

REPAIR AND RETROFIT OF CORRODED BEAMS, SLABS & COLUMNS

Location: Redondo Beach, CA

OVERVIEW

An upscale restaurant and adjoining apartment complex, which was in poor condition structurally and aesthetically mostly due to exposure to marine weather conditions was in dire need of structural rehabilitation. The restaurant actually sets out into the ocean on concrete pilings and ocean surf is continually surging up against the bottom of the restaurant's floor. The city required a permanent repair of corrosion damage to pilings, beams and slab or the restaurant would have to be demolished.

The severe deterioration of pilings, beams and slab required a phased retrofit, which would include the strengthening of specific areas and sealing the entire underside of the restaurant.

A suspended platform was constructed to provide working space for the crew, and at the same time, protect the beams and slab from the ocean surge. A process of discovery was initiated to remove unsound concrete. After treatment with a corrosive inhibitor system, the exposed steel and surrounding concrete was sandblasted. Polymer-modified concrete was then applied to reform members to their original shape. The LOCTITE SEH glass and SCH Carbon systems were applied to strengthen the pilings, beams and slab to regain their original capacity. A final application of LOCTITE WEB was applied as a water sealant and protection from the environment.

The LOCTITE Systems restored this unique oceanfront complex and is a long-term solution. This process was completed in a environmentally-sensitive tide zone in a safe and clean manner.

