

Concrete Polishing with 3M Trizact Diamond Abrasive Strips: Case Study
Square Scrub Facility
Jonesboro AR

Questions answered in this study

1. How many square feet can we do with a set?
 2. How fast can we polish concrete?
 3. What does it cost to polish concrete?

Overview

While preparing to move into our new manufacturing facility, we decided to conduct a concrete polishing test. Presented in this case study are the real results from the test. These are the real results. Since every floor and process is different, your results may differ as well. So, the results on your floor with your equipment may not be the same. The variable of concrete type, machine type, quality, and people operating the equipment may make a difference in the outcome of any skilled labor project. Speed of the process may also vary widely from job to job. Our goal was to produce a quality shine to our floors. This case study was conducted to collect real world accurate information. Please, use this as an example and guideline for what can happen. Keep in mind your floor will be different, and your results may vary. However, this data along with our step by step videos will get you going in the right direction.

We started with an unfinished commercial concrete floor, and used the following equipment:

- 1) Square Scrub EBG-20C Pivot New version
- 2) 21" propane high speed floor polisher
- 3) Tomcat 28" automatic Edge floor scrubber
- 4) Bucket on a Stick to lay the Stone Protector
- 5) 6 Coarse 3M Trizact diamonds
- 6) 6 Medium 3M Trizact diamonds
- 7) 6 Fine 3M Trizact diamonds

We used 6 diamonds on the machine to allow us to cut our labor time down. (See Square Scrub catalog for proper diamond placement). With 6 diamonds on the Square Scrub machine we were able to only make 3 passes per grit. Our goal was to use one person, and determine square footage numbers on work completed and how long the diamonds lasted. Our goal again was a recreate a real-world situation as much as possible.

Square Foot life of diamonds estimates

Coarse - 14,000 sq.ft. based on our floor and our process
Medium - 11,200 sq.ft. based on our floor and our process
Fine - 6,000 sq.ft. based on our floor and our process

Purple Diamond Pad - 8,000 sq ft based on this floor is our Trizact diamond pad life estimate
Stone Protector 1 gallon - 3,000 sq ft. This is the 3M specification for this product we were able
to get very close to this number.

Cost of labor and material per

Labor (\$20 per hr) - \$160.00

Coarse - \$33.80 This is the cost of the Trizact life we consumed

Medium - \$48.07 This is the cost of the Trizact life we consumed

Fine - \$93.27 This is the cost of the Trizact life we consumed

Purple Diamond Pad - \$10.13 This an estimate of the pad life we used

Stone Protector - \$149.80

Total Cost - \$495.07 to do the 1000 square feet

Total Cost per ft - \$0.50

YMMV (your mileage may vary)

As mentioned before, every floor is different and every process is different. This is a simple way to look at the process and can help in determining an estimated cost of the project. If you have a large project and need to get a close estimate of the cost, we suggest you block off a small area and carefully record the time and materials that small section needed. Then take that information and expand it to match the size of your entire project.