

The Mansion Riviera Nayarit

Hycrete Provides Superior Waterproofing Protection for a private mansion in Mexico



Integral Admixtures Deliver Lasting Concrete Protection and Reduce Long-term Maintenance Requirements

Structure: Single Family Mansion

Applications: foundation walls, structural slab, elevator pit, pool, and koi pond

Owner: Frederic Deblois

Architect: Jose Arturo Hernandez Hernandez

Architect: De Anda Arquitectura

Engineer: Cesar Garcia

General Contractor: Casa Alman

Ready Mix Provider: Concretos Miracles

Introduction

The luxurious 22,000 SF waterfront mansion consists of nine bedrooms, 15 bathrooms, billiard room, gym, massage room, office, 8-person elevator, and a large multi-use below grade space. The property includes an expansive pool with a 20-foot diving well overlooking a lake, as well as a custom koi pond at the front entrance.

Challenge

In order to accommodate up to 20 guests, a large below grade parking garage had to be constructed below the water table with high hydrostatic pressure. That 9,000 SF space includes a 10-car parking garage, laundry facility, game room, mechanical room and a workshop. The elevator base is the lowest point of the foundation at -23ft, which is 13ft below the water table. The pool's 20ft-deep diving well is also below the water table. Dewatering pumps were required to run around the clock to pour the concrete for the foundation.

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Thanks to Hycrete's unique product and exceptional team, we were able to carry out our vision and accomplish a project that we were told could not be done. From design to execution and completion, the exceptional support provided is what made the project a success. Several design and architecture firms in the area have come to witness how exceptional Hycrete's use has been and how they will incorporate it their future designs.”

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— Frederic Deblois, Owner





Solution

Hycrete Endure WP provided the highest level of performance over the standard waterproofing systems. Using Hycrete Endure WP, the owner was able to accelerate the construction schedule and reduce waterproofing costs by eliminating the need for a membrane system.

Result

The owner was able to shave weeks off the construction schedule, saving them time and money. The most important result for the owner was to have ample useable space underground that remains moisture and mold free, which is unseen in coastal areas in Mexico. Hycrete Endure WP provided a non-absorbent concrete surface with reduced maintenance over the duration of the building life span.

