PROJECT PROFILE

STATUE OF LIBERTY FOUNDATION REHABILITATION

PROJECT DATA
Location – Liberty Island, NY
Contractor – Macedo Construction
Concrete Producer – County Concrete

PRODUCTS FEATURED
Plastol 5000
High-Range Water Reducer Admixture
Eucon W.O.
Hydration Control Admixture
Visctrol
Viscosity Modifying Admixture
Accelguard 80
Non-chloride, Accelerating & Water Reducing Admixture

PROJECT SUMMARY
The Challenge
Deliver high performance, low shrinkage, architectural, pump-able, self-consolidating concrete to the Statue of Liberty for foundation restoration. Since access to this project on Liberty Island is only by boat, the concrete needed to maintain slump and workability for up to 6 hours!

The Solution
The team ran multiple trial laboratory mixes to develop the mix design that would meet all the criteria of the project. The final self-consolidating concrete mix design utilized several admixtures including Plastol 5000, a high-range water reducer (to achieve high workability and reduce the water content and shrinkage); Eucon W.O., a hydration control admixture (to allow the mix to remain as designed for up to 6 hours); and Visctrol, a viscosity modifying admixture (to maintain the self-consolidating ability). Accelguard 80, an accelerating admixture, was also used at times to modify the final set time of the concrete on the island.

The Outcome
An award winning project, featured by National Geographic. This project helped re-enable public access to the interior of the statue.