



Delivering Concrete Solutions

# Sustainable Waterproofing & Corrosion Protection Solutions for Concrete



## “Do More With Less” The Underlying Philosophy of Sustainability

### Less Expensive

Hycrete’s solutions provide a leak-free structure and enhanced durability. Depending upon the type of membrane being displaced, savings may be between 20-60%.

### Less Time

Hycrete admixtures offer real-time performance, meaning that waterproofing is achieved at the time of concrete placement. Membranes and coatings typically require an additional contractor and may take weeks or months to apply. Using Hycrete solutions removes this entire step.

### Less Material Demand

Hycrete System W eliminates thousands of square feet of membrane.

### Less Waste

Hycrete admixtures are batched in at the ready mix plant, eliminating packaging and scrap membrane materials on the jobsite. Also, because of its integral nature, it is easily recycled as part of the concrete after demolition.

## Project Highlight

*Bovis and Hycrete Deliver a LEED Point to Thomas Jefferson School of Law*

The US Green Building Council has awarded TJSJ a credit for **"Membrane Free Construction Through Integral Waterproofing" (Innovation in Design (ID) Credit 1.1)** for its use of Hycrete System W, which includes Cradle to Cradle™ certified admixture Hycrete W1000.

### Additional benefits:

- \$187,000 saved on construction costs
- 4 weeks saved on the critical path

### EASILY RECYCLE CONCRETE

Concrete substantially consists of imminently sustainable materials – sand, rock, and water. However, waterproofing membranes often make recycling concrete impractical or impossible. Chlorides and contamination from polluted soils may leach into concrete and prohibit recyclability. Concrete with Hycrete admixtures can be easily crushed and has reduced chloride and contamination ingress.

### REUSE RECYCLED CONTENT

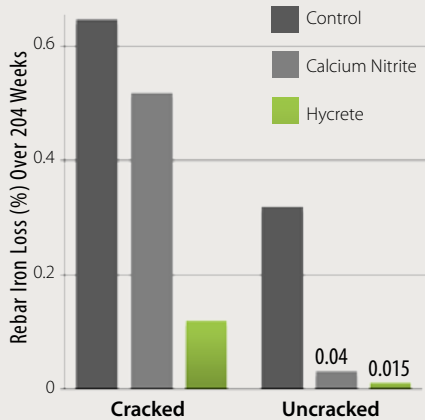
Hycrete’s admixtures are certified Cradle to Cradle™ Silver, meaning they are safe for human and ecological systems at all phases of their lifecycles. Also, Hycrete’s products have virtually zero VOCs and are produced with recycled water content and renewable energy sources.

### REDUCE RESOURCE DEMAND

Hycrete’s solutions enable membrane free construction and eliminate an entire step in construction. Thousands of pounds of non-renewable materials may be eliminated, worker safety is improved, and labor requirements are reduced .

**Corrosion Performance**

Hycrete admixtures provide superior corrosion resistance compared with calcium nitrite and the control, both in cracked and uncracked concrete specimens.



The Cradle to Cradle™ concepts are at the core of Hycrete's solutions. This approach models human industry on nature's processes in which materials are viewed as nutrients circulating in healthy, safe metabolisms. Put simply, it is a holistic economic, industrial and social framework that seeks to create systems that are not just efficient but essentially waste free. In Hycrete's case, this means using environmentally safe and healthy materials, designing for material reutilization, using renewable energy and energy efficiency in manufacturing and the efficient use of water in manufacturing.



## The First Cradle to Cradle Certified Building Material

### Build to Last

The most sustainable structure is the one you don't have to rebuild. Make your current project last longer. Not only does Hycrete technology reduce water absorption, it even protects the steel reinforcement. Hycrete admixtures chemically bond to the reinforcement surface to form a protective layer that drastically reduces corrosion by water and dissolved salts, extending your building's useful life and reducing replacement costs.

Once reacted with the concrete mix, Hycrete admixtures will remain an integral part of the concrete matrix for the life of the structure. The molecule doesn't break down. It won't leach out. There is no re-application.

## Using Hycrete May Contribute to LEED Credits

### Innovation in Design (ID Credit 1)

#### "Membrane-Free Construction"

Hycrete materials offer the opportunity to eliminate the use of membranes, providing substantial reduction in jobsite material used, pollutants emitted, non-recyclables consumed, and labor used.

Based solely on the use of Hycrete System W, this Innovation In Design credit has been successfully submitted and approved by the USGBC in previous projects.

### Materials and Resources (MR Credit 4.1/4.2)

#### Recycled Content

The value of recycled materials, 50% of pre- and 100% of post-consumer, counts towards this credit. Hycrete admixtures are 80% composed of pre-consumer recycled materials, by weight.

### Innovation in Design (ID Credit 1)

#### Greater than 2.5% of Building Materials Certified Cradle to Cradle™

Use of Cradle To Cradle™ certified products that constitute at least 2.5% of the material cost of a project has been established as a successful application for an Innovation Credit.

Hycrete products are certified Silver under the Cradle To Cradle™ program (50% credit).

### Materials & Resources (MR Credit 5.1)

#### Regional Materials

The value of materials extracted and manufactured within 500 miles of the project site count towards this credit. Hycrete admixtures are manufactured in Newark, NJ.

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