

# Concrete Lifting



Slabjacking is one of the primary services that we offer at Acculevel. In previous articles, we've explained how it works, when it won't work, and compared it to helical piers as a repair option or concrete leveling.

But we keep running into questions about the term, "slabjacking," and what it means when compared to other repair methods like concrete lifting, or concrete leveling, or mudjacking. In this article, we're going to answer your questions about how these terms differ, overlap, and compare.

Acculevel has been repairing foundations and waterproofing basements and crawl spaces since their start in 1996. When we began, we used a process called mudjacking to repair sunken concrete. In 2016, we adopted a new injection material that has proven to be more efficient, last longer, and repair more permanently. We'll explain more about this later in the article.

#### What is Concrete Lifting?

Concrete Lifting is a repair method for raising concrete back to its original positionor as close to it as possible. This is accomplished by drilling holes through the concrete slab and injecting a filler material underneath it. The filler material takes up space under the slab and raises it- or jacks it- to the desired height. Both mudjacking and slabjacking are methods of concrete lifting and concrete leveling.

#### What is Concrete Leveling?

Essentially, lifting and leveling refer to the same process. The two are often used interchangeably, although concrete leveling is a misleading term.

When a contractor says they're going to "level" your concrete slab, this may not be 100% accurate. Unless you have a slab foundation and the concrete in question is inside your home, the slab is not going to be truly "level" (in the textbook sense).

This is because outside slabs aren't level- and you don't want them to be. When concrete is poured outside- whether it's a driveway, a patio, a walkway- it's meant to include a gradual slope away from your home. This is even true for some "inside" slabs like the concrete pad inside your garage. This is how water drainage is managed on an outside concrete slab.



These photos were taken before and after an Acculevel crew slabjacked the porch back into position. You'll notice the gap between the siding and porch is closed, and sealant has been applied to repair the crack.

If you have a large crack in your patio and one side is sinking, you may say you want the patio leveled. But what you actually want is the sinking half of the slab lifted until it's even with the other side, and sloped just enough to drain any rainwater off and away from your home's foundation.

#### What is Mudjacking?

Mudjacking is a type of concrete lifting. A contractor drills holes through the concrete slab and injects a filler that is referred to as "mud" or a concrete slurry. It's a proprietary mixture of concrete, sand, limestone, water, and other materials that vary, depending on the equipment and the contractor that is doing the work. The essential part of this is the material must be thin enough to move through a hose and an injection gun, but thick enough to eventually cure or dry out. The pressure of forcing this material under the slab is what lifts the slab. Mudjacking is an older method of concrete lifting. Because the injection material is cheaper, this allows the process to be less expensive.

#### What is Slabjacking?

Slabjacking is another type of concrete lifting- but it does not involve a concrete or

limestone slurry as a filler. At Acculevel, we use a two-part polyurethane foam as the filler material. I mentioned at the beginning that this is a relatively new material for us; we've only been using it since 2015. Time and experience has shown that the injection foam is easier to control, faster to set up, and lasts significantly longer than "mud or slurry." Mudjacking (Competitors) Slabjacking (Acculevel) Material Concrete slurry: a mix of limestone, concrete, sand, and water Polyurethane foam **Drill size** 1 to 1.5 inches  $\frac{3}{8}$  of an inch Curing time

Concrete Lifting. Concrete Leveling. Slabjacking. Mudjacking. What's the Difference?

Hours or days, depending on quantity of material
Less than an hour
Durability
5-10 years
In most cases, permanent
Potential issues
Like concrete, it can decay, break apart, erode or sink. This material is similar to
concrete so it is heavy. Adding weight to the existing concrete can also lead to
concrete so it is heavy. Adding weight to the existing concrete can also lead to increased settling.
increased settling.
increased settling.  Can sink if soil erosion is significant underneath the injected foam. The foam is much lighter weight than "mud" or "slurry," so it doesn't contribute to settling like
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Unfortunately, slabjacking a polyurethane foam is more expensive than mudjacking. But for most homeowners, it's worth the added expense because it's something you only have to do once. Because mudjacking uses a variation on concrete, it breaks down and erodes the same way your concrete slab does. Polyurethane foam does not decompose; unless the ground below the foam erodes, the foam will keep the slab in place indefinitely.

## Want to Know if Your Sinking Concrete Slab Can Be Repaired?

If so, you should find an experienced foundation company, and make an appointment. Before you sign a contract for any service, we urge you to always verify the company is reputable, insured, and accredited by the Better Business Bureau.

Do you have a slab that has been mudjacked in the past? Is it sinking again? Slabjacking may produce better and longer-lasting results. But there are some risks involved. We explain more about slabjacking a previously mudjacked concrete slab here.

If you live in Minnesota or the surrounding states, contact Concrete leveling Solutions MN. If you have noticed any problems and would like an evaluation, you can request a free estimate. An experienced project manager will examine the areas of concern and recommend the best course of action for you, to keep your home strong and healthy for years to come.

### Have Other Questions You'd Like Us to Answer?

We discuss the costs of mudjacking, slabjacking, and concrete replacement here.

Concrete Lifting. Concrete Leveling. Slabjacking. Mudjacking. What's the Difference?

Is your garage floor sinking? We explore two repair methods, and when to use them, here.

Not sure what questions to ask when hiring a contractor? We understand. That's why we developed this guide, which includes a free downloadable copy for your use.