

Pool deck leveling: 5 methods and what each one costs

You walk out to the pool one morning and notice it right away: one slab has dropped about an inch, leaving a raised edge at the water's edge that wasn't there last summer. That lip is a trip hazard, especially on wet concrete, and it's only going to get worse if you ignore it. The good news is that most sunken pool decks don't need to be ripped out and replaced, they need pool deck leveling. A skilled crew can raise a sunken apron in a single morning, often without disturbing a single landscaping stone around it. That's the kind of result most homeowners don't know is possible until they start asking the right questions.

Pool deck leveling is the process of restoring a settled, uneven concrete apron to a safe, functional surface without demolishing your backyard in the process. This article covers why pool decks sink, how five different repair methods compare on cost and durability, and what to ask a contractor before you commit to anything.

Why pool decks sink in the first place

Soil erosion and washout beneath the slab

Water is the primary villain here. Pool splashing, rain runoff, and backwash drainage constantly push water against the soil under your concrete apron. Over time, fine soil particles erode and migrate away from beneath the slab, leaving voids. Once the concrete loses support from below, gravity does the rest. This is the single most common cause of sunken pool decks, and it's worth understanding because the right repair method depends directly on how severe the washout is.

Freeze-thaw cycles and seasonal ground movement

Water trapped in the soil beneath your deck expands when it freezes, heaving the slab upward. When it thaws, it contracts again. Run that cycle a few dozen times over two or three Midwest winters, and even a well-poured deck will start to shift and crack along joint lines. Homeowners in Illinois, Iowa, and other northern states deal with this constantly. The uneven movement from freeze-thaw cycles is one reason pool decks rarely settle uniformly. One section drops while adjacent slabs stay put, creating the exact raised-edge trip hazard you're trying to fix.

Poor drainage design and improper slope

Decks poured without adequate slope send water back toward the pool edge or the house rather than away from both. Standing water saturates the subgrade, accelerates erosion, and speeds up settling. This

is a design problem that predates the sinking, and it matters when you're choosing a repair method. If poor drainage caused the original settlement, fixing the concrete without also addressing the drainage means you'll be having this same conversation again in three years.

Signs your pool deck needs lifting, not just patching

Red flags that go beyond surface cracks

Surface cracks alone don't tell you much. The signs that point specifically to settlement are more telling: one slab sitting visibly lower than the adjacent one, cracks running along joint lines rather than cutting across the slab body, water pooling on the deck after a rain, and a hollow sound when you walk across a section. That hollow sound means there's a void beneath the concrete. Raised edges at slab joints are the most urgent concern because they're a direct trip hazard, especially for wet bare feet around a pool. These are the conditions that call for sunken pool deck repair, not just surface patching.

When the damage is too far gone to lift

Concrete lifting works when the slab itself is structurally sound and the problem is the soil underneath. When the concrete is severely compromised, no lifting method fixes that. Watch for widespread spalling, deep structural cracks running across the body of a slab (not just along joints), crumbling edges, or sections that have sunk more than a few inches with significant soil loss. If you're seeing those conditions, the conversation shifts from pool deck repair to full replacement. A reputable contractor will tell you this honestly before they schedule any work.

The 5 pool deck leveling methods compared

1. Mudjacking: the affordable workhorse

Mudjacking, also called slabjacking, is the most widely used and cost-effective method for raising a sunken pool apron. Small holes are drilled through the slab; a cement-soil slurry is pumped underneath, filling the void and hydraulically lifting the concrete back to grade. The [cost runs \\$3 to \\$9](#) per square foot, which makes it the most budget-friendly concrete lifting option on this list. It works best when the soil is otherwise stable and well-drained and the goal is to get a sound slab back to level without spending more than necessary.

The limitation worth knowing: mudjacking slurry adds weight to the subgrade. On sites with persistent drainage problems or weak, erosion-prone soil, that added load can accelerate future settling. For homeowners with a solid slab and a stable base, it's exactly the right tool. **Top Notch Mudjacking specializes in mudjacking for pool aprons** and backs the work with a 2-year limited warranty.

2. Polyurethane foam injection: the premium option

[Foam injection](#), marketed under names like PolyLevel or polyjacking, works through smaller drill holes than mudjacking. High-density expanding polyurethane foam is injected beneath the slab, fills voids, and lifts the concrete as it expands. It cures within minutes. The [cost range is \\$5 to \\$25](#) per square foot, with most residential pool deck jobs clustering around \$8 to \$15 per square foot. The higher price reflects the material cost and the faster turnaround.

Foam injection is the better choice when drainage is poor or the soil is weak and waterlogged, because the foam is significantly lighter than mudjacking slurry and moisture-resistant. It won't soften or wash out the way a cement-based slurry can in chronically wet conditions. [Warranty terms vary by contractor](#) but commonly run around five years, with the foam itself lasting far longer if drainage issues are corrected alongside the repair.

