

\$500 Million Stadium Lets It Rain with New Waterproofing Technology

Using GCP's PREPRUFE[®], stadium construction was protected with below grade waterproofing



Project	Golden 1 Center
General Contractor	Turner Construction
Applicator	F.D. Thomas
GCP Solution	PREPRUFE [®] Plus waterproofing

The Overview

The Project

Stadium construction on the new 17,500- seat, \$507 million Golden 1 Center—the new home of the NBA's Sacramento Kings—is complicated. The challenge? Time.

The general contractor, Turner Construction, delivered the LEED Gold-targeted arena in less than two years. There's also the fact that the arena sits below the water table and the immense scale of the task.

"GCP Applied Technologies works with contractors that perform at a very high level and were able to accept the risk due to high performing PREPRUFE® Plus product, technical expertise and global success on similarly critical projects", said Hunter. "We took the lead in making sure the general contractor, concrete subcontractor, rebar subcontractor and plumbing subcontractor all worked together to meet GCP's requirements and deliver on the aggressive schedule."



Unfortunately, heavy rains just weeks into the stadium construction project left the excavated jobsite under "... three or four feet of water", according to Stuart Hunter, Vice President of the waterproofing division of F.D. Thomas, a regional waterproofing contractor.

The stakes were high. The arena was being built below the water table and adjacent to two major river systems. The owner required a fail-safe below grade waterproofing solution. The Golden 1 Center had to operate dry, period.

Once the skies cleared, the pressure was on F.D. Thomas to waterproof 280,000 square feet (26,012 square metres) within 60 days. No excuses, no delays. F.D. Thomas held pre-job meetings to get all the trades dialed-in to support a smooth, efficient installation.

To meet the requirements for operating dry, the contractors used high performance PREPRUFE®Plus waterproofing membrane. Over 96 rolls of PREPRUFE®Plus membrane (30,000 square feet/2787 square metres) were kicked out in a single day. This allowed F.D. Thomas to finish the stadium construction job in 45 days, shattering all expectations.

Only PREPRUFE®Plus waterproofing offers a unique combination of industry-leading features for fast, confident application:

- Rapidly-deployed kick-out rolls
 - All-weather seam adhesion with exclusive PREPRUFE® ZIPLAP™ technology
 - Permanent lateral water migration resistance from an integrally bonded membrane
 - No-waste, release liner-free installation
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The Results

Turner Construction officials were ecstatic with the waterproofing and completion results.

The owners especially liked the fact that more than 500 million square feet (4,645,152 square metres) of PREPRUFE® membrane have been installed worldwide on thousands of high-profile, must-not-fail projects. As Hunter says, “It’s the industry workhorse”.

Today the stadium construction project is open to the public and no below grade leaks have been reported in spite of historic El Niño rains and a rising water table. To that, Hunter just grins and says, “Let it rain”.

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The power of GCP products, performance and people.