

WA State Dept. of Information Services (DIS) Wheeler Data Center

Hycrete Waterproofs WA State's Primary Data Center



HYCRETE ENDURE WP PROVIDES LONG-TERM CONCRETE PROTECTION

Structure: data center

Applications: 1,200,000-gallon water tank

Owner: State of Washington

Developer: Wright Runstad

Architect: NBBJ

General Contractor: Howard S. Wright

Engineer: KPFF

Ready Mix Provider: CalPortland

Introduction

The Washington State Department of Information Services Wheeler serves as Washington State's primary data center, dedicated to maintaining state records. This 480,000 SF project achieved LEED Gold CS (Core & Shell) certification. The data center features an advanced cooling system, including a 1,200,000-gallon water tank.

Challenge

Since the water tank serves as the primary cooling system for the data servers, it is essential that the tank remains watertight. Additionally, there is a critical utility area adjacent to the tank. The designers needed a solution that would not only keep water contained within the tank but also protect the nearby area, which is finished with drywall, from moisture issues.

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We chose Hycrete to waterproof the water tower reservoir, ensuring it remains watertight, as it is crucial for cooling the data server systems. With Hycrete, the tank is effectively sealed, resulting in significant cost savings for the owner.

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Jose Villa, Project Manager
Howard S. Wright





Solution

The design team chose Hycrete360 (formerly System W), Hycrete's warranted waterproofing system, which eliminated the need for an externally-applied membrane. This decision accelerated the construction schedule by approximately 12 days, saving the contractor \$120,000 in overhead costs. Additionally, using Hycrete's environmentally-friendly and Cradle to Cradle Gold Certified admixture instead of a traditional waterproofing membrane prevented over 10,000 ft² of non-renewable materials from going to landfill and avoided the release of 2,000 pounds of VOCs (volatile organic compounds).

Result

The structure remains watertight after being monitored by Hycrete over the course of ten years as part of the performance-based warranty. Utilizing Hycrete enabled the contractor to simplify the waterproofing process, expedite the project, and ensure reliable protection for this mission-critical data center.

Savings

Cost Savings:	\$120,000
Time Savings:	12 Construction Days
Environmental Savings:	10,000 SF of Non-Renewable Materials 2,000 Pounds of VOCs

