

America Training Solutions

ATS CONTINUING EDUCATION ONLINE\_SEMINAR Built to Last: Durable Design Solutions - Central Time Zone Thursday, October 12, 2023



# 08:00 AM Welcome, Credits, and Certificates

# 08:05 AM Understanding Wood Aesthetic Cladding and Soffit Technologies

This learning unit will provide an in-depth overview of current "wood" design technologies natural and synthetic. - Identify current market "wood aesthetic" technologies - Understand the core materials of each technology - Understand the sustainable features and Life Cycle benefits for each technology based on the following criteria: Color Retention, Maintenance & Warranty - Describe the surface burning characteristics and explain how they can be specified to achieve code compliance - Installation Details - Budgetary Information

Yancey Hughes Hughes & Associates Provider #: L161 AIA #:GL2020CS HSW

09:05 AM Review of Session Code Process

# 09:10 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 Mechanical systems are often outdated and inefficient, requiring consistent maintenance.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.

Denise Alvera Rockwool Provider #: K269 AIA #:RWNA210502 HSW

# 10:10 AM Break

### **10:30 AM** How It's Made: Today's PVC

PVC products have been around for 100 years. They're common in the construction industry because of their durability and long life. But old PVC manufacturing practices still cause concern for some of today's specifiers. This course will address those concerns head-on. We'll talk about today's manufacturing processes and how recycling is transforming the industry. You'll see how PVC resin becomes a strong and beautiful product using the example of vinyl fencing. With the understanding of today's regulations, collaboration, and greenbuilding practices, you'll have the confidence to specify today's PVC products.

Taylor Coley Barrette Outdoor Living Inc. Provider #: J696 AIA #:HIMPVC0523 HSW | GBCI (USGBC/CAGBC) #:920028037

# 11:30 AM 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

12:30 PM Break

# 12:50 PM 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 #:Accoya2023 HSW | GBCI (USGBC/CAGBC) #:920022858

# 01:50 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

