LUNCH & LEARN PRESENTATIONS

#welleducates
**INTRODUCTION**

Wells Concrete is committed to keeping the design community up-to-date on new precast technologies and innovations while continuing to develop interest in designing sustainable structures. We offer a variety of AIA, NCEES and HSW approved presentations for clients, designers, association groups, and students. Each presentation is about 45 minutes with 15 minutes for Q&A.

Wells Concrete is a registered provider through our unique relationship with the Precast/Prestressed Concrete Institute (PCI) and AltusGroup. Contractors, owners, architects and engineers can learn about precast concrete hollowcore floors, architectural precast concrete, precast parking structures, and glass or carbon fiber reinforced concrete.

**SCHEDULE YOUR TOUR OR PRESENTATION**

To schedule your next tour or Lunch & Learn, contact your local sales representative or visit our [website](https://www.wellsconcrete.com/education) at https://www.wellsconcrete.com/education. From here, click on the “Schedule Your Tour” button and submit your form. Note example below.

What are you waiting for? Sign up now! Free lunch and CEU credits = no risk! You won’t regret investing an hour learning about how precast can benefit your designs and projects.
CONTINUING EDUCATION PRESENTATIONS

Precast 101
Participants will explore building design solutions using precast and prestressed concrete products. They will learn what precast, prestressed concrete products are, how they are manufactured, including structural theory of prestressing, and quality assurance procedures. They will learn about the industry certification program (PCI) of plants, people and performance. Participants will explore numerous examples of architectural and structural concrete solutions for numerous building markets. They will explore a variety of architectural finishes and how each is created in terms of color, form and texture. They will explore common structural solutions using prestressed concrete products and explore integrated solutions; realizing the full potential of load-bearing architectural precast units.

Prestressed Concrete for Engineers
This presentation provides an overview of precast/prestressed concrete, discussing some of the key benefits of precast/prestressed concrete, and focuses on key attributes such as connections, details and relationships with the engineer of record. We will also look at the idea of resiliency and close with a discussion of precast concrete applications along with architectural and structural precast solutions for common design challenges.

Hollowcore Floors and Walls
This presentation instructs participants about Ultra-Span hollowcore products and how to design and build utilizing hollowcore floors and walls. Participants learn about the inherent fire resistance of hollowcore, a major life-safety consideration. After this program, participants will be able to identify the different precast, prestressed hollowcore concrete systems and explain the benefits of using precast, prestressed hollowcore concrete.

Precast Wall Panels / Enclosure Systems
This presentation addresses how to use precast concrete wall systems to meet the latest code requirements such as continuous insulation and air barriers, and include topics such as moisture management, thermal mass effect and how to calculate effective R-values, integration with other building systems, and more. This session will also touch on the idea of resilience. A structure must be able to resist environmental forces, such as high winds and earthquakes in order to protect life and fulfill its intended purpose. Case studies are used to highlight information presented.

Architectural Precast: Aesthetic Versatility of Precast Concrete
The aesthetics of a structure are very important, as it is what most people identify with. Precast concrete provides incredible aesthetic versatility from providing multiple colors and textures, to developing shapes, forms and very ornate details. Precast can also simulate or be veneered with natural materials providing all of their beauty, but with the added speed, durability, many other benefits of precast.

This presentation provides an overview of the many finishes available with precast concrete, along with methodologies for achieving them. We will also discuss combining multiple finishes into single panels, veneers and embedded materials, selection of mix designs, approaches to achieving colors, proper specification, and procedures to ensure expectations are aligned.

Total Precast
This presentation addresses what a total precast concrete structure is, how a total precast structure can benefit a project, and what components are used to construct a total precast structure. Participants will also learn how to manage a successful project.

Architectural Precast: Designing with Concrete Graphics
Whatever your mind imagines, you can place on precast concrete and create a stunning, iconic façade. This presentation demonstrates how Graphic Concrete technology allows you to impart durable patterns and images onto precast surfaces such as façades, walls, spandrels and sound walls. It opens up a bold new range of aesthetic possibilities for architects, developers and precasters.

