

Kings County Hospital Center Parking Garage

Brooklyn, NY



Kings County Hospital Parking Garage, Brooklyn, NY

Kings County Parking Maximizes Concrete Durability with Hycrete Waterproofing and Corrosion Protection

Structure:	Above- and below-grade parking garage
Application:	<ul style="list-style-type: none"> ■ Slab-on-grade ■ Foundation walls ■ Parking decks
Owner:	Clarkson Avenue Garage LLC
Architect:	Stephen Lepp Associates Architects and Planners
General Contractor:	Clearview Development
Concrete Contractor:	Kenry Contracting

Introduction

Kings County Parking Garage is a 500 car garage on the Kings County Hospital Center campus. The garage offers 24-hour per day public parking for Kings County, Downstate, and Kingsbrook Hospitals. The garage helps ease the congestion on the busy streets surrounding the Kings County Hospital campus, and improve the quality of life for the hospital's residential neighbors as well as for motorists that frequent the Flatbush community.

Challenge

The parking structure is both above- and below-grade, with one full level below-grade and the second deck half exposed. The below-grade slab and walls are exposed to soil high in chlorides. Additionally, the exposed parking deck will receive periodic de-icing using road salts. The owner desired a solution that would offer maximum corrosion protection and waterproofing while limiting maintenance requirements and downtime. Specifically, the owner was concerned about the costs and downtime resulting from surface-applied coatings to the decks.

Solution

Hycrete W1000 was added to the concrete to deliver maximum, proven corrosion protection and enhance the durability of the concrete. Hycrete W1000 was used in place of a spray-applied traffic coating system and eliminated future maintenance requirements associated with the periodic re-application. Also, Hycrete's ten year warranty guarantees the concrete will remain below 1% in absorption testing. Finally, the owner now has a more durable structure, resistant to freeze-thaw damage and corrosion, which will require less, costly long-term maintenance.

Result

The structure is dry and is protected from corrosion. The owner saved time and money by choosing Hycrete and eliminating the traffic coating system, while extending the life of the structure via enhanced corrosion protection.

“Using Hycrete’s waterproofing and corrosion protection admixtures eliminated the need for a traffic coating and sealants; creating savings of money and time during the construction process as well as reducing future maintenance costs.”

Manny Kazanas, Managing Member,
Clearview Development

“As the project is in a high-chloride environment and will be exposed to road salts it was important we addressed corrosion protection. Hycrete’s products are proven to provide maximum corrosion protection.”

Stephen Lepp Associates Architects and Planners

“The Hycrete admixture was easy to dose and use. We plan to use Hycrete’s admixtures for future waterproofing and corrosion protection needs.”

Manny Stratis, Project Manager,
Clearview Development