

**Delivering Concrete Solutions** 







# Integral waterproofing and corrosion protection solutions for concrete construction

Hycrete's innovative technology delivers water-tight concrete construction, cost savings, and reduced construction time, all with a greener solution.

# Waterproof Construction, Membrane-Free

Technologically advanced admixtures combined with comprehensive service ensure long-term, membrane-free, water-tight construction

### **Lower Construction Costs**

Typical savings are 40% lower installed cost than a traditional membrane approach.

## **Construction Time Savings**

No membrane means entire steps in the construction process are eliminated, shortening the critical path. The vulnerabilities to weather, damage by other trades, and extra excavation disappear. Days, weeks or even months of overhead are saved.

### **Best-in-Class Warranty**

Through an available 10-year warranty, Hycrete solutions ensure that your structure remains water-tight. If it leaks, we fix it.

## **Comprehensive Field Technical Services**

Hycrete's trained field technicians fully service each warranted project. Hycrete makes sure it gets done right for you every time, from planning to pour, and beyond.

# **More Durable Structures**

Unparalleled corrosion resistance that can help dramatically extend the life of your structure

## The Best Corrosion Inhibitor Money Can Buy

Not only does Hycrete technology reduce water absorption, it even protects the steel reinforcement. Hycrete admixtures reduce corrosion by water and dissolved salts, extending your structure's useful life and reducing replacement costs.

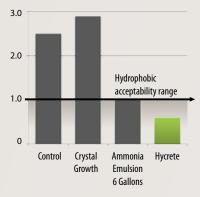
## In the Concrete for the Life of the Structure

Hycrete admixtures react with the concrete mix forming a permanent chemical bond. The molecule does not break down. It won't leach out. No reapplication is ever required.



#### Water Absorption Reduction

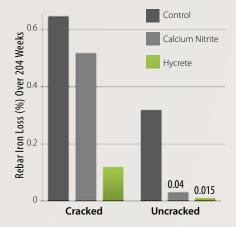
Hycrete admixtures consistently exceed the benchmark for hydrophobic concrete, which is less than 1% water absorption





#### **Corrosion Performance**

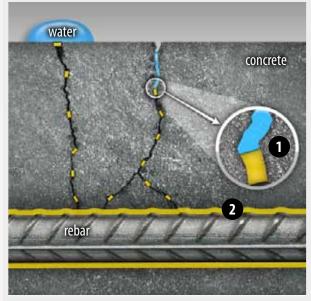
Hycrete admixtures provide superior corrosion resistance to calcium nitrite and the control, both in cracked and uncracked concrete specimens.



# Hycrete's Admixtures Make Concrete Waterproof and Inhibit Corrosion

Hycrete's products start as environmentally friendly, Cradle to Cradle<sup>™</sup> certified water soluble admixtures. When dosed into concrete, the Hycrete molecule chemically transforms, becoming a water-insoluble polymer. That polymer plugs pores in the concrete, keeping water out and blocking the diffusion of corrosive ions through the concrete. It also bonds to the surface of steel reinforcement, creating a protective layer that shields the rebar from corrosion. Finally, Hycrete's technology self-heals cracks.

All together, the Hycrete molecule keeps water out of the concrete and corrosive agents away from the steel.



1. Hydrophobic pore blocking

2. Corrosion-inhibiting surface coating

## Hycrete's Dedication to Field Services Makes the Difference









Hycrete's hydrophobic admixtures deliver waterproof concrete. But waterproof concrete is not waterproof construction. That requires a systems approach – Hycrete System.

Hycrete gets involved in the design phase, mix design, and preconstruction reviews to ensure the project is planned right. Before pours, Hycrete teams inspect the site and monitor batch plants. Hycrete teams are onsite during the pours. Finally, Hycrete teams follow up afterwards to address cracks; all concrete cracks, and Hycrete fixes them.

Hycrete can offer a water-tight structure that is built to last. If it leaks, we fix it. That's our warranty, and there's just one company you have to call.



# Applications

- Cast in place walls (1 & 2-sided forms)
- Shotcrete walls
- Foundation walls
- Cast in place structural slabs
- Slabs on grade

- Parking structures
- Concrete foundations
- Water features
- Basements
- Structural stairs
- Temporary roofs
- Green roofs
- Podium decks
- Elevator pits
- Tunnels
- Outdoor balconies
- Potable water tanks

# **Build to Last**

The most sustainable structure is the one you don't have to rebuild. Make your current project last longer. Hycrete admixtures and solutions provide more durable waterproofing approaches, and more durable structures.

# **Cradle to Cradle From the Start**

The Cradle to Cradle philosophy embraces a fundamental change in our disposable society from cradle to grave to Cradle to Cradle. Sustainable philosophies are at the core of Hycrete's business practices and our technology. In fact, Hycrete admixtures were the very first Cradle to Cradle certified building materials.

# **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, 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<sup>™</sup> 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<sup>™</sup> 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; 80% of the materials are extracted there.



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