

# Concrete Lifting

# SLAB SAVER

POLY FOAM



**Foam & Coating Systems, Inc.**

*Manufacturer of High Performance*

*Foam/Coatings and Application Equipment*

575 Commercial Ave., Green Lake, WI 54941

800-625-9577 [www.oakridgepoly.com](http://www.oakridgepoly.com)





**Gun Cleaning**

- Remove all debris
- Change all O-rings effected
- All moving parts should be greased
- All parts should only be hand tightened

**Airways**  
C, D, E, F, G

**Fusion Gun**

**KEY**

- Purge Air
- Feed
- Chamber Air
- Control

**MIST TIPS**

- Leave
- Turn
- Hold
- If m...
- allow
- C...
- In
- p...
- Rep...

**CLEAN**

**TIP INSTALLATION**

- Screw the tip onto the mixing chamber
- Unscrew it 1/4 of a turn to allow the action of the gun to pull back the mixing chamber that must line up with the side seals.



# Estimating Concrete Lifting

When starting out in estimating Poly lifting, the approach is very basic. As you gain experience, your methods will change as you start to see projects and how many numbers of pounds needed to do the project.

## Basic estimating formula:

- Slab length x width x the drop of the slab Divide by 3 = Initial total
- $10' \times 10' \times 2'' / 3 = 67 \#$  pounds
- Pounds x pricing/per pound = Job estimate
- If the slab has some voiding in several areas, keep the initial poundage
- If the slab **does not** have voids throughout, reduce/- estimate by 15% (=57#)
- If the slab seems to **have significantly** voids throughout, increase/+ the initial poundage by 20% (=80#)

## Sidewalks:

- Slab length x width x the drop of the slab / by 3 = Initial total
- If the sidewalk slabs are busted up, a lot of work involved or significant voiding underneath, increase/+ 20%. (you are compensating for the time & effort it'll take as well as making the material estimate)

## Garages or other Structures:

- Slab length x width x the drop of the slab / by 3 x 2= Initial total
- $10' \times 10' \times 2'' / 3 \times 2 = 134 \#$  pounds
- If the slab has significant voicing underneath increase total by 20% or more



## Basic Concrete Lifting Items Needed

| Company                         | Part  | Used for:  |
|---------------------------------|---|--|
| Strata-Teck Inc<br>515-251-7770 | QC1 C Mizer Injection Ports 5/8" w/black seating sleeve, no check ball 3010-1010C | Injecting ports for spraying Foam under the Concrete             |
| <b>Qty</b>                      | <b>Part</b>   | Check ball ports no drilling out needed                          |
| 2                               | 3/16" x 12" Drill bit   | Clean out the ports  |
| 2                               | 3/16" x 4" Drill bit  | Drilling out the extension tip                                   |
| 1                               | Hammer Drill- 15amp +   | Drilling port holes  |
| 1 or 2                          | 5/8" x 22-36" Hammer drill bit  | Bit for ports  |
| 1                               | Tradesman Drill (electric or Battery)   | Small bit drilling   |
| 1                               | Blower (Electric, Gas or Battery)   | Clean out port holes b4 patching & area                          |
| 1                               | Dust pan & brush  | Concrete dust and/or debris                                      |
| 100'                            | Electrical extension cord-contractor  | tools  |
| 1                               | 14-16" Gas Concrete Saw   | Pre-cutting concrete expansion cracks                            |
| 1                               | 14-16" Diamond serated saw blade  | Blade- concrete  |
| 1 Box                           | 5/8" Backer Roc   | Filler in wide cracks  |
| 1 Box                           | Crack Stix-Concrete Crack Filler  | Topper of backer rod - filler                                    |
| 1 Box                           | Large Garbage Bags  | 1 to wrap gun- prevent over spray                                |
|                                 | 1/2" Pex tubing   | Extension to ports if needed                                     |
| 2 or 3                          | Small Buckets   | 1-mix patching, 1 clean H2O, 1 sm tools                          |
| 1 or 2                          | Large sponge- Tile grout  | cleaning patch hole  |
| 2"                              | Small masonry trowel  | patching holes   |
| 1 bag/bucket                    | Concrete patch mix- mortar mix  | patching holes   |
|                                 | Plastic sheeting  | protection for house   |
|                                 | Masking tape  | Use on plastic sheeting  |
|                                 | Utility knife   | Pex tubing/plastic sheeting                                      |
| 1                               | Dead Blow hammer  | Pound BL. sleeve flush to btm of port & for voids under concrete |
| 2                               | 24" Levels  | for slabs  |
| 1                               | Tape Measure  | Estimating   |
| 1                               | Large pry bar   | for Slabs if needed  |
| 1                               | Wire brush- large   | over spray on concrete   |
|                                 | Knee pads   | To save your knees   |
| 1                               | Small shovel  | Digging for slab jacker  |
| 2                               | 2"x4"x24"- lumber   | Pry bar &/or bottle jack   |
| 1 or 2                          | 4"x4"x24" - lumber  | Pry bar &/or bottle jack   |
| 1                               | Bottle Jack- for slab jacker  | Use with slab jacker   |
|                                 | <b>Fabricated items</b>   | <b>From our fabricator</b>                                       |
| 1                               | Tip for AP Fusion gun   | Extension tip for gun & match up with port                       |
| 1                               | Slab Jacker   | Goes under a slab to lift  |
| 1                               | Port Remover  | Removes ports from concrete                                      |
| 1 or 2                          | Clamp for gun & Port  | Vice pliers w/ welded end for ports & gun                        |
|                                 | Ap Fusion Gun with AR5252   |  |
|                                 | Spare parts kit for Gun   |  |
|                                 | 2# foam or 2# Foam (Fast)   |  |
|                                 | Camera for B4 & After pics  |  |

