

ARCHITECTURAL RECORD

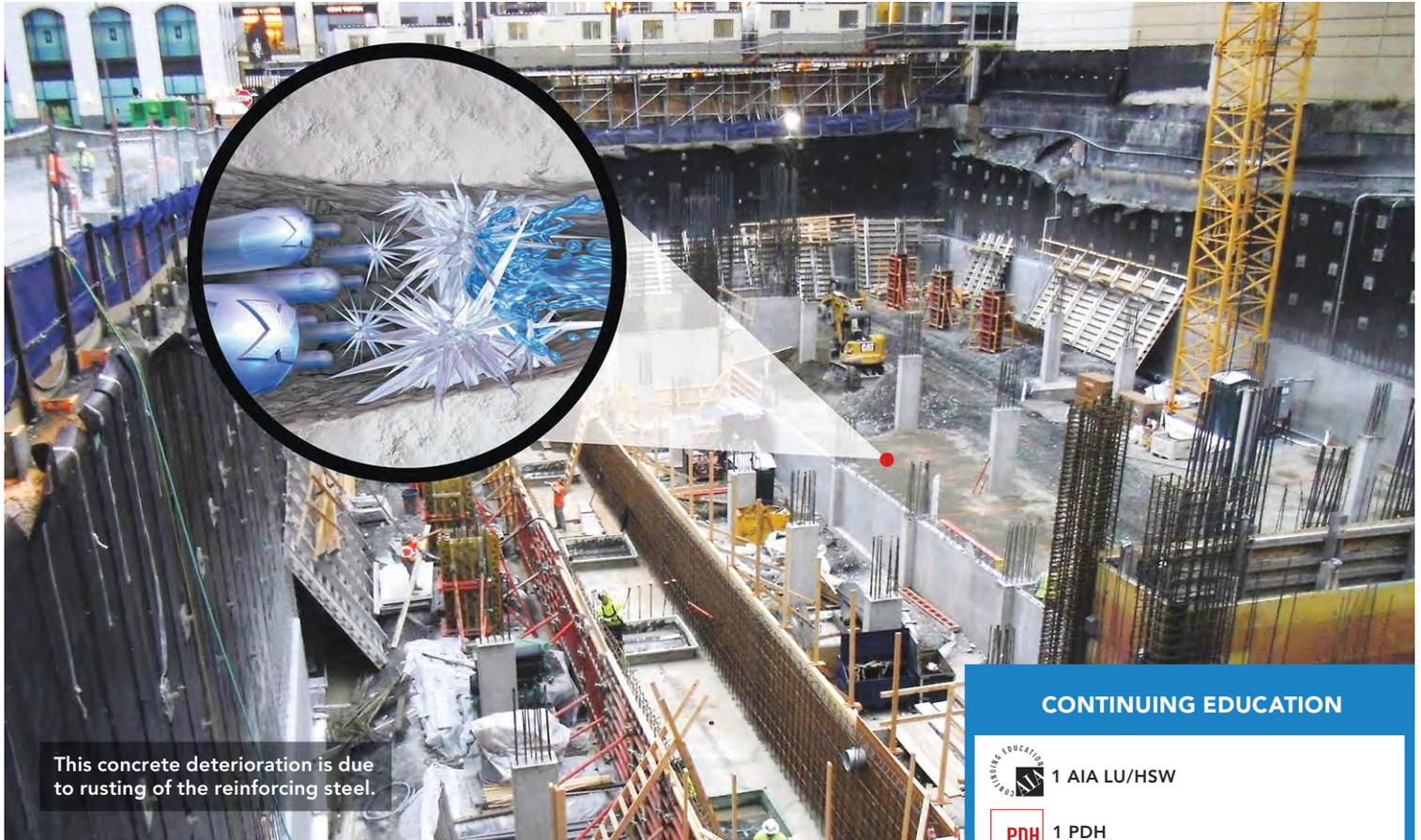
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2019

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Record
Houses
2019

Image courtesy of XYPEX Chemical Corp.



This concrete deterioration is due to rusting of the reinforcing steel.

Concrete Waterproofing with Crystalline Technology

Crystalline chemicals improve concrete durability, lower maintenance costs, and extend building life cycles

Sponsored by XYPEX Chemical Corp.

From foundations, floor slabs, and exterior precast panels to water treatment facilities and underground urban infrastructure, concrete is one of the most commonly used building and construction materials. However, due to its composition—a mixture of rock, sand, cement, and water—concrete is often susceptible to damage and deterioration from water and chemical penetration.

These deleterious effects can be avoided through the use of crystalline waterproofing

technology, which effectively improves the durability and lifespan of concrete structures, thereby reducing long-term maintenance costs. This course explores how crystalline technology provides a high level of performance to concrete mixtures, materials, and structures, and what design professionals need to know in order to specify and understand how this chemical technology will enhance building projects.

Continues at ce.architecturalrecord.com

CONTINUING EDUCATION

1 AIA LU/HSW

PDH 1 PDH

Learning Objectives

After reading this article, you should be able to:

1. Understand how crystalline technology works with concrete to provide high-performance waterproofing qualities.
2. Explain the difference between porosity, permeability and the mechanics by which water is absorbed through concrete structures.
3. Discuss how crystalline waterproofing technology improves the durability of concrete structures and reduces maintenance.
4. Identify appropriate crystalline technology product applications for various types of concrete construction.
5. Analyze how crystalline technology admixtures can impact building life cycle and project construction costs.

To receive AIA credit, you are required to read the entire article and pass the test. Go to ce.architecturalrecord.com for complete text and to take the test for free. This course may also qualify for one Professional Development Hour (PDH). Most states now accept AIA credits for engineers' requirements. Check your state licensing board for all laws, rules, and regulations to confirm.

AIA COURSE #K1812Z



XYPEX Crystalline Concrete Waterproofing penetrates and permanently plugs concrete's pores and micro-cracks. It becomes an integral part of the structure and will not deteriorate like coatings and membranes. The product is nontoxic, contains no VOCs, and is also available as an admixture for new concrete. www.xypex.com

Concrete Waterproofing by Crystallization

**NO
EQUAL**



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Concrete
(Untreated)



Xypex Crystallization
(Initiated)



Xypex Crystallization
(Mature)

XYPEX integral crystalline technology waterproofs concrete foundation structures as they're poured and cannot be damaged during installation or backfilling. Unlike membranes, Xypex is added to the concrete at the time of batching avoiding application errors. This sustainable technology also contributes to LEED credits. **When you select Xypex Crystalline Technology**, you've chosen the best... more than 40 years of independent testing, experience in over 90 countries, unmatched product and service standards... *and still no equal.*

Call 1.800.961.4477 or visit us at xypex.com

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