# Accelerated Building Construction Using Precast Prefabricated Concrete Structures and Enclosures



This one-day seminar for Developers, Architects, Engineers/ EoR, Building Consultants, and all other AEC Professionals will focus on Precast Building Envelope Design and Precast Concrete Architectural/Structural Design of Total Precast Concrete Buildings. A Passive House Total Precast Concrete Project Case Study will also be presented.

### The seminar will cover the following topics:

### **TOTAL PRECAST CONCRETE**

- What the Owner/Developer needs to know about Total Precast Construction
- What the Architect/Designer needs to know about Total Precast Construction
- What the Engineer needs to know about Total Precast Construction

#### **PRECAST CONCRETE BUILDING ENVELOPES**

- Building Enclosure Principles
- Detail Methods for Precast Concrete Enclosures
- Achieving High Performance
- Passive House Developments in Total Precast Concrete

# Participants will learn:

- How to apply building science principles to single-wythe and double-wythe precast concrete insulated panels
- Detailing methods to provide effective rain control at window penetrations and panel joints
- Innovative Research in Concrete and Off-Site Construction
- Wall system designs with high R-values, limited thermal bridges, good airtightness, and excellent control of rain penetration
- The advantages of using Total Precast Construction
- Pre-assembled windows in the panel caulked, vapour and air tested in the precast plant provide improved quality assurance
- The differences between Total Precast Concrete and CIP concrete design
- The variety of options when designing with Total Precast
- Important detailing considerations in Total Precast Design
- How to utilize Total Precast Concrete Systems for Passive House Designs

Seminar Price: \$199 (includes; 1 light breakfast, 2 coffee breaks, 1 lunch and a cocktail networking reception)

**Travel Discount Price: \$100** We offer an Outof-Province (Mainland New Brunswick) Travel Discount of \$99 for NS, PEI, and NFL. Use discount code – **moncton2023** 

Date: Thursday, June 8, 2023 Time: 7:15 am – 4:00 pm Where: Canvas Moncton Hilton Hotel Address: 55 Queen St, Moncton, NB, E1C 1K2 Phone: 1-506-800-8118

### **CONTINUING EDUCATION CREDITS**

This seminar is EPP approved by the Architects Licensing Board of Newfoundland and Labrador, the Architects Association of New Brunswick and the Nova Scotia Association of Architects. Attendees will earn Professional Development Hours (PDH). A certificate of completion will be sent to all attendees.



### **Technical Resources:**

Download free copies of our technical publications, including;

- CPCI Total Precast Concrete High-Rise Building Design Example (Co-Authored by Kurt Ruhland, M. Eng., P. Eng., MTE Consultants Inc.)
- Meeting and Exceeding Building Code Thermal Performance Requirements and High Performing Building Performing Precast Concrete Building Enclosures – Rain Control Guide (Authored by John Straube, Ph.D., P. Eng, RDH Building Science)
- CPCI Architectural Precast Concrete Walls: Best Practice Guide (Authored by Malcolm Hachborn, P.Eng., FCPCI, President, M. E. Hachborn Engineering)



# **Register for this seminar today!**

## **SEMINAR Presenters:**

### KURT RUHLAND, M.Eng., P.Eng. | MTE Consultants Inc.



Kurt Ruhland, P. Eng, has been a practicing consulting structural engineer for over 30 years and is licensed across Canada and the United States. He has been involved with the structural design of total precast buildings ranging from one to twenty-seven stories. Mr. Ruhland has worked both as the Engineer of Record and as the Precast Engineer. He has been on the CPCI Technical committee for many years and currently sits as its Vice-Chair. He is also a co-author of the CPCI Total Precast High-Rise Building Design Example.

### JOHN STRAUBE, Ph.D., P. Eng | RDH Building Science



John Straube, Ph.D., P.Eng., is a Principal at RDH Building Science, where he conducts forensic investigations, assists with the design of new high performance buildings, and leads research projects in the areas of low-energy building design, building enclosure performance, hygrothermal analysis, and field performance monitoring. Dr. Straube is also a cross-appointed faculty member in the School of Architecture and the Department of Civil and Environmental Engineering at the University of Waterloo. He is the author or co-author of over 100 published technical papers, author of the book High Performance Enclosures and co-author, with Eric Burnett, of Building Science for Building Enclosures.

### ALAN LLOYD, P. Eng, Ph.D., Associate Professor | UNB

Dr. Alan Lloyd is a structural engineering professor in the Department of Civil Engineering at the University of New Brunswick. He received his master's and doctorate degrees from the University of Ottawa, where he studied explosive-resistant reinforced concrete. His current research interests include precast concrete structures and modular buildings. He primarily conducts experimental research on reinforced and precast concrete, including hollowcore precast, connections of total precast concrete structures, and fibre-reinforced polymer

#### KYLE CROOK, Territory Manager | Kohltech Windows

Kyle graduated from St Mary's University with B. Com and a Major in Finance. Kyle has worked with Kohltech Windows since 2013. Previously Kyle worked with Soprema (Roof and Building Envelope) and IKO, a Roofing Company. Kohltech's relentless pursuit of innovation and commitment to creating highperformance windows and entrance systems has made the company a proud Canadian and US industry leader. Kyle will present a new window developed exclusively for precast concrete Architectural and Double Wythe Insulated Wall Panels.

#### **RUSSELL COOKE,** Business Development Associate | Strescon

Russell joined the OSCO Construction Group in Business Development for Borcherdt Concrete in the spring 2020. In 2022 he was promoted to Strescon's Business Development Team covering Nova Scotia, PEI and Nfld. Russell is a 2020 Construction Management Technology program graduate at the Nova Scotia Community College (Waterfront Campus) in Dartmouth, NS.

#### MATTHEW CONRADI, Business Development Associate | Strescon

Matthew was born in Ontario and graduated with a diploma in Motive Power from Niagara College and later a diploma in Energy Systems from New Brunswick Community College. Matt is passionate about educating the AEC Community about Precast Concrete Accelerated Building Construction (ABC) & its many benefits and unlimited aesthetic possibilities.

## Accelerated Building Construction **ABC**

With Precast Concrete



E: info@cpci.ca TF: 877.937.2724 To participate in this seminar, simply click on **ABC'S of Total Precast Concrete Structures** from your computer, tablet or smartphone.