



Torrance Memorial Specialty Center

Torrance, CA, USA



Completion Date
2013

Architect
GENSLER

Contractor
2H CONSTRUCTION

Products
ADMIX C-500



The 3-storey, 65,000-square-foot building is designed and constructed to exceed the Energy Star standards and LEED sustainability "Bronze" category.

The structure is constructed of decorative tilt-up concrete wall panels with a light sandblast finish to expose the fine aggregates in the concrete matrix. Besides aesthetics, this finish was especially selected to help reduce future maintenance, minimize the contribution of harmful products to the environment, and reduce the overall environmental footprint of the building. During a preliminary discussion about the project with the architect, Innovative Concrete Products and Marketing, a southern California-based Xypex independent representative with a background in tilt-up construction and engineering, warned about the possibility of moisture penetration associated with cracks that develop in the concrete panels.

Mike Davis, president of Innovative Concrete Products, says, "Even if they applied a premium water repellent to the exposed aggregate finish, moisture penetration is still a possibility. And even if the moisture didn't get to the inside of the structure, calcium carbonate deposits usually form at cracks that take on water through the structure or just at the surface."

After review and analysis, the architect opted to use crystalline waterproofing. As a result, the contractor used the Xypex [Admix C-500](#) admixture to waterproof the 33,300 sq.ft. of wall surface panels during the on-site casting process.

Davis adds, "Now even if hairline cracking in the exterior panels occurs, the [integral crystalline waterproofing](#) properties will continue to protect against water and chemical ingress."

After sandblasting the panels, the contractor noted numerous hairline cracks that had been concealed by the surface cement paste and yet no leaking or moisture intrusion occurred in the concrete.