

ATS CONTINUING EDUCATION **ONLINE SEMINAR** Lifecycle, Recycling, and Carbon Considerations -Solutions North America Thursday, June 13, 2024



12:00 PM Welcome, Credits, and Certificates

America

Training

Durable Timber: Designing for the Life Cycle of Embodied Carbon 12:05 PM

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

01:05 PM **Review of Session Code Process**

01:10 PM **Break**

Thermally Modified Wood as a Sustainable, Biophilic Product Choice for Architects and 01:30 PM Designers

This course examines the use of thermally modified woods in sustainable building practices. Through this course, participants will gain a comprehensive understanding of the thermally modified wood process, its environmental benefits, and its applications in architectural design. We will explore the science behind thermal modification, its impact on wood properties, and its advantages over traditional wood treatments. Additionally, the course will address key considerations for specifying, installing, and maintaining thermally modified wood products, equipping attendees with the knowledge needed to incorporate this innovative material into their projects. Discover how thermally modified woods are reshaping the landscape of sustainable construction and contributing to a greener future.

Lisa Avala GMX Group Provider #: 10093159 AIA #:GMXThermWood27 HSW | GBCI (USGBC/CAGBC) #:0920029828

02:30 PM Solving Performance Demands Using Wood Fiber Insulation

Wood fiber insulation is now being produced in America. Learn how wood fiber insulation can help provide high performance above grade insulation products to create wind-tight, vaporopen assemblies offering stable, long-term R-values, improved temperature stability, and robust sound protection. A review of current insulation available today and an introduction to wood fiber insulation as a readily available alterative solution. A deep dive into current code compliant assemblies with the introduction of wood fiber insulation and how it fits into the wall assembly to provide a vapor open alternative. Finishing the session by discussing the current state of building materials carbon emissions impact and how Life Cycle Analysis help reveal impact areas that need to be addressed. Carbon sequestration can help dramatically reduce carbon emissions and wood fiber insulation offers can help.

Scott Johnston Timber HP Provider #: 10018930 AIA #:THP 02-31723 HSW

03:30 PM

End

