

## Surmac Saves Owner \$5 Million with Project-Rescuing Concrete Restoration

## THE BROADWAY LOFTS PARKING GARAGE STORY

Building engineers said scrap it. The idea of repairing the five-story, 240,000 square foot Broadway Lofts Parking Garage in San Antonio, Texas was a lost cause.

This concrete restoration project required a miracle.

The owner didn't have to look far for a miracle-maker. San Antonio-based Surmac, Inc., a leading specialty contractor in concrete restoration, is a "concrete whisperer" that uses out-of-the-box innovation and applied common sense to transform bad pours into good.

"Even in the worst case, concrete can be saved. What we're doing with concrete repair blows the lid off conventional wisdom," says Surmac company founder and president Rick Watson. Operating strictly on word-of-mouth, Surmac operates with a backlog of about 40 projects, all private-sector work.

The Broadway Lofts project remains "a very special job" to Watson.

"It's a pan and beam garage supporting a 308unit residential project," Watson explains. "Almost immediately after the slab pour in 2012, cracks started to appear on all five levels. Forensic engineers determined the aggregate was too small, it had been way over-watered, and no steel was used in the concrete. The pH was 6.8, meaning near-acidic, threatening the galvanized pans. A \$5 million investment was falling apart before the owner's eyes.

"He was going nuts."

Rick had worked with the owner on an unrelated repair project. Learning of the garage problem, Rick decided to quietly check it out. "I looked at it closely. I made up my mind we could help."

While engineers advised demolition and rebuild, the owner agreed to let Rick's team test a repair protocol. It would prove to be the first of three protocols Surmac would deploy over the next three years. All three tests proved successful, even with heavy vehicular traffic.

With the situation worsening and legal action pending, the owner finally gave Surmac the green light to repair the entire garage in early 2015. The protocol:

- **1. Shot blast and diamond grinding** removed the top quarter-inch of carbonated concrete.
- 2. Low-viscosity, hybrid polyurethane-polyurea mender was applied to all cracks.
- Carbon fiber strapping and staples were carefully implanted over the main girder beams to increase rigidity and mitigate flexing.
- 4. Miracote MiraPrime Aqua-Blok served as a deep-penetrating alkali-reactive internal hardener. The chemical reaction creates far denser concrete and lifts pH (to nearly 12 in this case).
- Miracote MPC Park Deck System (including MPC hard) in combination with MiraGard Dry Look Sealer was applied to strengthen wear surface durability.

## The outcome?

"The owner is beyond happy. We saved him millions of dollars. Our solution is an absolute bargain for him. Miracote even agreed to stand behind their system with a 10-year warranty. Our success here has generated more repair jobs for us all across the country.

"I can't say enough good about Miracote," Rich praises. "They make incredible products. I'm not sure they even know how good their system really is. What the Miracote system can repair can't be touched by any other product. I'll swear to that. Now owners and property managers can fix any concrete problem, even 'unfixable' ones."

Just ask the owner of the Broadway Lofts Parking Garage.

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