Underground Fire Water Storage Tank, Massachusetts General Hospital, Boston MA

Case Study: Protecting Critical Hospital Infrastructure at Mass General with CIM 1000 TG



Waterproof coating across the tank's overhead surfaces, walls, and support columns.

Introduction

Massachusetts General Hospital is one of the nation's leading medical centers, and like any major hospital campus, it depends on infrastructure that most people never see. Among the most critical is its fire water storage, the reserve that supports the hospital's fire protection system and must be ready at all times.

In Summer 2026, the hospital undertook a waterproofing project on a large underground concrete fire water storage tank with approximately 35,000 square feet of coating area. The work was performed by PJ Spillane Co., a masonry contractor based at 97 Tileston Street in Everett, Massachusetts.

The Challenge

A waterproofing product previously applied by another contractor had failed, leaving the tank unprotected. The project engineer called for system improvements and a switch to CIM Industries.

Below grade, groundwater pushed moisture through cracks in the concrete, requiring a coating that could bond and seal under continual external moisture pressure.

The 35,000-square-foot coating area included vertical walls and overhead surfaces, where liquid-applied coatings can sag or struggle to reach the required thickness. Success required proper surface preparation, careful detailing at cracks, joints and transitions, and efficient application on both surfaces.

For the hospital, dependable fire water storage was critical. Extended downtime or another system failure was not an option.

Underground Fire Water Storage Tank, Massachusetts General Hospital, Boston MA

The Solution

To meet the engineer's requirements, PJ Spillane Co. installed a CIM Industries system of EMT Epoxy Primer and CIM 1000 TG. Materials for the project included 60 five-gallon pails of CIM 1000 TG with activator, along with EMT resin primer and hardener. The installation followed a structured process:

- Surface Preparation: Concrete surfaces were prepared and cracks and other details were addressed to create a sound substrate for coating.
- EMT Epoxy Primer: The two-part resin and hardener primer was applied to the prepared concrete to promote adhesion of the waterproofing membrane.
- CIM 1000 TG: 60 five-gallon pails, mixed with activator, were applied to the tank's vertical and overhead surfaces to a total of 120 mils.

CIM 1000 TG (Trowel Grade) is a tough, two-component urethane elastomeric coating that is chemically thickened for trowel application with minimal sag. It can be applied up to 250 mils on vertical surfaces in a single coat, bridges cracks, and is ANSI/NSF 61 certified for potable water contact. Those properties made it well suited to an underground tank where vertical and overhead work, crack bridging and high film build were all required.

The Results

- **Faster installation:** 120 mils of CIM was installed in less time than the specified system.
- **Lower labor costs:** The faster installation cut significant labor costs from the project.
- **Ahead of schedule:** The tanks were completed ahead of schedule.
- **20-year warranty:** The installed system is backed by a 20-year warranty.
- **Long-term protection:** Where the previous product failed, the hospital's fire water storage is now protected by a seamless, crack-bridging elastomeric membrane designed for demanding below-grade conditions.



Completed interior waterproofing of MGH's underground water storage tank in Boston.

Contact Us

Chasecorp.com/contact-us

Product Questions: 781-750-0525