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 Mechanical systems are often outdated and inefficient, requiring consistent maintenance.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 over 20 years in millwork manufacturing, national account sales 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 are available 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

03:10 PM End