

Real World Solution for Flooring Needs

Customer: Space Needle/Seattle, Washington
Products: CRYL-A-QUARTZ SL
Industry: Recreation/Dining

The Space Needle in Seattle, Washington stands 605 feet high; it features 360-degree panoramic views, and is known as the gateway into Seattle Center. It is comprised of three main tourist attractions: The Observation Deck, the Space Base Gift Shop and Sky City Restaurant - all of which are open 365 days a year. Built in 1962, the Space Needle served as the symbol of that year's World's Fair and has become a major tourist attraction. It has since become the symbol of Seattle and one of the most recognized structures in the world.

Every four years, the floor in the Observation Deck at the Space Needle had to be repaired. The owners looked at life cycle costs and realized that they had to come up with some innovative solutions to better fit their business needs. The floor was being repaired so often because the membrane on the floor would fail, there were problems with spalled concrete, and water drained from the Observation Deck into the Restaurant below. The owners agreed that a structure with this much significance and name recognition needed to be open to the public with no interruptions in the operating schedule. They could not afford to have their business interrupted or suspended for any length of time, and it was not an option to lose the business generated from tourists and regular customers.

Donald and Shannon Ware of Seattle based Concrete Restoration, Inc. were hired to renovate the Observation Deck at the facility. While working closely with Dur-A-Flex, Inc. representative Jeff Donnell, they focused on the water leaks being caused by the improper slope to the drains. The concern was that this leakage could possibly cause electrical shock, power failures; cosmetic issues, etc. The existing floor had been in place for about fifteen years, and all the personnel that maintained the floor had either retired or moved out of the state. There were questions that needed to be answered about the number of layers present in the existing concrete.



Cryl-A-Quartz SL before topcoat

PERFORMANCE FLOORING SOLUTIONS

DUR-A-FLEX® Inc.

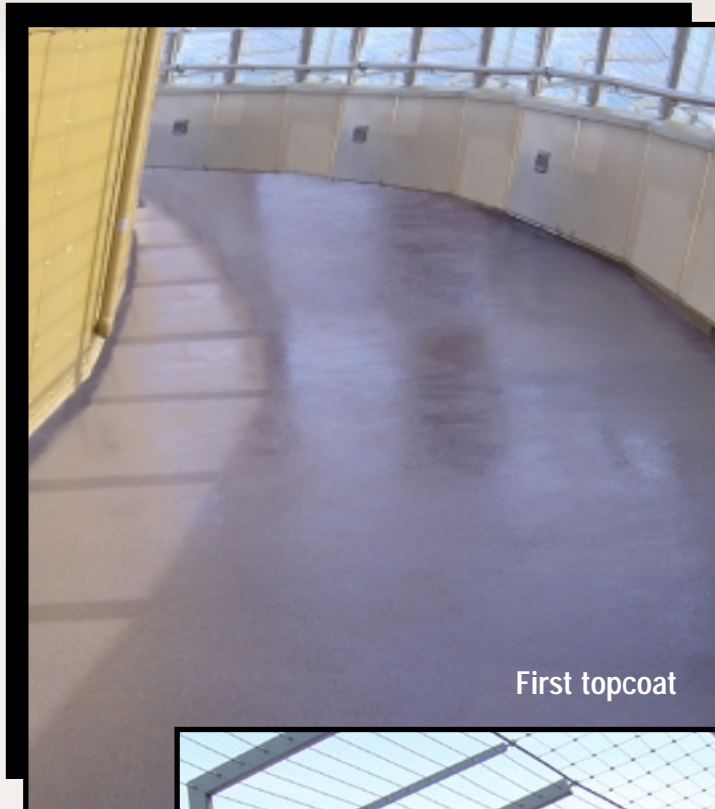
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COLORED QUARTZ AGGREGATES

Innovatech, the Seattle based manufacturers of surface preparation equipment devised a plan with Sales Manager, Thad Hovis, to remove the existing deck and prepare the surface for installation of the new floor. When the old deck flooring was removed, they found that the slope of the deck and the pitch to the drains was far greater than anyone had anticipated. According to Donald Ware, the pitch sloped from the inside out. It was not sloped to the drains, it was sloped to the outside of the drains and water would puddle on the outside edge and cause leakage into the electrical/plumbing room and into the restaurant below. To facilitate the correct pitch, DUR-A-FLEX, INC's CRYL-A-TEX polymer concrete was installed prior to the installation of the floor system.

Since the Restaurant, Observation Deck and Gift Shop are open from 9:00 am to midnight 365 days a year, a system had to be chosen that provided minimal downtime. Because the facility owners wanted a product that would last for years to come and offer a good return on their investment, a durable system needed to be chosen as well. The Concrete Restoration, Inc. crew also realized that whatever system they chose, it had to withstand harsh conditions since the Observation Deck is exposed to outside elements and is subjected to heavy foot traffic every day.

CRYL-A-QUARTZ SL was the system they decided to install because this material cures to full strength in less than one hour. They were able to work through the night when the facility was closed and still finish in time for it to open for normal business hours the next day.

According to Don Ware: "The patrons did not realize that they were walking on a surface that was just installed only a few hours earlier." The owners were pleased that there were no interruptions in normal business hours, and the system continues to pay for itself.



First topcoat



Finished Cryl-A-Quartz SL System