Preliminary list of Video Links to be used in the training sessions.

<https://www.youtube.com/watch?v=4MCuccVa86g> Lifting a Settled Driveway

<https://www.youtube.com/watch?v=yEVx949guHM> Lifting a Sidewalk

<https://www.youtube.com/watch?v=55QDLhoXYj4> Lifting a Sidewalk (do not recommend this method)

<https://www.youtube.com/watch?v=YSOGHYLWn9A> Garage Leveling & Crack Repair

<https://www.youtube.com/watch?v=wifzWGMSimw> Sinking Foundation Slab

<https://www.youtube.com/watch?v=3lqFHcBTtGU> What happens under the slab

[https://www.youtube.com/watch?v=IKej0UAJ\\_U](https://www.youtube.com/watch?v=IKej0UAJ_U) Slab Lift w Protective Bagging to contain spillage

<https://www.youtube.com/watch?v=lmQ91o5ztgA> Stoop Lifting

<https://www.youtube.com/watch?v=pYFsUpvedec> Trench Breakers & Rock Guard for Pipelines

<https://www.youtube.com/watch?v=80MEhTXy4nl> Basement/Foundation Slab Lift



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**Contact us today for a FREE  
Estimate!**

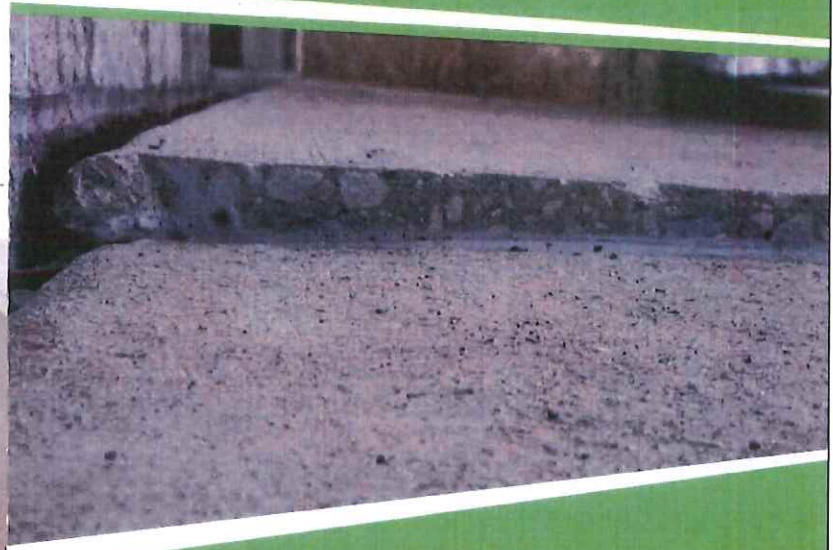
Problem Area: \_\_\_\_\_

Approximate estimate \$ \_\_\_\_\_




# SLAB SAVER

**Don't replace your concrete... Raise  
it with our polyurethane foam!  
10 YEAR WARRANTY!**



**Is your concrete settling from  
poor soil compaction, tree roots,  
weight or water damage?  
(Driveways, Patios, Sidewalks,  
Stoops, Garages, Interior Floor  
Slabs, Pool Decks)**

