

## CASE HISTORY ~ CH-040

## BIO-DUR 560 SEALS UNDERWATER CONCRETE IN ORLANDO THEME PARK

**THE CHALLENGE:** A major theme park attraction in Orlando, Florida uses an aboveground "canal" with a constant current to convey unpowered boats around a lively scenario with leaping pirates, swashbuckling rogues and piles of loot. The canal sides are dry jointed walls poured onto a concrete base. Areas of this joint and base leak sufficiently under a 3-foot head to cause annoying water ponding and unacceptable loss of valuable water. Because of the constant demand for this attraction it was out of the question to drain the canal for maintenance.

**THE SOLUTION**: Thin Film Technology and its contractor attended the exhibit one evening after normal activities had closed for the day. Contractor personnel wearing waders entered the canal and water jetted the concrete base underwater using a 3,000 psi pressure washer. The constant current in the canal swept most of the fine debris into drains while larger pieces of debris were removed by hand.

BIO-DUR 560 is a water tolerant, 1/1 ratio solvent-free epoxy coating manufactured by TFT. In order to make the canal as unobtrusive as possible the BIO-DUR 560 was tinted to a very dark gray which appears almost black after installation.

**APPLICATION:** BIO-DUR 560 was pressure rolled onto the prepared concrete surface using a pressure roller unit. This equipment heats and accurately proportions the epoxy components, then mixes and pumps them to the pressure roller unit underwater. The contractor's operator, who had never applied coating underwater before, rolled the BIO-DUR 560 over the surface achieving immediate adhesion and 100% coverage.



**RESULT:** The large application was properly covered with tightly adherent, glossy BIO-DUR 560 resulting in an attractive, dark surface. Water leaks were seen to stop immediately, subsequent inspections made over a period of months following this application confirmed the complete integrity and perfect sealing of the leaks in the test area.

For more information regarding this project, contact:

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PRODUCT: BIO-DUR 560	YEAR: 2004	LOCATION: ORLANDO, FLORIDA
	We go where others fear to spread!	
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