

Sustainable High-Performance Concrete: Innovative Façade & Interior Solutions

High Performance Concrete (HPC) is a class of concrete that is exceptionally strong and durable with enhanced aesthetics. With its unique set of properties, a fraction of the materials in conventional concrete mixes is used with thicknesses ranging from ½" to 3". In this way, carbon emissions from manufacturing, transportation, and installation are reduced.

HPC can be used to create decorative and protective façade elements, grand entrance cladding, urban furniture and interior solutions such as stair treads, interior wall panels, countertops, boardroom tables and sinks. We will cover the possibilities of incorporating various embedded items and atypical aggregates without sacrificing flexural and compressive strength, meeting or exceeding performance requirements.

This presentation will provide basic material properties and illustrate advances in materials and fabrication, which allow for more flexibility with form and finish while remaining monolithic.

The course concludes with a few examples of best practices to follow when designing with UHPC and HPC, showing how early engagement benefits the designer and the end user.

Course Number: HPC-25

Length: 1 Hour

Credits: 1.0 LU/HSW

LEARNING OBJECTIVES

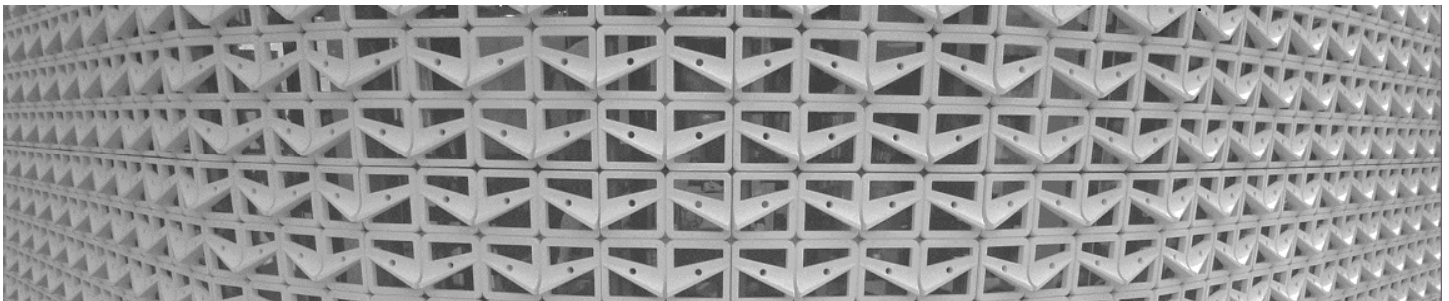
1. Learn the differences between standard concrete mixes, and UHPC and HPC mixes and its applications.
2. Understand how using less concrete with high-performance mixes contributes to sustainability by reducing material use and environmental impact.
3. Understand the finishes, colors and forming options available when utilizing high-performance concrete on interior and exterior designs.
4. Learn how to leverage the power of high-performance concrete and design assist for your projects.
5. Discover how high-performance concrete has been utilized to meet design goals while maintaining budgets, as illustrated through case studies.

Questions? We are happy to help!

Contact us or schedule a seminar today.

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Concrete Characteristics



Finishes and Forming



Design Assist