

Kaiser Permanente Sunnyside Medical Center

Clackamas County, OR, USA (2007)

PRODUCT USED:

Krytol Internal Membrane™ (KIM®)

OWNER:

Kaiser Permanente

ARCHITECT:

ZGF Architects LLP

CONTRACTOR:

Skanska

READY-MIX SUPPLIER:

Ross Island Sand & Gravel Co.

DISTRIBUTOR:

Kryton International Inc.

BACKGROUND

During 2018, the Kaiser Permanente Sunnyside Medical Center was recognized as Oregon's top teaching hospital and fifth best hospital overall by hospital watchdog Leapfrog Group. However, this couldn't have been accomplished without first having the space to accommodate everyone in need.

Before 2007, they didn't quite have that space when it came to parking. To resolve this dilemma, the center decided to construct a three-story, 700-space above grade parking garage. During the first phase of its construction, the project team applied a traffic membrane to half of the garage so they could waterproof the exposed concrete decks and protect the reinforcing steel and post-tensioning cables used in the suspended slabs.

However, the application process proved to be difficult and costly as areas of the traffic deck coating kept delaminating. In fact, the project team had to address challenges with the coating system in general several times before they considered it to be satisfactory.

Then, when the second phase of construction started and they needed to protect the exposed decks once more, the project team sought a faster, reliable, and more cost-efficient solution that would not involve potential delamination.

SOLUTION

In the end, the project team turned to Kryton, a worldwide leader in crystalline waterproofing technology. Before, the team's original protective traffic membrane system had been costly, labor-intensive, and vulnerable to human error. However, with Kryton's integral waterproofing admixture KIM for the second phase of the garage construction, they would have the world's leading crystalline technology to protect the structure.



Kaiser Permanente Sunnyside Medical Center

Clackamas County, OR, USA (2007)

PRODUCT USED:

Krytol Internal Membrane™ (KIM®)

They would also save a substantial amount of time and money over installing a traditional traffic membrane system. After all, when added to concrete mix, Kryton's Krytol® products become an integral, permanent part of the concrete, allowing the owner to save the life-cycle costs that would have been needed for the eventual reapplication of a traditional membrane system. As a result, the Kaiser Permanente Sunnyside Medical Center includes 1,830 m (2,000 y) of KIM. In turn, KIM will prolong the life of the parking garage as it does not deteriorate and is instead guaranteed to last the lifetime of the structure.

