



Phase 2 - Repairing & Waterproofing against extreme hydrostatic pressure CN2000® to coat the interior concrete

Problem

Kelso Coatings initiated work in the City of Toronto below grade parking garage on Queens Quay in November 2013. This project has been extended into its 3rd phase based on the success of CN2000® during Phase 1.

The November 2013 CN2000® coating performed as expected to waterproof the concrete through Toronto's polar vortex and extreme freeze/thaw conditions during the 2013/2014 winter.

This below grade parking garage is in Lake Ontario. The continuous hydrostatic pressure required the use of a coating designed to perform under these conditions.

In addition to cracks along the walls and areas of delamination, leaks were evident around the pipe penetrations and the cold joints.

Solution

The previous solution of injections failed to stop the water infiltration.

CN2000® was specified by Genivar (now WSP Group). Tested by Queens University and National Research Council of Canada, CN2000® resists extreme hydrostatic pressure and rapid freeze/thaw cycles. The success of the November 2013 application led the general contractor, Macdero, to call Kelso Coatings to complete Phase 2 and Phase 3.

CN2000® was also used to coat the exposed steel rebar to act as an anti-corrosion solution to the steel.

Time to Complete

The project was completed over a two week period while maintaining continuous operation of the parking facility.