Mud Jacking: Alternative to Concrete Replacement

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Almost anywhere you pour concrete there is the potential for movement that can raise, lower or crack pads or foundations. Movement in pads results in uneven concrete floors, sidewalks and driveways. Trip hazards may result. Foundation movement can translate into cracked walls, windows and doors that don't function properly or serious structural problems.



This photo shows result of movement of driveway, sinking in relation to garage. Note the downspout to the right that dumps runoff next to the driveway. This is a likely suspect as the cause of the movement. The cycle of water seeping into the gap created by the pad movement, freezing and expanding, thawing and filling with more water to expand even more will accelerate deterioration. <u>Mud jacking</u> can solve this problem.

Tearing out old concrete and replacing it is expensive. Many problems can be solved by concrete leveling techniques also called mud jacking, and slab jacking. Companies that do this work claim that it costs 50-75% less than replacement.



<u>Mud jacking</u> can solve a variety of problems like: unlevel concrete pads; cracking foundation; bowed basement walls; failing retaining walls and uneven junctions of concrete pads.

The basic technique has been used for at least a couple hundred years. Filler compounds of various kinds are injected underneath concrete to fill gaps and lift the slab or foundation back into place.

Fillers made of limestone and



Portland cement, or other natural compounds are injected underneath using hydraulic pumps. This technique usually leaves the surface ready to use in 24 hours. Sometimes large diameter holes,

up to 3", must be used risking breaking the pad apart.

The newest techniques use closed cell, expanding polymers to fill gaps and lift the concrete back into place. Holes of about 5/8" diameter are used to inject the expanding foam underneath the slab. It goes in as a liquid, filling all voids. The expansion capabilities of the foam are as much as 6,000 pound per square inch. Lifts of over 125 tons have been reported by manufacturer, <u>Uretek</u>. Here is a <u>You Tube of the process</u>. Slabs are ready for use in about 30 minutes. The new polymer foundation that has been created underneath the concrete is waterproof, won't rot, shrink and will last forever.

If you have concrete problems check with a reputable mud jacking firm to see if repair is an option. If replacement is required consider using a <u>rubber sidewalk</u>, or paver system, made from recycled tires, or other eco friendly product.

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