

### Sinkhole Repair

Florida sinkholes are a natural component of Florida's landscape. We have more sinkholes in Florida than any other place in this country. Despite what many people think, there usually is no void under the house. A sinkhole damaged home can be caused by the unstable ground. The ground is unstable due to fine sand, clay, or organic material (Mud). This soil will expand and contract as the water level in the ground goes up and down. It causes the damaged house foundation to be unstable. It usually requires pressure grouting and/or underpinning installation.

### Sinkhole Repair Solutions

**Compaction grouting** is a process of injecting a very thick cement mixture underneath the ground where the sinkhole is occurring. Grouting is used to do two things first to seal the top of the limestone layer preventing additional sand from raveling into the sinkhole and then to add density to the soil matrix which will further stabilize the ground. It actually fills in the lime rock and pressurizes the soil in the surrounding areas. The mixture can be injected as far as 80 feet or more underground. This process of sinkhole repair can be used to compact soil or to lift structures that have sunken. Compaction grouting does not lift the house itself. Compaction grouting should normally stop once any lift is noticed on the sinkhole house.

**Underpinning** simply defined, is a method of subsurface sinkhole repair using repair lifts at multiple points on the foundation using steel piers which are drilled into the limestone underneath, then attached to the sink hole home using brackets. If structural damage from the sink hole has occurred and lifting is needed, underpinning would be a better sinkhole repair solution as this is a much more precise way of lifting. This process of sinkhole repair lifts at multiple points on the foundation directly at the foundation simultaneously or differentially. Compaction and underpinning together is usually the very best sink hole repair solution. When it comes to Florida sinkhole repair, we find it prudent to follow what the geotechnical engineer's recommendations are and DO NOT cut any corners.

### Sinkhole Repair and Insurance Claims

**If you opt to go forth with the sinkhole repair understand that insurance companies normally wish to avoid paying the policy limits and will often discourage owner's of sink hole homes to use combined methods of sink hole repair such as exterior perimeter**

**underpinning coupled with interior pinning. The cost of the sink hole repair when using combined methods usually exceeds the available property insurance policy limits. Many owners of sink hole homes will then opt for or are forced into the most cost efficient method of repair, which often results in future collapses and often worse sink hole damage than what previously occurred.**

**Sinkhole repair with exterior perimeter underpinning, coupled with interior pinning, is widely considered the best way to stabilize a structure where sink hole activity is present. Some grout may also be added to provide lateral support to the pins. □ Underpinning is the process of modifying an existing foundation system by extending into subsurface stratum that is deeper and more stable than the near surface soil that supports the existing foundation. This is done to provide support that is not present. Methods of underpinning include Helical Piles, Push Piers and Pin Piles.**

**When it comes to Florida sinkhole repair Brownie Geotech has the experience, equipment and the right professional staff to perform the repairs your home needs.**