Participants will review the technology platform and manufacturing process for graphically imaged precast concrete using retardant transfer membranes and discuss health, safety, environmental and sustainability considerations for graphically imaged concrete.
LUNCH & LEARNS

Building Educational Facilities
Educational Facilities are a vital part of the fabric of our society that directly contribute to what our future will be. These are places where future generations learn more than just math and science, they learn about people, life, and develop key life skills. Today's schools are more than just buildings, they are interactive learning environments. They are gathering places. They are safe havens for a community. This presentation will discuss recommendations on how to design and build high performance schools, which provide energy efficiency, safety and resiliency, as well as reduce life cycle costs. Aesthetics, acoustics, schedule, and fire protection will also be discussed. Case studies will be used to highlight topics discussed.

Sustainable Design Using Precast Concrete
This presentation provides an overview to help participants understand the key to sustainable building lies in long-life, adaptable, low-energy design. Attendees will learn how the earth's resources are best conserved if the service life of a building is prolonged and how using precast concrete in buildings conserves energy and resources during and after construction because of the following characteristics of precast concrete: (a) The materials used in precast buildings are natural, renewable, and locally available. (b) Water and materials used in precast buildings are often recyclable and recycled. (c) Indoor and outdoor air quality are improved in precast buildings because less (or no) VOC-based preservatives and paints are required, and because of the thermal mass qualities of precast concrete.

Designing Parking Structures
Parking structures have changed a lot over the past decade. Today's parking structures have to be built sustainably, reduce operational and maintenance costs, last longer, and have more stringent aesthetic requirements. In many cases, they have to be high performance structures exceeding standard expectations. This presentation will explain what a high performance parking structure is, as well as how to design and build them utilizing high performance precast concrete. The latest innovations and design methodologies, including connections, proper detailing and maintenance will be discussed.

Building Athletic Facilities
Health awareness and athletic competition have become increasingly more important throughout the past years. We see expansions of professional sports teams, new extreme sports being introduced, old facilities being rebuilt, and a growing demand for new facilities. For example, the athletic facility market is expected to grow by 15% or more over next couple of years. Furthermore, these structures have increasing requirements to design and built for high performance and provide flexibility, functionality, and durability. This presentation will provide an overview of today's high performance athletic facility design using precast concrete systems, as well as include recommendations to optimize designs. Topics discussed will be highlighted with case studies.

Designing Industrial Structures with Precast/Prestressed Concrete
This presentation addresses how precast concrete systems allow an industrial structure to meet the demands of heavy use and dynamic production advancement. Additionally, the program explores the use of precast concrete components for specific industrial, retail, and manufacturing applications that take advantage of precast concrete’s fire-resistance and long roof span capabilities. Participants also discover benefits to the designer and owner in terms of increased durability, flexibility of design, high quality of manufactured products, versatility, high-performance, durable materials and speed of construction because precast components can be erected quickly once they arrive at the site.
Mock up Sample Building Tours
Wells constructed three Mock-up Sample Buildings to showcase various finishes and features capabilities, attendees participate in a guided tour. The 30’x10’ buildings are located at the Rosemount, MN, Albany, MN, and Grand Forks, ND facilities.

The displays are fully enclosed and comprised of eight different wall panels illustrating unique architectural finishes. Structural details include detailing for three common roofing systems: double tee roof members, bar joist roofing systems, and hollowcore roofing systems. Another exciting feature on display is the newly introduced preinstalled Integrity Windows by Marvin.

Plant Tour for Precast/Prestressed Concrete
Attendees will observe firsthand how designs and engineering details are executed in the precast manufacturing process. They will also observe the entire precast and prestressed manufacturing process from engineering and connections, forms set-up, casting and finishing. Attendees will gain a better understanding of precast and prestressed capabilities and related quality issues. Attendees will learn how precast fits within the entire building system and how to specify precast concrete accurately and safely.
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