



Imbanaco Clinic Basement Waterproofing



2016

ABOUT THIS PROJECT:

Market Segment:
General Construction

Engineer:
Omar Benavides Veis

Products Used:
Xypex Admix C-1000

Location:
Cali, Colombia

General Contractor:
CIP SA

During the construction of Clínica Imbanaco, one of Cali's largest hospitals and a recipient of the prestigious ECRI Health Technology Excellence Award, an effective waterproofing solution was essential for the multi-level basement, located in an area with a high water table.

These basements extend to a depth of 12 meters and house critical medical and logistical services, including parking, technical facilities, machine rooms, and storage for hospital supplies. Ensuring the waterproofing of these areas was vital to protect sensitive equipment and supplies from water intrusion, which could compromise the hospital's operational efficiency and safety.

The waterproofing process was overseen by engineer Omar Benavides Veis in collaboration with CIP SA - Ingeniería para el Concreto. The engineering team selected Xypex Admix C-1000 to provide permanent and integral waterproofing.



When incorporated into concrete, Xypex activates a chemical reaction between its proprietary active components, moisture, and unhydrated cement particles. This reaction forms insoluble crystals that block water and harmful agents, such as chlorides and sulfates. Additionally, Xypex's Crystalline Technology gives the concrete self-healing properties, where moisture triggers crystal growth in new micro-cracks, further enhancing waterproofing and chemical resistance. This self-healing mechanism reduces maintenance costs and extends the structure's lifespan.

Xypex Admix C-1000 was added at a 2% concentration relative to the cement content. An additional benefit of the Xypex Admix C-Series is the time and cost savings, as it is mixed into the concrete during batching, eliminating the need for post-curing applications like membranes and coatings.

Implementing Xypex Admix enhanced the safety, efficiency, and cost-effectiveness of the building, ensuring the clinic can deliver world-class healthcare without the risks associated with water damage. Maintaining the functionality of these underground areas is crucial for the smooth operation of Clínica Imbanaco.