

Recommended Watering Maintenance Program



Expansive soils absorb water and swell. Shrinkage occurs as soils lose water and dry out. During the rainy season, soil expansion occurs and during the dry-summer months, soil shrinkage occurs. Due to the drastic changes in weather in the Metroplex throughout these seasons, soil tends to swell and shrink often causing your home to move up and down. To stop seasonal damage, a controlled watering program must be followed that will prevent excessive changes in the moisture content of the soils near the home.



The major factors influencing soil movement that can cause stress to the foundations are large individual trees, thickets or other vegetation that withdraw large amounts of moisture from the soils. The area where the roots are located is drier than adjacent areas. These pockets of dry soils have a much higher potential for swelling than do the less dry areas. Planting flowerbeds or shrubs next to the foundation and keeping these areas flooded will increase soil moisture content and result in soil expansion. Shade trees should be planted a distance equal to the mature height of the trees from the foundation. (*Horticulturists report that one large tree can remove up to 200 gallons of water from the soil every day*). If planted too close, the roots penetrate beneath the foundation and withdraw moisture from the soil creating soil shrinkage, which can cause damage problems.



If the structure is built on expansion soils, and the lot is not graded to drain rainfall runoff away from the structure, water collects and causes distress to the structure due to the swelling of the soil from excessive moisture content.

Maintenance Procedures Below:

1. Landscaping should be done on all sides of the foundation. Make sure you have a positive grade away from the foundation to assure proper drainage. If water is not properly draining away, consider installing a surface drain or French drain, depending on the severity of the problem.
2. During hot, dry weather, the foundation needs much more water to maintain stability. During cold, damp weather, less water is needed.
3. A soaker hose should be placed on each side of the foundation, no further than 12" from the edge of the foundation. This will allow for an even distribution of water to soak into the soil. (*Do not place the soaker hose against the foundation. If the soil has dried and cracked, water may travel along the cracks and accumulate at the bottom of the grade beam. If too much water collects under the foundation, the soil may become too wet and lose its load-bearing capacity, therefore causing your house to sink into the ground or the soils may swell under moderate amounts of water and cause that area to heave*).
4. During hot or dry months, proper watering will keep the soil from separating or pulling back from the foundation. We recommend watering daily during these months to keep the soil under the foundation at a consistent moisture rate.

REMEMBER, THE GOAL OF A WATERING PROGRAM IS TO MAINTAIN A CONSTANT LEVEL OF MOISTURE IN THE SOILS NEAR AND UNDER THE HOUSE.