



11:00 AM [Welcome, Credits, and Certificates](#)

11:05 AM **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) #:0920029573

12:05 PM [Review of Session Code Process](#)

12:10 PM **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 #:GL WPC 2023 HSW

01:10 PM

1-Hr Fire-Retardant-Treated Wood in Today's Building Code

This session is a discussion of fire-retardant-treated wood's technical characteristics and building code-related applications. Emphasis is placed on the testing and labeling required by the International Building Code. The building code, as with many products, regulates the use of wood in construction. Two broad categories separate materials: combustible and noncombustible. Codes limit the applications of combustible materials on the basis of fire and life safety. The question is then, are there options available to using wood in lieu of a noncombustible material. Fire Retardant Treated Wood (FRTW) provides that option. Codes recognize FRTW for many applications where a noncombustible material is mandated.

Christopher Athari
Hoover Treated Wood Products Provider #: J583
AIA #:FRTW1 HSW

02:10 PM

Break

02:30 PM

Sponsor: [Chemical Technologies Holding, Inc](#) - Andrew Dingman

02:40 PM

Design Commercially with SIPs (Structural Insulated Panels)

This course is an overview of the commercial application of structural insulated panels (SIPs) in Type V Construction (i.e. hotels, offices, multi-family, schools). The designer will gain an understanding of how to properly utilize SIPs for their off-site construction advantages of installation speed, waste minimization, energy efficiency, and sustainability.

Jack Armstrong
SIPA Structural Insulated Panel Association Provider #: 50111211
AIA #:SIPs C101 HSW

03:40 PM

Sustainable Exterior Envelope

This course focuses on the effect biological and physical agents have on the wood substrate of the exterior building envelope. After reviewing these agents, you will learn how proper installation and best building practices can limit the exposure these agents can pose to your project. Durable wood substrates will also be discussed with a comparison of popular man-made durability agents used to further protect the exterior envelope.

Corbin Rinehart
WindsorONE Provider #: T109
AIA #:ExtEnvelope23 HSW

04:40 PM

End

