



Delivering Concrete Solutions



City Creek Center – Blocks 75 & 76, Salt Lake City, UT

CASE STUDY

City Creek Center – Blocks 75 & 76

Salt Lake City, UT

When Traditional Waterproofing Just Isn't Enough

Hycrete Delivers Water-Tight Shotcrete Structure 30 Feet Below Water Table for City Creek Reserve

Structure:	• Multi-family housing and retail with underground parking and loading facilities
Application:	<ul style="list-style-type: none"> • Water cisterns and tanks • Elevator pits • Mat slab foundation • Structural walls: shotcrete and cast-in-place • Fire suppression water tanks • Water feature water tanks • Truck elevator shaft • Precast electric junction boxes
Owner:	City Creek Reserve, Inc.
General Contractor:	Okland Construction
Waterproofing Consultant:	Morrision Hershfield
Architect:	FFKR Architects, Zimmer Gunsul Frasca Architects
Engineer:	Magnusson Klemencic & Associates
Shotcrete Contractor:	Johnson Western Gunite Company
Ready-Mix Provider:	Jack B. Parson Companies and Geneva Rock

“
The Hycrete system of waterproofing, Hycrete System W, works even in the most difficult waterproofing applications. Hycrete’s team was very proactive, which made our job easier! The structure is dry and we are using Hycrete in other jobs.”

Weston Woolsey, Superintendent,
Okland Construction

Introduction

City Creek Center is a multi-use development owned by City Creek Reserve, Inc. Block 76 of the project includes mixed use buildings with five floors of below-grade parking. The project also includes a semi-truck loading dock facility on P5, 30 feet below the water table. Due to concerns about the difficulty of waterproofing the project, Hycrete was used in addition to the specified double bentonite membrane system.

Challenge

The project is 30 feet below the water table and the considerable hydrostatic pressure and the sensitivity of the mechanical equipment for the semi-truck loading facility made waterproofing challenging and extremely important. Additionally, the truck shaft walls were poured with shotcrete, traditionally a more difficult application to waterproof. For these reasons, Hycrete was selected as the integral waterproofing back-up system.

Solution

Areas under hydrostatic pressure and prone to leaking were protected with Hycrete as a back-up defense to water migration. Where there were minor leaks, Hycrete, via the owner’s choice of the Hycrete IntegraTek Warranty, was there to support the client and address the leaks well before the building was placed in use and without being a burden to other trades.

“ Unlike with other integral waterproofers, the automated dispensing system with Hycrete made the concrete batching process seamless. ”

Rod Higley, Quality Control Manager
Jack B. Parson Companies

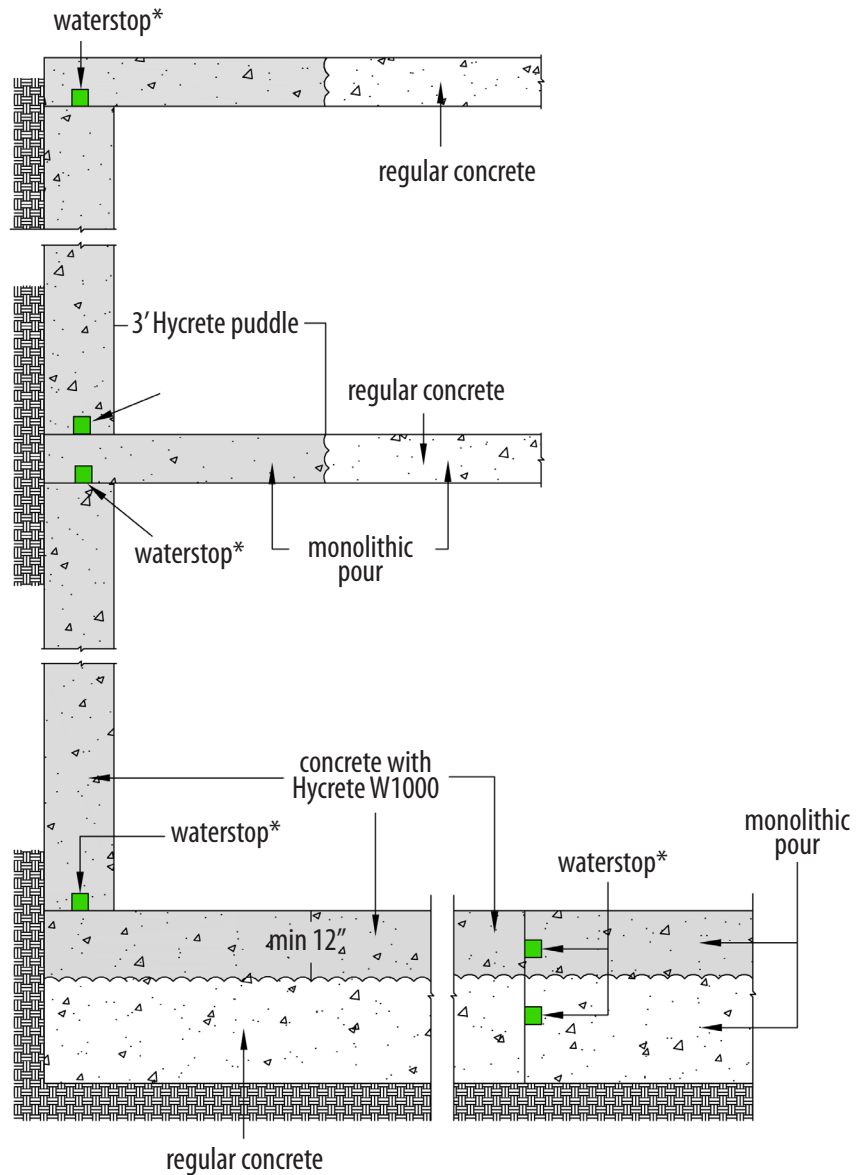


Hycrete waterproofed a semi-truck elevator shaft 30 feet below the water table. The shaft is designed to accommodate two semi-trucks that make deliveries to the loading dock facility on P5.

Results

The owner has a long-term, hydrophobic solution to water migration and the structure is dry.

Simple detailing for walls and slab



* Expanding joint strip waterstop must be glued & nailed to the surface every 12"