

Foundation Watering info:

Property address: _____

Expansive soils act like a sponge. As they absorb water, they swell and as they lose water they shrink. Soils tend to dry out (and shrink) during the summer and to absorb water (and swell) during the winter and spring.

As the soil under a house shrinks and swells with the seasons, the house and foundation will move up and down. As long as the foundation movement is not great enough to damage the house and/or foundation, it is not a problem. If the up and down movement of a foundation always returns the foundation to its original level position, then damage to the house and foundation may appear and disappear on a regular basis as the seasons change.

If a homeowner wishes to stop seasonal house and foundation damage, the first course of action should be to follow a controlled watering program. By keeping the moisture content of the soil under the foundation constant, foundation movement can often be stopped. The goal of a foundation watering program is to maintain a constant level of moisture in the soil under the house and foundation.

The best way to water a foundation is to install a buried foundation watering system. If you do not want to go to the expense of installing a buried watering system, soaker hoses will provide you with many of the same benefits. The best way to use a soaker hose is to bury a soaker hose three inches deep, 6 inches from the edge of your foundation. Placing the hose a short distance from the foundation allows the water to soak into the soil evenly.

The hose should not be placed against the foundation. When soil has dried and cracked, water can travel along the cracks for several feet in all directions. If the soil around your foundation is dried and cracked, then water placed next to the foundation will run through the cracks and accumulate at the bottom of the grade beam (the thick portion of the foundation that is under the exterior walls). In some cases, an accumulation of water in the soil at the base of a foundation can cause the soil to lose some of its load bearing capacity. If the soil loses enough load bearing capacity, the house will sink into the ground.

Obviously, it is necessary to water more during hot, dry weather and less during cold, damp weather. **The amount of water required to keep a foundation stable during the summer can be surprisingly large.** A single large tree can remove as much as 150 gallons of water, or almost 20 cubic feet of water, from the soil each day. Shrubs and other plants can also remove large quantities of water. During persistent hot dry weather, it may be necessary to water a foundation daily.

Watering should supply enough water to keep the moisture content in the soil under the foundation constant. **If the amount of water applied is only enough to keep the surface damp, the watering program will not work.** Obviously, the homeowner is the only one who can weigh the benefits of controlling foundation movement versus the increased size of the water bill.

Renter Signature:

Date: