

America Training Solutions

ATS CONTINUING EDUCATION ONLINE\_SEMINAR Built to Last: Durable Design Solutions - Eastern Time Zone Wednesday, March 15, 2023



## 08:00 AM Welcome, Credits, and Certificates

# 08:05 AM Durable & Resilient Retrofits – Solving with stone wool insulation

Globally, existing buildings account for approximately 30% of final energy demand and CO2 emissions. Typical renovation rates are 1-2% of the building stock per year, with an average energy use intensity (EUI) reduction of less than 15%. However, to reach sustainable development and climate targets, EUI reductions should be between 30-50% In addition to energy and emissions conservations, building retrofits improve occupant health and comfort. In many cases, existing buildings are poorly insulated and leaky, resulting in excess heat loss and reduced thermal comfort. Mechanical systems are often outdated and inefficient, requiring consistent maintenance. With spending most of our time indoors, indoor health and comfort can be a priceless attribute that can be crucial for building renewal investment. This course will review core concepts to consider when implementing energy conservation measures through retrofit & renovation; Three unique case studies are provided to highlight the complexity of renovations and look at the ever-present challenges of extreme weather events.

Wally Hallowes Rockwool Provider #: K269 AIA #:RWNA210502 HSW

#### 09:05 AM Review of Session Code Process

#### 09:10 AM Retrofit Anchoring of Masonry and Stone Facades

An overview of existing masonry and stone façade instability issues, the cause and recognition of these problems, and the cost-effective re-anchoring solutions for repair involving various masonry wall construction techniques. A detailed look into the different types of retrofit anchoring systems available to stabilize existing masonry and stone facades.

Kelly Moorman Prosoco Provider #: J388 AIA #:PRO034-22 HSW

#### 10:10 AM Break

## 10:20 AM Sponsor: QWEB (Quebec Wood Export Bureau) - Eli Gould

Eli graduated with one of the first dual Architecture/Forestry degrees from Yale in the early '90s, with a conviction that the two fields would eventually be more linked. After a quarter century, this seems more true and even mainstream, but for many years it was an entrepreneurial effort in the small vertical wood prefab companies he ran in Vermont, and in the automated timber industry where he often consulted. For the last three years, Eli has brought those experiences into a nonprofit market development role for QWEB. When he's not trying to transform the AEC industry into a positive climate force he enjoys small town and organic farm life in Vermont with his family.

## 10:30 AM Coating of Aluminum Extrusions

Provides an overview of aluminum extrusion coatings and includes discussions on the aluminum extrusion process; a comparison of powder and liquid coatings; an overview of the chrome and the chrome-free pretreatment processes; and, the performance objectives of AAMA testing standards.

Taylor Coley Barrette Outdoor Living Inc. Provider #: J696 AIA #:AG1012020 HSW

#### 11:30 AM Acetylated Wood: Discover the Difference for Siding, Decking, and More

This course discusses the process of wood acetylation, the resulting changes to wood, applications for acetylated wood, its green credentials and a number of case studies involving acetylated wood.

**Douglas Gillikin** 

Doug has nearly 30 years in millwork manufacturing, OEM national account sales management and project management. Having been on all sides of the process, he understands the challenges faced beginning with inspiration, design to installation. Accsys Technologies - Titan Wood Inc. Provider #: K382 AIA #:Accoya2020 HSW | GBCI (USGBC/CAGBC) #:920022858

#### 12:30 PM Lunch

# 01:10 PM Durable Timber: Designing for the Life Cycle of Embodied Carbon

Architects have always had to adapt to a variety of performance indicators like energy use for their buildings. Recent years have seen a complex shift towards embodied carbon as an indicator. This shift has occurred without a full understanding of the principles of life cycle analysis (LCA), that go into the data sets for carbon. The rise of mass timber has fueled a broad interest in wood and bio-sourced building materials as a potential carbon storage solution. However, there is a real difficulty of capturing complex and regional variations in the simple frameworks of most carbon comparisons. There are competing agendas, methodology, and data presented to specifiers from all sides. Even the best advocates for timber must be humble about the range of variables while defending their choices of regenerative natural building materials. This course starts by helping the modern architectural practice to understand key definitions and principles of carbon calculation metrics and life cycle analysis. It then moves into specific comparisons that highlight the unique attributes of wood, with learning objectives demonstrating the effect of design for durability and biogenic carbon.

#### Eli Gould

Eli graduated with one of the first dual Architecture/Forestry degrees from Yale in the early '90s, with a conviction that the two fields would eventually be more linked. After a quarter century, this seems more true and even mainstream, but for many years it was an entrepreneurial effort in the small vertical wood prefab companies he ran in Vermont, and in the automated timber industry where he often consulted. For the last three years, Eli has brought those experiences into a nonprofit market development role for QWEB. When he's not trying to transform the AEC industry into a positive climate force he enjoys small town and organic farm life in Vermont with his family.

QWEB (Quebec Wood Export Bureau) Provider #: 502111360 AIA #:DurableTimber HSW | GBCI (USGBC/CAGBC) #:920027550

## 02:10 PM PreFabricated Fireproof Columns

Structural fire protection guards essential structural components from the devastating effects of fire. This course examines the various active and passive fireproof methods that areavailable with a focus on the features, types, and design considerations of prefabricated fireproof structural columns designed for exposed exterior and interior load-bearing columns. We also discuss Glass Fireproof Columns and possible applications.

Patricia Brindle Fire-Trol Provider #: 10008964 AIA #:USFT01 HSW | GBCI (USGBC/CAGBC) #:920026530



End





