



*Don't Replace It,  
Miracote It!*



*Don't Replace It,  
Mirastamp It!*



## ***Parking Garage Re-done with Miracote Repair Mortar and Protective Coating***

Washington Dental Service Parking Garage –  
Top Deck Restoration and Waterproofing –  
Seattle, WA

Project Contractor: Construction Solutions and Services  
Inc. – Kenmore, WA

Miracote Supplier: Industrial Coatings and Sealants  
– Mukilteo, WA

**THE CHALLENGE:** The existing parking garage structure at this large 5-story professional building lacked a protective coating and waterproofing system. The parking structure, built in 1989, consisted of several raised decks built on concrete precast "T" beams. The "T" beams supported a series of 2-1/2 inch topping slabs poured over the beams, and expansion joints aligned over the underlying "T" core junctions. Original project drawings and specifications called for a waterproofing membrane to be applied over the precast joints, however this was eliminated during construction. Within a short time after completion, constant flexing of the sixty-foot long precast members caused the existing urethane expansion joint sealant to become fatigued and fail. In addition, many small fractures developed in the topping slabs. Although reinforced with steel and welded wire mesh, the topping slab became spalled, and progressive damage was eminent as a result of water penetration and freeze thaw cycling.

### **THE SOLUTION: Miracote Protective Coating with Waterproof Membrane**

Miracote has provided a system with both low initial investment cost and low maintenance cost to offer minimum life-cycle cost. The tough, water-retardant coating substantially limits water penetration, freeze-thaw scaling and concrete carbonation. When applied in conjunction with a Miracote waterproof membrane, a positive waterproofing system — designed to bridge minimum substrate cracking — came together to form a composite system designed to resist vehicular traffic. Available in a multitude of colors, Miracote also facilitates the creation of custom designs and parking stall delineation while affording single source specifications. Roof deck and parking deck applications are finished with Miracote topcoat sealers to provide lasting protection and a readily cleanable surface.



1. The first part of the project was pre-paring the surfaces. This included removing and storing for future reinstallation all of the pre-cast parking bumpers, then pressure washing the entire top deck.



2. The next step required repairing all cracks larger than 1/16 inch with Miracote Protective Coating and imbedded fiberglass tape.



3. The low spots in the flat areas of the deck were then filled with Miracote Repair Mortar to eliminate ponding.



4. The largest cracks that appeared to be working and leaking directly through the topping slab and "T" slab were routed out with a crack chaser and filled with a pliable sealant.



5. Next, the process of applying the first "scratch" coat of Miracote Protective Coating to smooth and fill surface voids.



6. Followed by applying 3 coats of Miracote Membrane A.



7. The membrane was then covered with three coats of Regular Miracote Protective Coating.



8. Then the expansion joints were filled with a two-component polyurea sealant designed to remain flexible under the vibrations of traffic loadings.



9. The final step in the system was the application of two coats of Miracote Colorbond Sealer. This can also be followed by an application of Miraseal.



10. You can paint lines, words, etc. using any of Miracote's 15 standard. Miracote's entire system of waterproof membrane, protective coating and topcoat sealers can provide you with long-lasting protection and a readily cleanable surface.