Located on the Chesapeake Bay, Baltimore is exposed to a variety of weather conditions during the year that can be detrimental to concrete. Repeated exposure to freeze-thaw cycles and a salt water atmosphere can have an adverse effect on the structural and aesthetic integrity of concrete structures.

Charged with rehabilitating several concrete parking decks in Baltimore that feel victim to these conditions, CPR Concrete Construction used QUIKRETE® FastSet™ Concrete Mix with corrosion inhibitor and QUIKRETE® Polymer Modified Fiber-Reinforced Deck Mix to make the necessary repairs. The repair areas were prepared with a concrete saw and the dilapidated concrete was removed with a jackhammer and pressure before applying QUIKRETE® materials to make repairs, which averaged 4” to 6” deep and were predominately full-depth repairs. CPR Concrete Construction applied QUIKRETE® Polymer Modified Fiber-Reinforced Deck Mix during standard working conditions, but transitioned to QUIKRETE® FastSet™ Concrete Mix late in each shift when the repairs needed to set hard quickly before lanes re-opened to traffic.

QUIKRETE® FastSet™ Concrete Mix is a rapid hardening, high strength material designed to build or repair concrete parking structures, highways, bridge decks, concrete parking lots and concrete floors. It can be applied from 1 ½” to 24” thick and reaches 3,000 PSI in three hours and 7,000 PSI in 28 days.

QUIKRETE® Polymer Modified Fiber-Reinforced Deck is crack resistant, air entrained for freeze/thaw durability and contains integral corrosion inhibitors to promote superior durability, high strength, and long working time. It can be applied from 2” to 2” thick and reaches 1,800 PSI in 24 hours and 6,000 PSI in 28 days.

CONTRACTOR: CPR Concrete Construction

QUIKRETE® PRODUCTS:
• 70 lb QUIKRETE® FastSet™ Concrete Mix: 2,000 bags
• 80 lb QUIKRETE® Polymer Modified Fiber-Reinforced Deck Mix: 4,000 bags

PROJECT START DATE: July 2014
PROJECT COMPLETION DATE: October 2014