



United States Air Force Academy

Colorado Springs, Colorado, USA



Completion Date
2015

Applicator
COSYLEON & COSYLEON

Products
ADMIX C-500

Project Type
**GENERAL CONSTRUCTION -
FOUNDATION**



The United States Air Force Academy is known for its distinctive architecture and aesthetics. Adding to the ambiance is The Terrazzo, a 700-ft-long open space with lighted pools, lowered grass sections and maze-like walkways that are made of red Terrazzo tiles. Recently, it was necessary to renovate the concrete slabs within the parade grounds and the Terrazzo. The concrete had deteriorated badly due to exposure to de-icing salts, freeze-thaw cycles and harsh Colorado winters. With a large steady volume of Cadet and civilian traffic, this area receives a strong dose of salts daily throughout the winter months.

New concrete was placed, totaling 140,000 sq. ft. The contractor blended Xypex [Admix C-500](#) into the concrete mix at the time of batching to waterproof and protect the concrete. A total of 30,000 lbs of Xypex Admix were used. "It outperforms other methods because of its unique ability to become a truly integral part of the concrete matrix," says Boyd. Concrete treated with Xypex Admix C-500 resists extreme hydrostatic pressure from either the positive or negative surface of the concrete and allows concrete to breathe. It is also resistant to aggressive chemicals and can seal static hairline cracks up to 0.4 mm.



Xypex representative, Stephen Boyd, commented: "Due to the heavy salting, the operations team was dismayed at the short life cycle they were getting from these architecturally important squares. Xypex products had been used in other areas of the academy with good success, so Xypex was again suggested and implemented."