



Delivering Concrete Solutions



Skyline at MacArthur Place, Santa Ana, CA

“
Hycrete’s waterproofing solution accelerated construction and their service was top-notch. Our customer has a water-tight solution backed by an industry-leading warranty.”

Ken Long, President, Largo Concrete, Inc.



CASE STUDY

Skyline at MacArthur Place

Santa Ana, CA

Hycrete Delivers Membrane-Free Waterproof Construction at Skyline at MacArthur Place

Structure: **Multi-family residential**

Application: **• Foundation walls
• Hydrostatic mat slab
• Podium decks
• Detention vault**

Owner: **Nexus Companies**

General Contractor: **Nexus Construction Services**

Architect: **Perkins & Company**

Engineer: **Glotman Simpson**

Waterproofing Consultant: **Morrison Hershfield**

Concrete Contractor: **Largo Concrete, Inc.**

Ready Mix Provider: **Associated Ready Mix**

Introduction

Skyline at MacArthur Place is a 1 million square foot mixed-use development with condominiums, retail, and below-grade parking for 500 cars.

Challenge

The mat slab is almost 30 feet below the water table and the builder wanted to use shotcrete for the foundation walls.

Solution

Hycrete System W offered superior performance to other waterproofing systems, was more cost-effective, accelerated the construction schedule and enabled the use of shotcrete for the foundation walls. Using Hycrete System W eliminated the need for waterproofing membranes and saved Nexus Construction Services approximately \$123,000 up-front in materials.

Material Savings

Location	Membrane			Hycrete System W	
	Type	Area (ft ²)	\$/ ft ²	\$/ ft ²	Savings
Foundation walls	Bentonite	27,500	\$7.00	\$4.44	\$70,278
Slab on grade	Bentonite	95,000	\$5.00	\$4.44	\$52,778

Total Material Savings = \$123,056

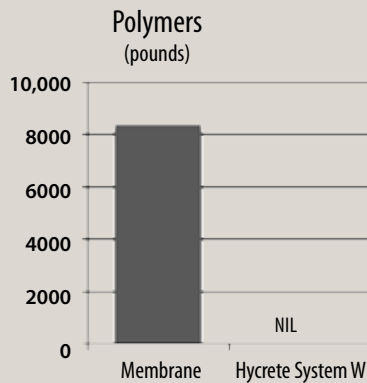
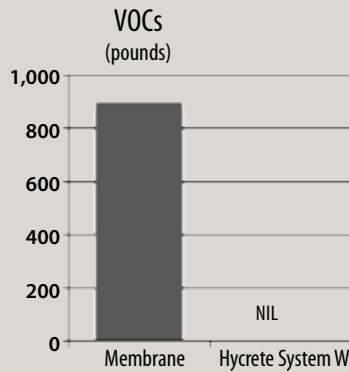
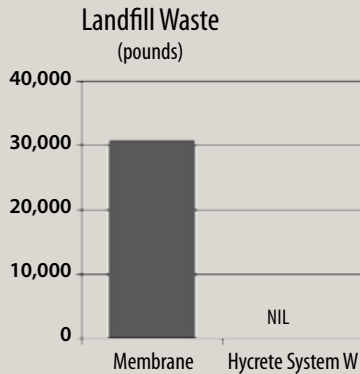
In addition, using Hycrete System W saved 15 days on the critical path (10 on the foundation walls and five days on the slab), totaling \$150,000 in overhead.

Time Savings

Location	Membrane Type	Membrane Critical Path	Daily Cost	Hycrete System W Savings
Foundation walls	Bentonite	10 days	\$10,000	\$100,000
Slab on grade	Bentonite	5 days	\$10,000	\$50,000

Total Time Savings = \$150,000

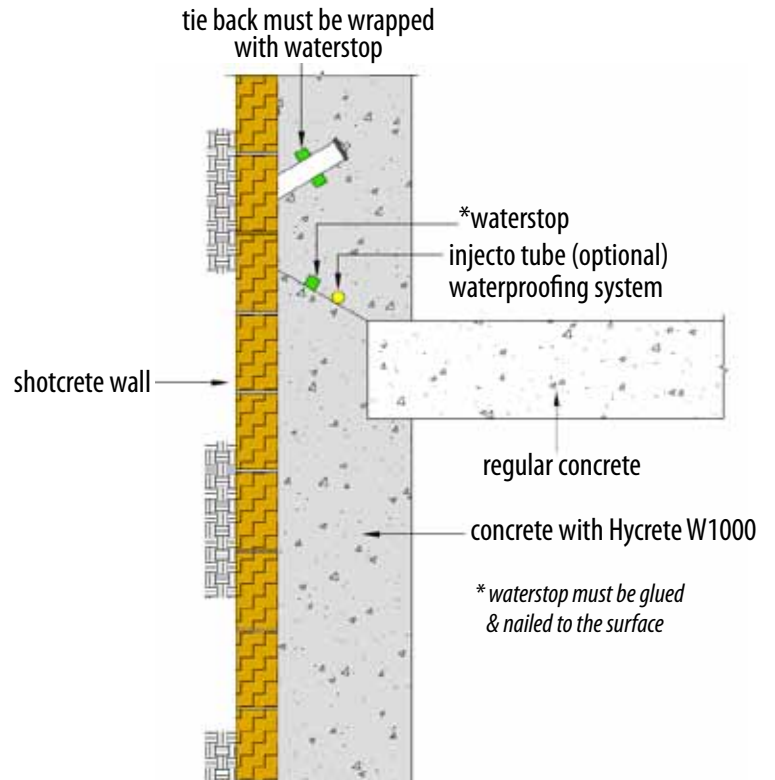
Environmental Savings



Results

Total material and time savings are \$273,056. In addition, the elimination of waterproofing membranes resulted in environmental savings. Over 31,000 pounds of landfill waste, 900 pounds of VOCs (volatile organic compounds), and 8,400 pounds of polymers were eliminated.

Simple construction details



Skyline at MacArthur Place, Santa Ana, CA