3. Concrete grinding: for minor height mismatches only

Grinding is not a lifting method. It shaves down raised slab edges at joints to eliminate the trip hazard at the surface. If the height difference between two adjacent slabs is less than half an inch, grinding is a practical, low-cost fix, typically running \$1 to \$3 per linear foot depending on the length of the joint. It does nothing to address the void or settlement underneath, so the slab continues to sink after the grind. Think of it as removing the immediate safety risk while you plan the actual pool deck leveling work.

4. Self-leveling overlay: surface-only cosmetic fix

A self-leveling concrete overlay poured over the existing slab can address thin height discrepancies and surface texture issues. It has no structural value and does nothing for voids underneath. Overlays generally run \$3 to \$7 per square foot installed, making them a low-cost option for cosmetic touch-ups on a stable, level deck, but not for decks with active settlement issues. If the subgrade continues to settle, the overlay cracks and separates along with the original slab.

5. Full concrete replacement

When the slab itself is beyond saving, replacement is the right answer. Demolish the existing concrete, address drainage and compaction in the subgrade, pour new concrete. Cost runs \$8 to \$15 per square foot or more depending on finish, reinforcement, and demo costs. It's the most disruptive and expensive option, but it's also the correct one when lifting would be temporary or structurally unsafe. A good contractor won't recommend replacement when slab lifting will do the job.

What each method costs and how long it takes

Real cost ranges for a 400 sq ft pool deck

Putting those per-square-foot numbers into a realistic project context puts the comparison in perspective. For a 400 square foot pool apron, mudjacking runs roughly \$1,200 to \$3,600. Foam injection on the same deck comes in at \$2,000 to \$10,000 depending on the contractor and site conditions. Full replacement for the same area runs \$3,200 to \$6,000 or more once you account for demolition, haul-away, and finishing. In most cases, lifting costs 40 to 70 percent less than replacement, and the finished result is functionally identical for a slab that qualifies.

Downtime and pool access during repair

Foam injection jobs on a standard pool deck are often [finished in two to four hours](#), and the pool can typically be used the same day. Mudjacking takes a similar amount of time on-site but requires roughly 48 hours of cure time before the deck handles full foot traffic. Here's a detail most homeowners don't expect: the pool can stay full during both lifting methods, and **a full pool actually helps by providing counterpressure during the lift**. The one exception is pool step repair, which may require partial draining for access. Either way, you're looking at one to two days of disruption at most, compared to several weeks for a full replacement.

DIY vs. hiring a specialist: where the line is

What homeowners can realistically handle themselves

Surface patching, crack sealing, and light grinding at slab joints are all within reach for a capable DIYer with the right materials. Stop there. Leveling a pool deck requires specialized pumping equipment, experience reading soil conditions, and the skill to raise the slab evenly without cracking it further. A bad DIY lift doesn't just fail to fix the problem, it can crack a structurally sound slab beyond repair or damage plumbing lines running beneath the deck. The equipment alone puts slab lifting firmly in professional territory.

Questions to ask before you hire anyone

Not all concrete lifting contractors are the same. Before you commit, get answers to these five questions:

- What's causing the settlement, and have you identified the void location?
- Are you licensed, bonded, and insured?
- Do you offer a warranty on the leveling work?
- Will my landscaping or pool coping be disturbed during the repair?
- How long before we can use the deck after you finish?

A contractor who can answer all five clearly, before any work begins, is a contractor worth trusting. Top

Notch Mudjacking provides free, no-obligation estimates on pool apron work, assesses the root cause of settlement before recommending a method, and backs mudjacking with a 2-year limited warranty. That's the standard to hold any contractor to.

The bottom line on pool deck leveling

Sunken pool decks are almost always a soil problem, not a concrete problem. That distinction matters because it means the concrete you have, properly lifted and stabilized, can serve you well for years without the cost and disruption of tearing it out. Mudjacking is the right call for stable, well-drained sites where budget matters. Foam injection earns its higher price tag on sites with wet, weak, or eroded subgrades. Replacement is reserved for slabs that are genuinely beyond saving.

A sunken pool apron isn't just an eyesore. It's a liability, and every season you wait, the settlement typically gets worse. When evaluating your options, prioritize the pool deck leveling method that matches your site conditions and budget, because lifting runs a fraction of what replacement costs, and the functional result is the same for a slab that qualifies.

If you're in the Quad Cities area and want a straight answer on whether your pool deck is a candidate for mudjacking, Top Notch Mudjacking offers free, no-obligation estimates for residential and commercial pool apron work across Illinois and Iowa. The crew is licensed, bonded, and insured, and the work is backed by a 2-year limited warranty. Get an honest read on your slab before you spend money on a fix that isn't the right one.