

Case Study

Leaking Water Pit | Medical Hospital, New York City

Project Scope

Install a flexible membrane liner in a concrete pit that holds water for a fire suppressant system located in a major medical hospital.

Challenge

As part of an addition to a major NYC hospital, a pit was built to hold water for the fire suppressant system. The pit was designed with water stops, but the pit leaked into adjacent parts of the hospital. A water resistant coating was applied but it too failed. A second attempt at the applied coating also proved futile.

Solution

The architect for the job selected a flexible liner from Witt Lining Systems to line the pit. A Witt Liner isn't affected by the cracks in the concrete that the applied coating was unable to bridge in the previous attempts to repair the pit. A geotextile padding was installed on the pit walls and floors to protect the liner. The custom liner was fabricated in one piece and shipped to the job site for installation. The pipe penetration in the tank was handled on site by the installation company with a pipe boot supplied by Witt Lining Systems.

Results

Installation of the padding and liner was completed over 3 days. Upon completion, the pit was returned to service. Field reports concluded that no further water was weeping into other rooms as was the case with the failed coating. The finished liner is expected to provide years of worry-free service in the pit.

