

## Redondo Beach Pier – Redondo Beach, California, USA Project Summary

Since the late 1800's, the Redondo Beach Pier has gone through seven different incarnations. The most recent version of the pier was built at the end of Torrance Boulevard in 1995. Covering 70,000 square feet, the pier construction of reinforced concrete took eight months to complete. Sitting 25 feet above the water, the Redondo Beach Pier is the longest "endless" pier on the California Coast. One of the most popular attractions in Southern California, it is home to Kings Harbor retail shops, restaurants, sports fishing, and an outdoor concert stage that provides entertainment to patrons of the pier.

Over the years, degradation had left this tourist spot in desperate need of repair. In 2011, Redondo Beach Pier began work on a multi-year, multi-phase renovation plan. Working with MAPEI CRS representatives, the two architects who worked on separate phases of the project, along with the city of Redondo Beach, chose MAPEI systems to repair the pier and produce a finished look with decorative concrete pavers.

Two contractors - Pavers Plus of Downey, California, and Southwest Specialties of Las Vegas, Nevada – worked together on the project. Work began in the 7700-square-foot area fronting the retail shops along the south end of the boardwalk stretching out to the fishing pier. After shotblasting the concrete to a Concrete Surface Profile (CSP) of 7, the Southwest Specialties crew resurfaced the entire section of the walkway with *Planitop FD* full depth repair mortar mixed with *Planicrete AC* admixture. Once the repairs were made and the surface was prepared, the Pavers Plus crews began installing exterior concrete pavers using MAPEI's *Granirapid* mortar system. *Granirapid* was selected for its excellent strength and deformability characteristics.

In the Pier Plaza area along the beach, there is a large multi-tiered parking structure with retail shops on the top of the structure and on the lower level facing the beach and the concert stage out on the pier. The architects selected *Mapelastic* to waterproof and protect the lower level of the parking garage and the retail shops on that level. *Planitop FD* was also used to repair the surface of the Pier Plaza and around the Kincaid Restaurant on the north end of the boardwalk. The 8300 square feet of walkways in this area were then covered with concrete pavers, too. Pavers Plus crews again used *Granirapid* to set the pavers.

In this first phase of renovation, 16,000 square feet of the pier walkways were repaired and covered with pavers. More than 3,000 bags of *Planitop FD* were used for the repairs. Additional portions of the pier will be renovated in a second phase, as more development comes to the pier and public funds are approved. The repaired and improved areas have made the Redondo Beach pier even more attractive to the two million visitors who flock to the pier every year.