

OPERATIONS • MARKET DEVELOPMENT • PRACTICE

# Concrete<sup>®</sup>

## PRODUCTS

CONCRETEPRODUCTS.COM

MAY 2012

- Lafarge's Illinois move, p. 4
- OSHA rebar survey, p. 8
- Vulcan on the offensive, p. 10
- Slab-drying admixture, p. 12
- ASTM, AASHTO's Cement & Concrete reference lab, p. 14
- Clark Pacific, p. 16
- Truck & Components, p. 26
- Tablet-equipped drivers, p. 28
- Google Map routing, p. 31



## QC/QA CERTIFICATION

It's up to New York City producers

A MINING MEDIA PUBLICATION



## XYPEX PREVENTS LEAKS AT NEW ST. LOUIS ZOO EXHIBIT

The St. Louis Zoo's new sea lion exhibit, which is set to open this summer, features thematic concrete rock work constructed by Cemrock, based in Tucson, Az., and Seattle, Wash. Cemrock, which specializes in the construction, fabrication and installation of artificial and themed elements, used Xypex Concrete Waterproofing through Crystallization admixture in the shotcrete exterior to prevent leakage of the habitat's salt water pools, underwater viewing areas, and an underwater walk-through tunnel.

"We have a thorough, working knowledge of Xypex concrete waterproofing products," says Scott Chandler, Cemrock project superintendent for the zoo contract. "For a number of reasons, including the fact that this exhibit will hold 258,000 gallons of salt water, this was a high-risk project that required a zero-tolerance concrete waterproofing solution."

Xypex Concrete Waterproofing by Crystallization was specified by the project's architect, St. Louis-based PGAV Destinations (Peckham Guyton Albers & Viets, Inc.). "Through research and value engineering on multiple exhibit projects," says Project Manager Mariusz Bleszynski AIA, LEED AP of PGAV Destinations, "we discovered that a concrete pool vessel made watertight by



PHOTOS: Roger Brandt,  
Zen Pirate Photography, St. Louis, Mo.

a crystalline concrete admixture or surface treatment is a very economical construction method. This is especially true for the sculptured artificial rockwork pools, where

a surface applied waterproofing is not aesthetically or economically viable. We have found the Xypex line of products works well for free-formed shotcrete exhibit pools as well as cast in place concrete basins for water treatment processes."

An established green technology, Xypex Concrete Waterproofing by Crystallization uses concrete's inherent water permeability to deliver crystalline chemicals that plug the material's pores and to bridge micro-cracks that occur as the concrete dries and shrinks. The chemistry can be easily introduced into new concrete as an admixture, a dry-shake product, or a surface-applied coating. All of the concrete in the St. Louis Zoo sea lion exhibit project was treated with Xypex C-500 Admix—a total of 4,830 lb. was used for both shotcrete and poured slabs. For existing (i.e., cured) concrete, surface-applied coatings were used.

The \$18 million, 1.5-acre habitat and arena will initially be home to 11 sea lions and later will include harbor seals. Other key firms involved in the construction of this project include Alberici Constructors (Project Managers) of St. Louis; Rhodrey Construction of St. Louis; Raineri Building Materials of St. Louis; and Ameristar Building Products of St. Charles, Mo. Cemrock was the applicator. — Xypex Chemical Corporation, [www.xypex.com](http://www.xypex.com)



The new sea lion exhibit at the St. Louis Zoo features a shotcrete exterior made with a Xypex Concrete Waterproofing through Crystallization admixture to help prevent leakage of the habitat's salt water pools, underwater viewing areas, and an underwater walk-through tunnel.