**Residential, Commercial,  
Municipal, DOT**

**800-625-9577**



**Oak Ridge**

**Foam & Coating Systems, Inc.**



# Make Your Concrete Great Again!

When your home was new, your concrete was a thing of beauty. New concrete always is. However, over the years, things begin to change as the soil beneath settles due to water and weight damage, poor soil compaction or tree roots. Not only are they unsightly, but also a trip hazard.



Imagine the daily weight on the gravel and soil underneath the driveway slab. An average 8' x 10' x 4" thick slab weighs approximately 4,000 pounds and an average sedan weighs 3,500 pounds. Some slabs will stop settling after the one-inch drop, but more often than not it will continue to get worse and the beginning of a slide into a very costly repair.

If you let it go for too long, at some point your only option becomes tear it out and replace it, a very expensive, dirty and disruptive repair. **(Remove and replace with new concrete +/- \$15.00 per sq. ft.)** At some point replacing it becomes your only option. Bottom Line: **It will never be less expensive to make this repair than it is today.** By taking action now with *Slab Saver Poly Foam*, you can save yourself a great deal of money and inconvenience.



Less than 1" drop, \$ 3.00/Sq. Ft.



1"-3" drop, up to \$6.00/Sq. Ft.



3"+ drop, \$10.00 +/-Sq. Ft.

If you have any plans to sell your home in the near future, sunken slabs in a driveway, sidewalk, patio, garage floor, interior floors or pool decks are an automatic punch list item for today's savvy home purchasers.

At **Oak Ridge**, we repair settled concrete with *Slab Saver Poly Foam*, a blend of polymers that incrementally and precisely lift your slabs back to their original position. We will provide you with a ten-year transferable warranty protecting you from any future settlement. Our competition will only warranty their work for 1 to 5 years. Call today for a FREE estimate.



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POLY FOAM

Driveways  
Sidewalks  
Porches  
Stoops  
Interior floor slabs  
Pool decks  
Patios  
Residential  
Commercial  
Municipal  
DOT



