



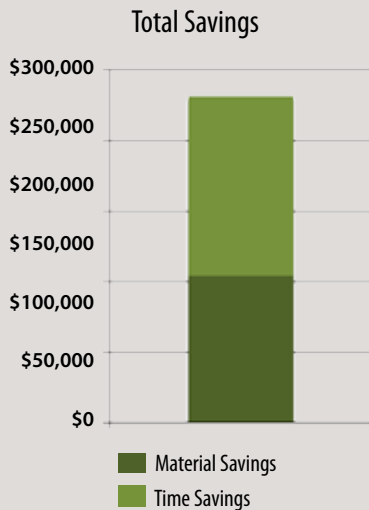
Delivering Concrete Solutions



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 <sup>2</sup> )	\$/ ft <sup>2</sup>	\$/ ft <sup>2</sup>	Savings
Foundation walls	Bentonite	27,500	\$7.00	\$4.44	<b>\$70,278</b>
Slab on grade	Bentonite	95,000	\$5.00	\$4.44	<b>\$52,778</b>

**Total Material Savings = \$123,056**

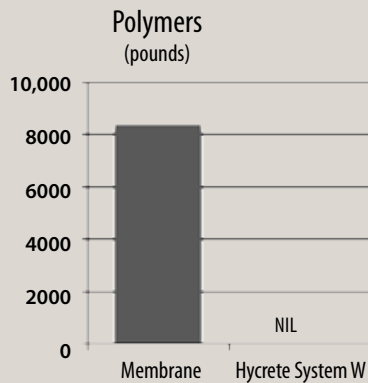
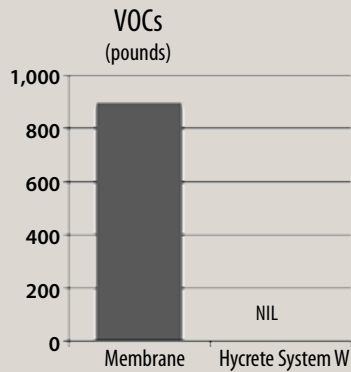
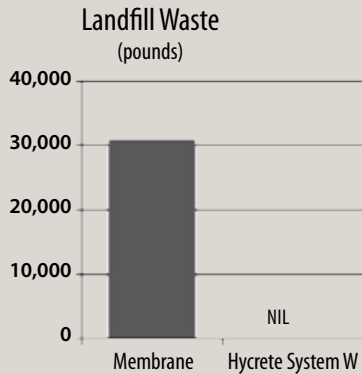
In addition, using Hycrete System W saved 15 days on the critical path (10 on the foundation walls and five days on the slab), totaling \$150,000 in overhead.

### Time Savings

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

**Total Time Savings = \$150,000**

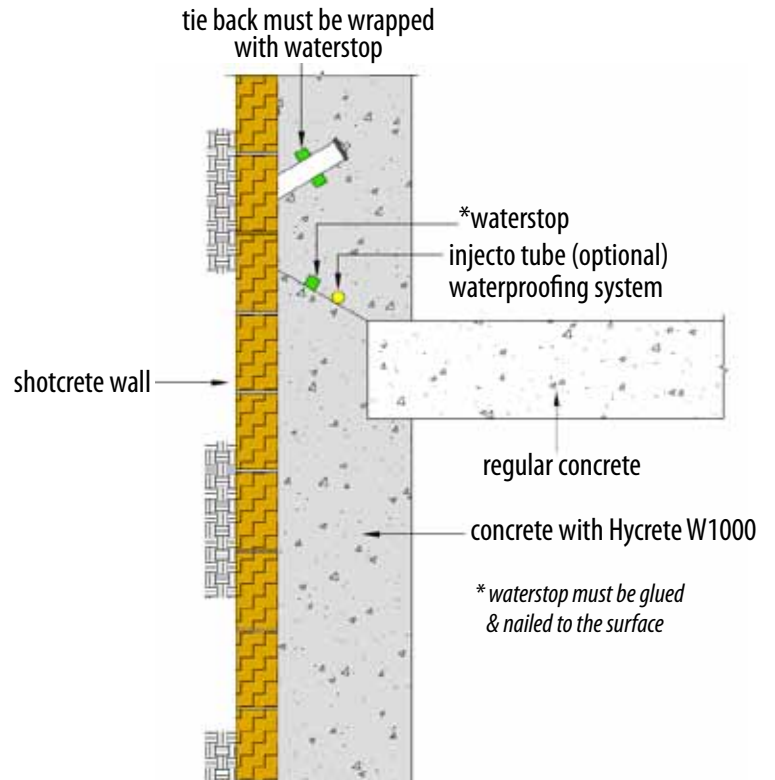
## Environmental Savings



## 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