Plumbing & Foundation Repair Methods

Tunneling Under a House vs

Cutting Concrete Slabs

7 Myths Dispelled

By

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Homeowners have choices to make when there is an under slab plumbing leak or foundation repairs are needed. Is it better to tunnel under a house or is cutting through the concrete slab the best way to go?

How-to websites and blogs are full of questions on whether to tunnel under a house or cut slabs for plumbing and foundation repairs. Some are tunnel only advocates while others push the slab cutting alternative. There is no one size fits on regarding tunneling under a house or cutting through concrete slabs. Each repair situation is different and needs to be evaluated on its own.

Before committing to one method over another, understand the difference between fact and fiction regarding the two different methods.

Myth: Tunneling under a house is always more expensive than cutting concrete slabs.

Fact: Once all the costs are considered, tunneling is often cheaper. When breaking through a slab, remember the flooring with have to be removed and replaced, the interior of the home cleaned, and possibly homeowners will have to move out while work is in progress. Tunneling generally costs more for situations where the floor finishes are inexpensive. For expensively finished homes, tunneling can cost less. For the average homeowner, tunneling will cost more. Advanced prefers tunneling under a foundation because it has some distinct advantages over cutting concrete slabs:

* Homeowners can stay in their homes during the repairs.
* Avoids indoor mess and disruption especially when having to replace large sections of flooring or needing to install multiple foundation piers/pilings.
* For plumbing, plumbers don't have to pin point the exact location of leak.

Myth: Cutting concrete slabs is a one size fit all solution.

Fact: There are different types of slab foundations. In some cases, breakouts should be avoided. "In my opinion," Fred Marshall states, "breaking through structurally suspended flat slabs should be avoided." Flat slabs are slabs with no interior beams.

Myth: Concrete slabs are never quite as secure when patches are applied after cutting through them.

Fact: If properly repoured, patches are secure. In 21 years, I think that we have only had one interior patch fail, including patches in garages that cars drive on.

Myth: You can do the tunneling yourself using a tunnel boring machine.

Fact: Tunnel boring machines are machines used to bore tunnels, generally for mining. They are too big and expensive to use on homes. Machines can be used to bore small diameter tunnels through which one can install pipes, electrical lines, and other items with small diameters. Tunneling is physically challenging, to say the least. I would not recommend that a homeowner try it. One homeowner that I know of tunneled. It took 6 months to do what we do in a week.

Myth: Mudjacking is a good way to fill voids created when refilling tunnel.

Fact: Mudjacking can be used and it does require specialized equipment. I strongly recommend that people not use mudjacking in any situation involving expansive soils that have heaved. Using mudjacking in such situations can lead to future movement. For plumbing repairs, Advanced recommends that mudjacking be avoided. The material that is pumped in will surround the pipes and then harden. If the underlying soils shrink, say during a dry period, the soils will shrink and go down. When the soils go down, the concrete surrounding the pipes will settle, pull the pipes down, and break them.

Myth: A soil compaction test is required to prevent voids after tunneling.

Fact: When soils are moved, engineers like to have the soil compacted so that it will not settle later. A compaction test is a lab test. The tests usually have a specification of 90 or 95% of Proctor Density or modified Proctor Density. To reach the specified density, it is necessary to use mechanical compactors which will not fit in tunnels. There are always voids after tunnels are refilled. Voids are okay, as the foundations are capable of spanning across the voids. Long tunnels can be drained and sealed.

Myth: Insurance companies prefer tunneling.

Fact Insurance companies prefer the solution that costs the least.

Visit http://www.foundationrepairs.com for information on Advanced Foundation Repair's services, home owner tips and DIY white papers or watch this tunneling under a house video to see how tunneling is done.

Advanced Foundation Repair offers home repairs from the foundation up including foundation repair, plumbing and general construction services. Advanced Foundation Repair has specialized in foundation repair needs of Texas homeowners for over 100 years. Advanced Foundation Repair specialists' reputations prompt and honest service assures customers reliable service.