

The perfect finish for an urban oasis.



The extensive CityNorth multi-use complex rising in Phoenix, Arizona.

A multi billion-dollar urban oasis rising in the Phoenix area, CityNorth is a mixed-use residential, commercial and retail area that's bringing uniquely designed city living to its distinctive desert environment.

While large in scale, the project's design details are thoughtfully woven together to create an appealing mix – from the top of the modern buildings right down to the hardscape walkways. Making the latter look good was one of the responsibilities of Hensel Phelps Construction, the project's general contractor.

To create an attractive, textured finish, an acid-wash was originally planned for the 128,000 square feet of hardscape sidewalks and courtyard areas. But when tested in small-scale mockups – even after three attempts – the acid-wash wasn't doing the job.



Top-Cast™ 03 etch-grade top-surface retarder was used to create an "acid-wash" like finish on CityNorth's sidewalks – without the traditionally cumbersome acid-wash process.

"We had a lot of blotchiness, spots and inconsistency while testing the acid finish," said Ted Alvarez, project superintendent for Hensel Phelps. "With our contacts at Grace and Davis Colors, we turned to Top-Cast and immediately achieved the results we wanted on the first test."

Alvarez explained that with the tremendous scale of the project, and the need for a consistent, high-quality finish, Top-Cast™ 03 was selected for sidewalks, and Top-Cast™ 250 was used in courtyard areas to create a 3/8" exposed aggregate finish. In addition, Grace's WRDA® 64 water reducing admixture was included in the concrete mix to make the concrete more workable, easy to place and finish.

"What would have taken 25-30 finishers using the traditional acid-wash process and approach, took just 10 finishers with Grace's Top-Cast. We were placing every day and I don't think we would have made the schedule if not for Top-Cast. We certainly wouldn't have achieved the desired finish we wanted without Top-Cast."

**Ted Alvarez, Project Superintendent
Hensel Phelps Construction**



For the courtyard areas, Top-Cast™ 250 grade was applied to create a consistently high-quality deep exposed textured appearance.

The results were a better-looking finish and a tremendous labor savings. “What took about three hours of man time with acid-wash was done in just about an hour with Top-Cast, and without the hassles or inconsistencies of the typical acid-wash approach,” said Avez. “There’s a lot less managing needed with Top-Cast. We don’t have to worry about temperature and tight time tolerances like you do with the traditional acid-wash process and approach. You put it down and it works. It’s very forgiving.”

Lead finisher, Jesus Morales, agreed. “You walk away and come back, and it works just as expected. It’s really easy and we’re very comfortable working with Top-Cast,” said Morales. “It gives us much better control and doesn’t change the concrete’s color like acid-wash can.”



performed well as it was applied and removed, delivering the desired results dependably and consistently.

For Hensel Phelps, knowing they can assure their customers of a top-quality job every time is the key to their success. And with the ability to satisfy their customers while working faster and more cost-effectively, they’re looking forward to using Top-Cast on upcoming projects.

“Top-Cast was easy to use and finish. It makes my job easier and gives us the quality, texture and consistency we want every time.”

**Jesus Morales, Lead Finisher
Hensel Phelps Construction**

While acid-washing can sometimes be used effectively in a small, controlled area, in large areas with real life conditions, it’s nearly impossible to get the quality expected. With Top-Cast, everyone knows they’ll get the results that will meet expectations – from the specification and mockup stage to the finished surface. As expected on the CityNorth project, Top-Cast

Project Credits:

- Project:** CityNorth, Phoenix, AZ
- General Contractor:** Hensel Phelps Construction, Phoenix, AZ
- Hardscape Finisher:** Hensel Phelps Construction, Phoenix, AZ
- Supplier:** Cemex, Inc., Phoenix, AZ
- Grace Products:** Top-Cast™ 03, Top-Cast™ 250, WRDA® 64

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