



CASE STUDY

Washington State Department of Information Services (DIS Wheeler) Olympia, WA



Washington State Department of Information Services
Olympia, WA

Hycrete Waterproofs State Data Center, Saving Time and Money

Structure:	Data center
Application:	Water tank slab and walls
Owner:	State of Washington; Wright Runstad
Architect:	NBBJ
Engineer:	KPFF
General Contractor:	Howard S. Wright
Ready Mix Provider	CalPortland

Introduction

DIS Wheeler will be Washington State's primary data center, designed to maintain state records. The project is 480,000 ft² and the State is pursuing LEED Gold CS (Core & Shell) certification for the data center. The data center's cooling system includes a 1.2 million gallon water tank.

Challenge

Because the water tank functions as the primary cooling system for the data servers, it is critical that the tank be watertight. Also, there is a critical utility area next to the tank. The designers required a solution capable of keeping water in the tank and ensuring that the area next to the tank, which is finished with drywall, is protected from moisture problems.

Solution

The design team selected Hycrete System W, Hycrete's warranted waterproofing system, which eliminated the requirement for an externally-applied membrane system. Using Hycrete accelerated the construction schedule by approximately 12 days, saving the contractor \$120,000 in overhead. Also, the use of Hycrete's environmentally-friendly (and Cradle to Cradle Gold Certified) admixture in place of a traditional waterproofing membrane prevented over 10,000 ft² of non-renewable materials from going to landfill, and 2,000 pounds of VOCs (volatile organic compounds) from being released.

Result

The structure is watertight and Hycrete continues to monitor the structure to keep it that way as a part of its warranty. Using Hycrete allowed the contractor to simplify the waterproofing process, accelerate the project and provide trusted protection on this mission critical data center.

“ We used Hycrete to waterproof the water tower reservoir because it is critical that the tank be watertight as it is used to cool the data server systems. With Hycrete the tank is watertight, and the owner saved money. ”

Jose Villa, Project Manager,
Howard S. Wright

Time Savings:

- 4 days on the water tank slab
- 8 days on the water tank walls
- \$120,000