

PROJECT HISTORY

BARLOW MOUNTAIN SCHOOL GUTTER RESTORATION

RIDGEFIELD, CONNECTICUT

COMPLETION: 2010

Before



PROJECT ASSESSMENT

“What needed to be done”

During the course of re-surfacing the pool at the Barlow Mountain School, a random inspection was done of the concrete gutter that spanned the entire 260' perimeter of the pool. This inspection found severe concrete deterioration, concrete cover-cracking, reinforcement steel corrosion with iron oxide nodules depositing and penetrating out up to 2" en masse into the gutter channel from voids and cracks in the gutter's concrete walls. The existing 4" PVC return line was found to be brittle, worn and needing replacement. Even though only pool water entered the gutter channel, the surface of the gutter looked like a deteriorated wastewater treatment tank attacked by hydrogen sulfide.

RENOVATION PLAN

“How it was done”

Because of the severely damaged conditions in the gutter channel, a repair system had to be chosen to seal the cracks, fill the voids and inhibit further chemically treated water from penetrating into the concrete. Pitting and corrosion had to have occurred to steel reinforcement bars in the gutter walls. However the remaining steel had to be protected from further deterioration. Because of economic conditions and a low budget, the Town of Ridgefield, who owned the pool, had to work toward extending the life of not only the pool but also the gutter channel. Working in conjunction with the town's engineers,

Mid-America Pool Renovation, Inc. specified a wastewater materials repair system to perform the Work. This materials system included a microsilica cement mortar, a penetrating epoxy primer, and an ultra high build epoxy coating. The surface was cleaned, ground, and given a 6,000 psi water jetting with a rotational nozzle. Rust was cleaned off of all the exposed reinforcement steel and covered with Sika Armatec® 110. The channel was then re-surfaced with solvent free, high solids Epoxy Amine coating.



**Renovation Result: Gutter Channel Re-surfaced
New 4" PVC Return Piping In Place**

SAMPLE PICTORIAL SEQUENCE ON BACK OF THIS PAGE

BARLOW MOUNTAIN SCHOOL GUTTER RESTORATION

RIDGEFIELD, CONNECTICUT SUMMARY PICTORIAL

CONCRETE GUTTER CHANNEL
BELOW S/S GRATE BRACKET



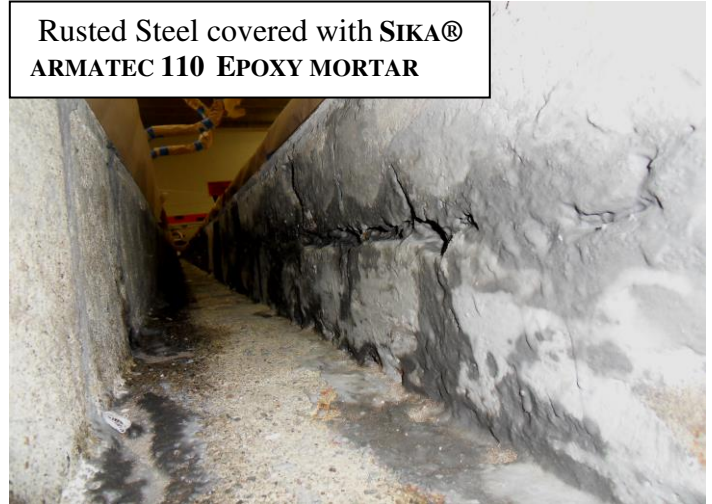
TYPICAL SIZE OF AN
IRON OXIDE NODULE



After High Pressure
Water Jetting



Rusted Steel covered with SIKA®
ARMATEC 110 EPOXY MORTAR



MICROSILICA MORTAR &
EPOXY PRIMER



EPOXY AMINE SYSTEM
COMPLETELY INSTALLED



PROJECT SPECIFICATIONS:

TOTAL SQ. FT.:	2,340 SQ. FT.
SHAPE:	CHANNEL
TYPE OF CIRCULATION:	GUTTER
TYPE OF CONSTRUCTION:	FORMED & POURED
TYPE OF INTERIOR FINISH	Mid-America Pool Renovation EPOXY AMINE COATING