INDUSTRIAL CASE STUDY PARKING DECK





SITUATION

Parking structures are designed to meet the needs of heavy automotive traffic but over time these concrete-based decks can become susceptible to wear in the form of cracks, water damage and more. To ensure longevity, it is critical that parking structures are resilient against harsh weather and heavy vehicle and pedestrian traffic. For this application, a waterproof membrane was applied to the concrete to provide the very best protection against the elements. LINE-X offers an array of protective spray-on coatings, which when used in combination with other specialty products creates the idea barrier against water intrusion. LINE-X Mexico has perfected this system.



SOLUTION

Knowing that surface preparation is key to successful coating adhesion and water resistance, LINE-X of Mexico followed a stringent protocol to clean and repair the surface before beginning the application. Stone-grinder blocks were used to evenly scraped the surface, removing dirt and debris and revealing any cracks in the concrete. Next, a two-component primer was applied to act as a moisture barrier by preventing pin-holing and promoting chemical adhesion. Once this was done, the LINE-X of Mexico applicators applied LINE-X CU-970 at 20 mils. CU-970 is a cold-applied two-component polyurea coating which serves as an additional waterproof membrane by absorbing most of the concrete-structural movement and temperature dilation during contraction. The applicators then applied a base waterproof membrane known as XS-310, a spray-applied polyurea that serves as a tough layer against tire circulation.



RESULTS

LINE-X continued continue the application by spraying LINE-X XS-310 in three layers, including a silica sand bed on the final layer which is encapsulated by a breeze texture layer for added durability. Next, a single-component aromatic polyurethane topcoat, was applied at 7 mils. The final step was to apply a 7-mil application of an aliphatic two-component polyurethane topcoat featuring UV- and heavy-traffic resistance. For this application, gray was selected as the base color for the topcoat but can be mixed in various shades and colors. The completed application completely renewed the parking structure both in terms of looks and performance. Thanks to the integrated coatings traffic system, the parking structure is better protected against harst weather elements and is ready for heavy traffic use for years to come.

 PROJECT OVERVIEW:
 Concrete Membrane For Parking Deck

 PRODUCTS USED:
 CU-970, XS-310

 SOURCE:
 LINE-X Mexico

