a qualified roofer.
  - a. Inspect the roof after a severe storm for loose or damaged shingles.
  - b. Check caulking around furnace vent pipes, water heater vent pipes, and plumbing vent pipes.
  - c. Keep all debris removed from the roof.
  - d. Clean out gutters and downspouts to ensure they will drain water.
  - e. Cut tree branches to a minimum of five feet away from the roof.
2. Ventilation: A properly ventilated roof can lower the cost of cooling by up to sixty percent, prolonging the life of roofing materials and preventing premature deterioration of attic insulation material. A

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combination of soffit vents and passive roof vents, turbine vents, or motorized vents will help ventilate the roof.

- a. Make sure that soffit vents are free and clear to allow airflow.
- b. If turbine vents are installed, make sure they are moving freely.
- c. Motorized vents work off of a thermostat. Usually the thermostat is set to a ninety-degree temperature. Make sure that the motor is activating and there are no abnormal noises in the motor.

## **Plumbing**

1. I recommend purchasing a water meter key from any hardware store. Having a key will allow you to check the meter periodically for movement and to shut the main water off to the house.
  - a. Leaks can occur on the supply or drain
  - b. Inspect under sinks for leaks in drain pipes
  - c. Check commodes for secure mounting to the floor
  - d. Make sure there are not any exposed openings in the grout in the shower and on tiles around the bathtub.
  - e. Remove the commode tank lid and flush the commode. Make sure the float valve is not leaking and the water level is properly adjusted to match the level in the tank.
  - f. Make sure outside faucets are properly winterized.
  - g. P-traps can dry out in plumbing fixtures that are not used. Mineral oil can be added to P-traps to prevent the traps from drying.

## **Heating & Air Conditioning**

1. Gas furnace pilot lights should be turned off during the summer months.
2. Have the furnace serviced before use every winter.
3. Change air filter monthly.
4. Visually check the vent pipe for secure mounting and that the pipe terminates through the roof.
5. Keep debris away from the outside condensing unit and make sure unit is sitting level.
6. Turn off power to the outside condensing unit and wash the condensing coils if they are dirty.

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7. Listen for any abnormal noises coming from the compressor.
8. Make sure the outside condensing fan is coming on during compressor operation.
9. During the summer, visually check the secondary condensation drain line for dripping water. The secondary drain line is usually mounted over a window extending from the soffit. If there is condensation coming from this pipe your primary drain line is clogged. You should pour a cup of bleach down the vertical vent pipe on the primary drain once a month to prevent algae from building up. This pipe is located in the attic about four inches away from the evaporator unit.

### **Electrical**

1. Operate the GFCI outlet around the kitchen sink, bathroom, garage, and exterior plugs to ensure the plug will properly trip.
2. Visually check all plugs for any burn marks on the plugs or wall switches.
3. Have an electrician replace outlets that will not hold plugs securely.
4. Call an electrician if breakers continue to trip.

### **Hot Water Heater**

1. Make sure the Temperature & Pressure Relief valve is not open. There is a copper pipe that is routed to the outside of the house. If water is leaking from this pipe you can reset the valve at the hot water heater.
2. Stainless steel gas flex should be used from the rigid pipe to the appliance.
3. Make sure vent pipe is mounted securely to the top of the hot water heater.
4. Make sure the hot water heater is eighteen inches off the ground if located in the garage.

### **Fireplaces**

1. Check for exposed openings in the firebox.
2. Make sure the damper is opening and closing freely.
3. Make sure that a spark arrestor is mounted to the fireplace chimney.

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## **Safety Items**

1. Gas connections can be checked for leaks by using soap and water in a spray bottle. Spray the solution at a connection and look for bubbles. Natural gas has a distinct odor. If you think you smell gas call your local gas provider.
2. Smoke detector batteries should be replaced once a year all at the same time.
3. It's a good idea to mount a fire extinguisher in an easy to get to location.

This document was created by Professional Property Inspections and is intended to give tips on maintaining your property. Following these tips does not totally ensure that you will not experience problems. Professional Property Inspections does not assume any responsibility for any systems that malfunction on your property. Good luck on your new home.

Sincerely,

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Professional Inspector #4304

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