**10-year warranty**

**Financing Available**

**Don't replace your concrete,  
raise your slab! Why?**

**Safety** – Trip hazards

**Structural Damage** – walls, doors  
windows may be affected.

**Appearance** – eye sore

**Cost effective** – 75% cheaper than  
replacing slab.

**Time** – from start to finish, 1-3 hours for  
most jobs

**Resale value** – sale of your property  
may be affected

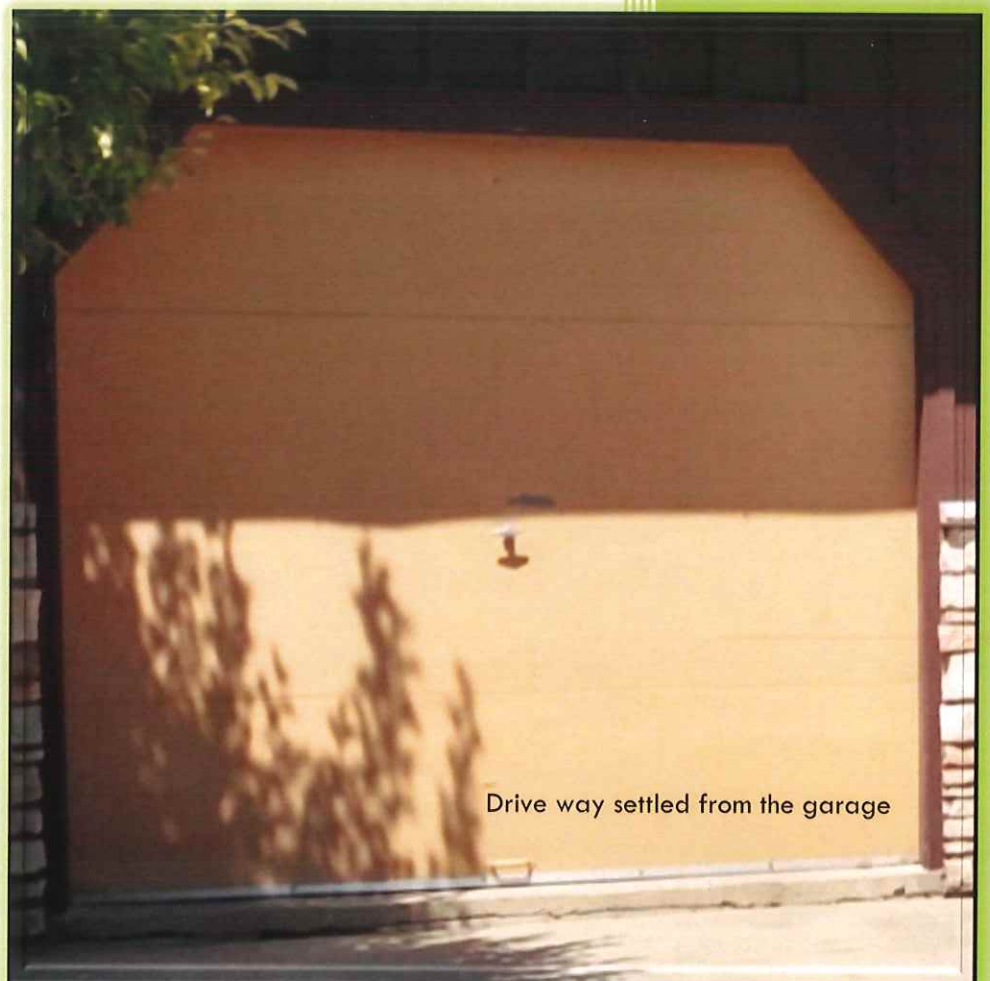
**What causes your concrete to  
settle?**

Poor soil compaction  
Tree Roots  
Water damage

**123**

Easy as

1. Drill
2. Pump/Spray
3. Fill



Drive way settled from the garage



# SLAB SAVER

## POLY FOAM



### Making Concrete Great Again!

Poly-jacking uses high density Polyurethane Foam injected into under-slab voids to raise concrete to its proper level. This process provides stability to the restored slab system.

This permanent concrete leveling method is 75% cheaper than removing and replacing existing concrete. Poly Jacking is 80% faster than other repair methods. The lifting foam cures in less than fifteen minutes meaning your project can be completed in hours versus the days or weeks that other methods take. This method is precise to within 10/1000 of an inch. Other methods could result in a shrinkage factor. Polyurethane foam never shrinks.

Poly-jacking municipal concrete is less disruptive than other methods. The affected areas can be re-opened to traffic immediately.

By expanding 20 times its liquid volume, the foam moves laterally beneath the concrete, filling all the voids 100%. It binds the surrounding soil, strengthening the base material.

The Polyurethane adds only 3 – 5 lbs. per cubic foot compared to 100 lbs. plus that mud-jacking grout adds. The foam is moisture resistant and is a special formulation designed for wet conditions. The hydrophobic properties displace and repel water without being compromised.

Poly-Jacking foam seals the underside of the concrete joints and cracks eliminating water penetration and future erosion. Last but not least, **Poly-jacking allows towns, cities, industries and municipalities the ability to control their aging infrastructure by saving them time and money.**

|                   | Foam Jacking    | Mud Jacking     | Slap Piers       | Replacement    |
|-------------------|-----------------|-----------------|------------------|----------------|
| Hole Size         | 5/8"            | 1 – 5/8"        | 9"               | n/a            |
| Lifting Potential | High            | High            | Slight           | n/a            |
| Speed             | Fast            | Moderate        | Slow             | Very Slow      |
| Disruption        | Low             | Moderate        | High             | Very High      |
| Cost              | \$3-10/ sq. ft. | \$5-10/ sq. ft. | \$20-40/ sq. ft. | \$30+/ sq. ft. |
| Material Weight   | 4 PCF           | 120 PCF         | Leaves Voids     | 120 PCF        |
| Cleanliness       | Very Clean      | Messy           | Messy            | Messy          |



Foam Jacking uses fewer holes that are only 5/8" in diameter, so the slab is weakened less than the more numerous, larger holes required by conventional mud jacking.



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