



Delivering Concrete Solutions

CASE STUDY

Architectural Concrete, Landscape, and Precast Applications

Bay Front Development

Corpus Christi, TX

Bay Front Development is a seaside development on the Gulf of Mexico that includes an interactive fountain with a choreographed wave simulation pool and water feature. The feature is designed to resemble an artistic version of a beach area by simulating waves and areas where people can relax. The choreographed lights and water sprays are sequenced to a desired effect changing throughout the day and night.

Hycrete was used to waterproof the feature and protect the mechanical equipment in the room below. In addition, Hycrete was selected to protect the concrete and steel reinforcement from spalling and corrosion resulting from the high levels of salt in the air. Finally, using Hycrete enabled the designer to provide a long-lasting, durable solution for the owner without the need for periodic re-applications of coatings and sealers to protect the concrete.

Olympic Sculpture Park, Seattle Art Museum

Seattle, WA

Olympic Sculpture Park is a nine acre outdoor sculpture museum and beach at the northern end of the Seattle seawall.

Hycrete was used to protect the architectural concrete of the water feature, where major concerns were efflorescence and concrete degradation.

Also, Hycrete was used to waterproof the outdoor stairway above a mechanical room, a particularly difficult area to detail with other solutions. By using Hycrete the details were simplified and the owner received a performance warranty.

The Pierre

Lopez Island, WA

The Pierre is a private residence nestled into the rocky hillside of the San Juan Islands in Washington State. The house was designed to blend with the landscape, and includes a sod roof, outdoor living area facing the water, and a concrete slab and walls integrated into the surrounding rocky environment.

Hycrete was used to integrally waterproof the home. Due to site constraints, a traditional exterior-applied waterproofing membrane could not be used. In addition, using Hycrete enabled the designer to maximize the durability of the concrete and ensure that the structure and its interior have long-term protection.

Additionally, the owner desired a solution with no VOCs (volatile organic compounds) and that would have a positive environmental impact. That design criteria was an important factor in the designer's selection of Hycrete W1000 admixture, a Cradle to Cradle Certified admixture.



Courtesy: AMFJ Photography



North Metro Fire Rescue Headquarters Water Feature

Broomfield, CO

The North Metro Fire Rescue District serves several counties and a total area of approximately 63 square miles.

Hycrete waterproofed below-grade portions of the headquarters building and donated Hycrete W1000 admixture for use in the water feature to support the organization's fine work. Hycrete W1000 was used to enhance the concrete's durability in the harsh environment and help maintain its aesthetic appeal.

Architectural Precast Concrete

Hycrete admixtures are used in a variety of architectural precast elements including walls, mouldings, columns, sills, railings, and veneers.

Hycrete admixtures barrier the transfer of damaging water and chlorides though precast elements and reduce potential efflorescence. Using Hycrete admixtures also reduces spalling and enhances the durability of the precast element.

Hycrete admixtures enhance concrete durability by providing:

- Freeze thaw protection
- Reduced absorption
- Corrosion protection

Please see Hycrete Testing Summary for performance specifics.

Concrete Pavers, Block, Mortar and Stucco

Hycrete admixtures are used in concrete pavers, block (CMU), mortar, and stucco to protect against efflorescence and freeze thaw degradation and to shut down the capillary transport of water through the cementitious elements. In CMU construction, Hycrete admixtures are used in both block and mortar to form a permanent barrier against water.

“ We use Hycrete admixtures in all exposed pavers due to testing validating freeze thaw protection, which is critical to preserve the desired appearance of our pavers. ”

Large Paver Manufacturer

