



Delivering Concrete Solutions

CASE STUDY

# Thomas Jefferson School of Law San Diego, CA



Thomas Jefferson School of Law, San Diego, CA

## Bovis & Hycrete Deliver a LEED Point to Thomas Jefferson School of Law

Structure:	<b>University Classroom Building</b>
Application:	<b>• Shotcrete foundation walls • Mat slab</b>
Owner:	<b>Thomas Jefferson School of Law</b>
General Contractor:	<b>Bovis Lend Lease</b>
Architect:	<b>Carrier Johnson</b>
Engineer:	<b>Hope Engineering</b>
Ready Mix Provider:	<b>Vulcan Materials Co.</b>
Concrete Contractor:	<b>JT Wimsatt</b>
Shotcrete Contractor:	<b>Superior Gunitite</b>
Waterproofing Consultant:	<b>Diehl Group</b>

### Introduction

Thomas Jefferson School of Law, located in downtown San Diego, California, is an eight story classroom building, with ground level retail space, and three levels of underground parking. Construction is structural concrete below grade, with a podium slab at the first floor, and eight levels of concrete slab above ground.

### Challenge

Pursuing Gold Certification as a LEED for New Construction building, the owner desired to contain costs while still achieving a structure with superior environmental performance.

### Solution

By selecting Hycrete's membrane-free approach to waterproof concrete construction, the School reduced the construction critical path by 4 weeks and saved an estimated \$187,000 on construction costs, a 32% improvement over traditional waterproofing approaches.

In addition, the US Green Building Council has awarded TJSL a credit for **"Membrane Free Construction Through Integral Concrete Waterproofing" (Innovation in Design (ID) Credit 1.1)** for its use of Hycrete System W, which includes Cradle to Cradle Certified admixture Hycrete W1000.

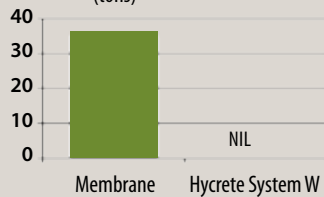
### Environmental Impact

1. Elimination of 36 tons of landfill debris
2. Elimination of an estimated 53,844 pounds of non-renewable materials
3. Elimination of an estimated 18,567 pounds of polymers
4. Reduction in required onsite equipment – concrete waterproofing is added at ready-mix, not site
5. Elimination of excavation / backfill required for membrane installation reduces construction footprint
6. Improved concrete recyclability, as future membrane removal is eliminated

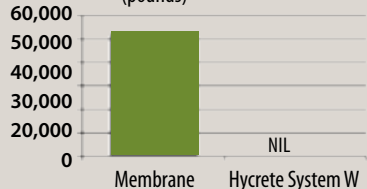
“We saved money by choosing a greener product; that was an unusual opportunity.”

Dean Rudy Hasl, Thomas Jefferson School of Law

Landfill Waste  
(tons)

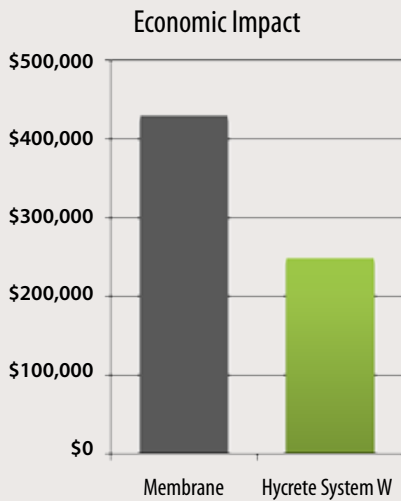


Non-Renewable Materials  
(pounds)



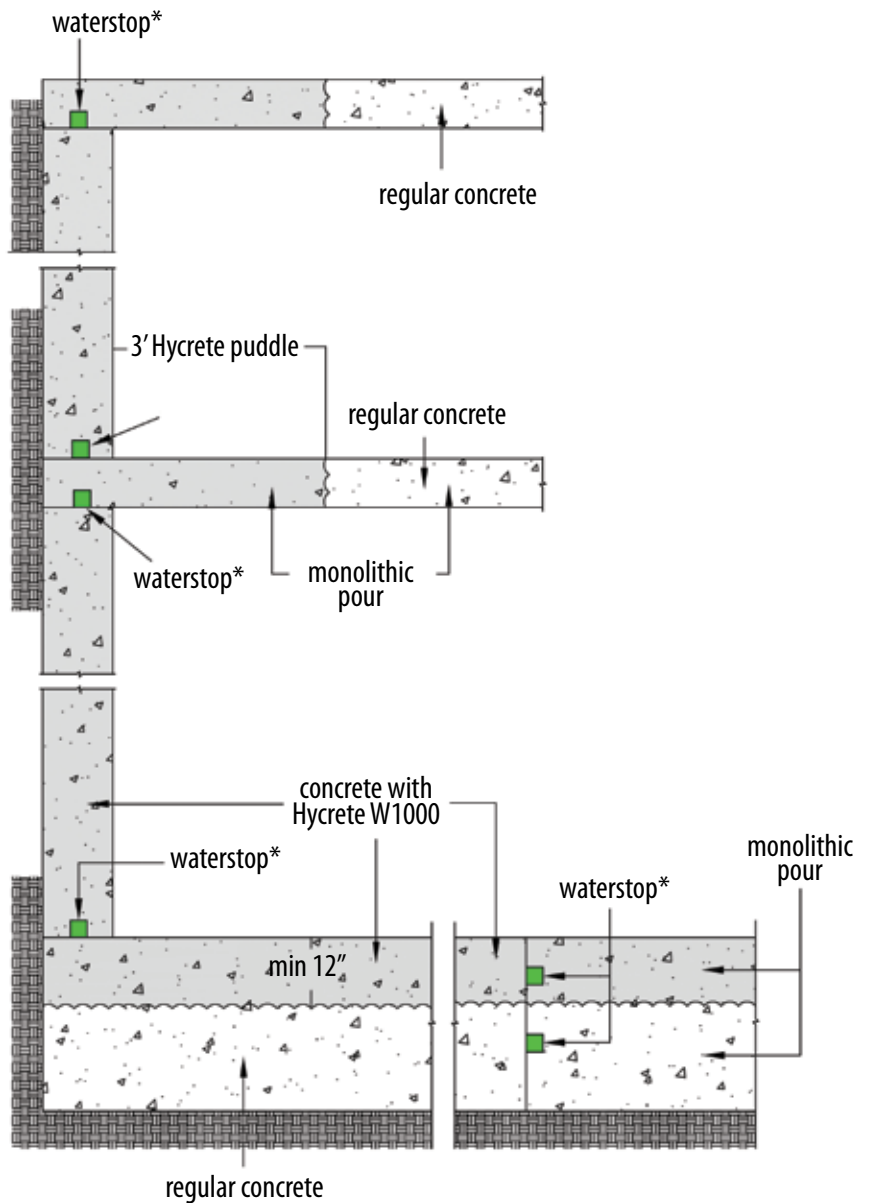
“ This is simply a better method of construction. ”

Byron Chilleme, Senior Project Manager,  
Bovis Lend-Lease



The school reduced the construction critical path by 4 weeks and saved an estimated \$187,000 on construction costs.

### Simple detailing for walls and slab



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