



Construction Management Workshop: Executing the Design

Brandon Brooks, WoodWorks
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901 East Sixth,
Thoughtbarn-Delineate Studio,
Leap!Structures, photo Casey Dunn

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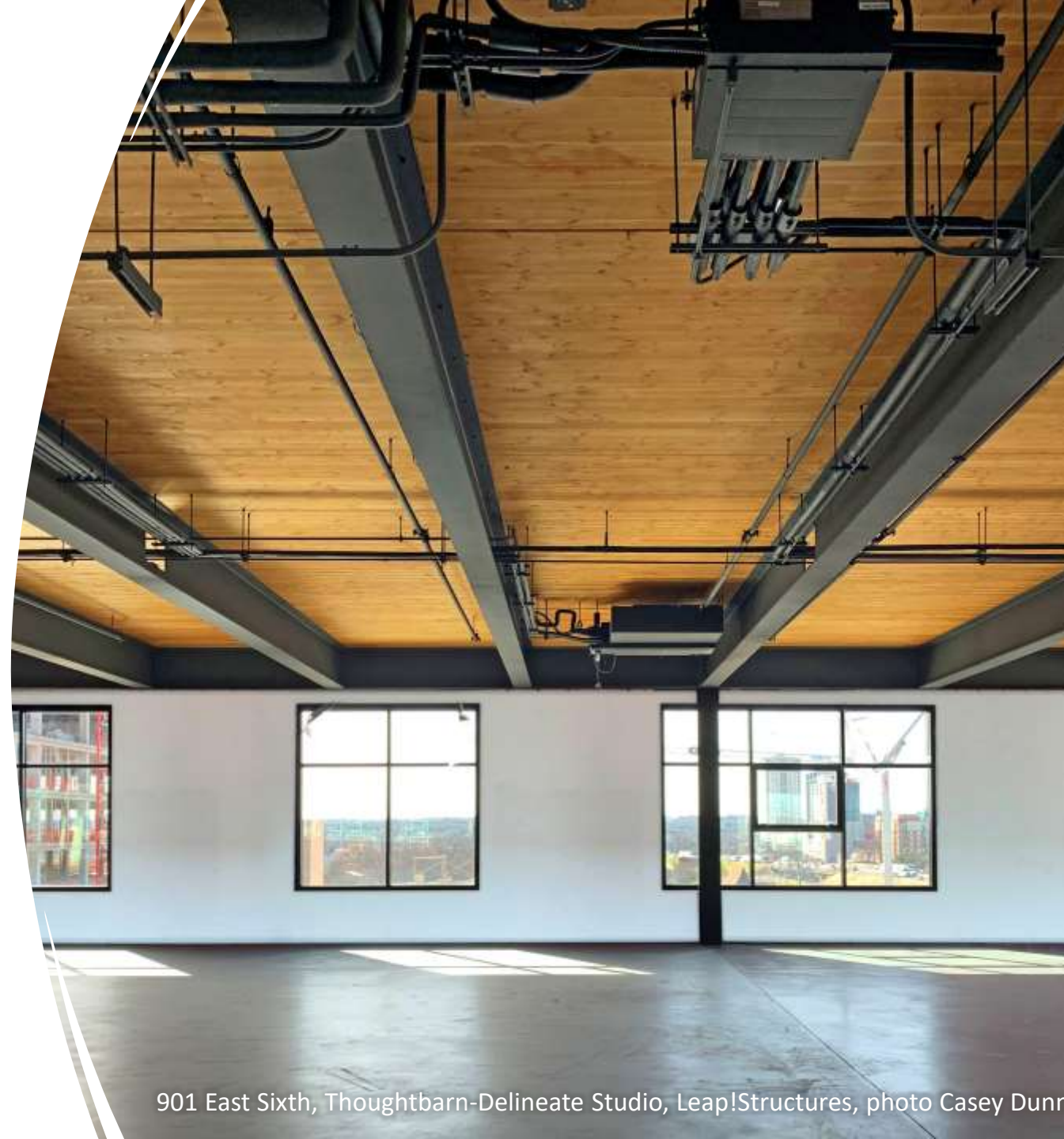
Mass timber is an innovative building material with many benefits, including construction speed, aesthetics, sustainability, and strength-to-weight ratio. The beauty of the finished product has inspired many owners and designers to pursue mass timber for their projects. However, while design and code aspects receive a great deal of focus, it is the construction aspects that often decide whether a project goes forward. While mass timber draws installation techniques from other construction types, it also has unique attributes—and a complete understanding of the differences is key to efficient estimating, planning and construction. This workshop is designed to address critical gaps in knowledge and skills among contractors and installers, with topics such as cost considerations , site planning, schedule, and risk mitigation . It will also include three brief case studies highlighting design team interaction, challenges, benefits and lessons learned during construction. Intended for construction industry professionals looking to gain a deep understanding of the unique attributes of mass timber, this workshop will leave attendees with information they need to successfully bid and construct a mass timber project.

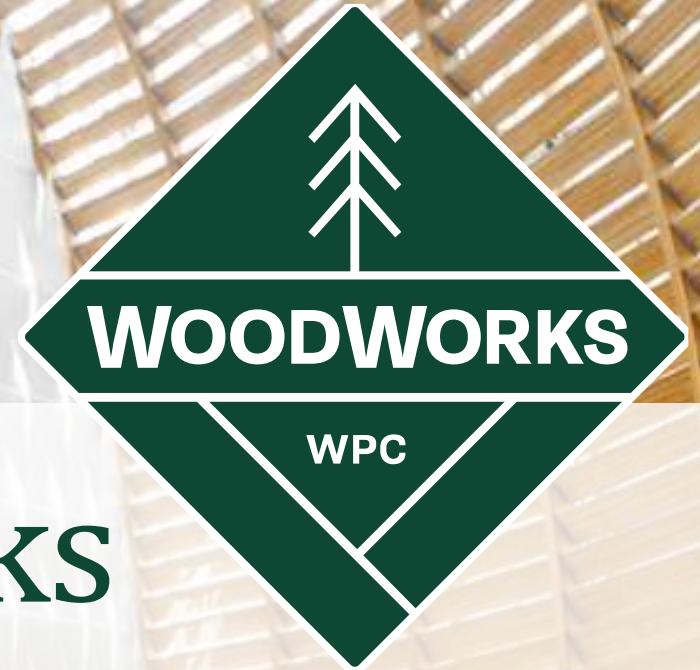
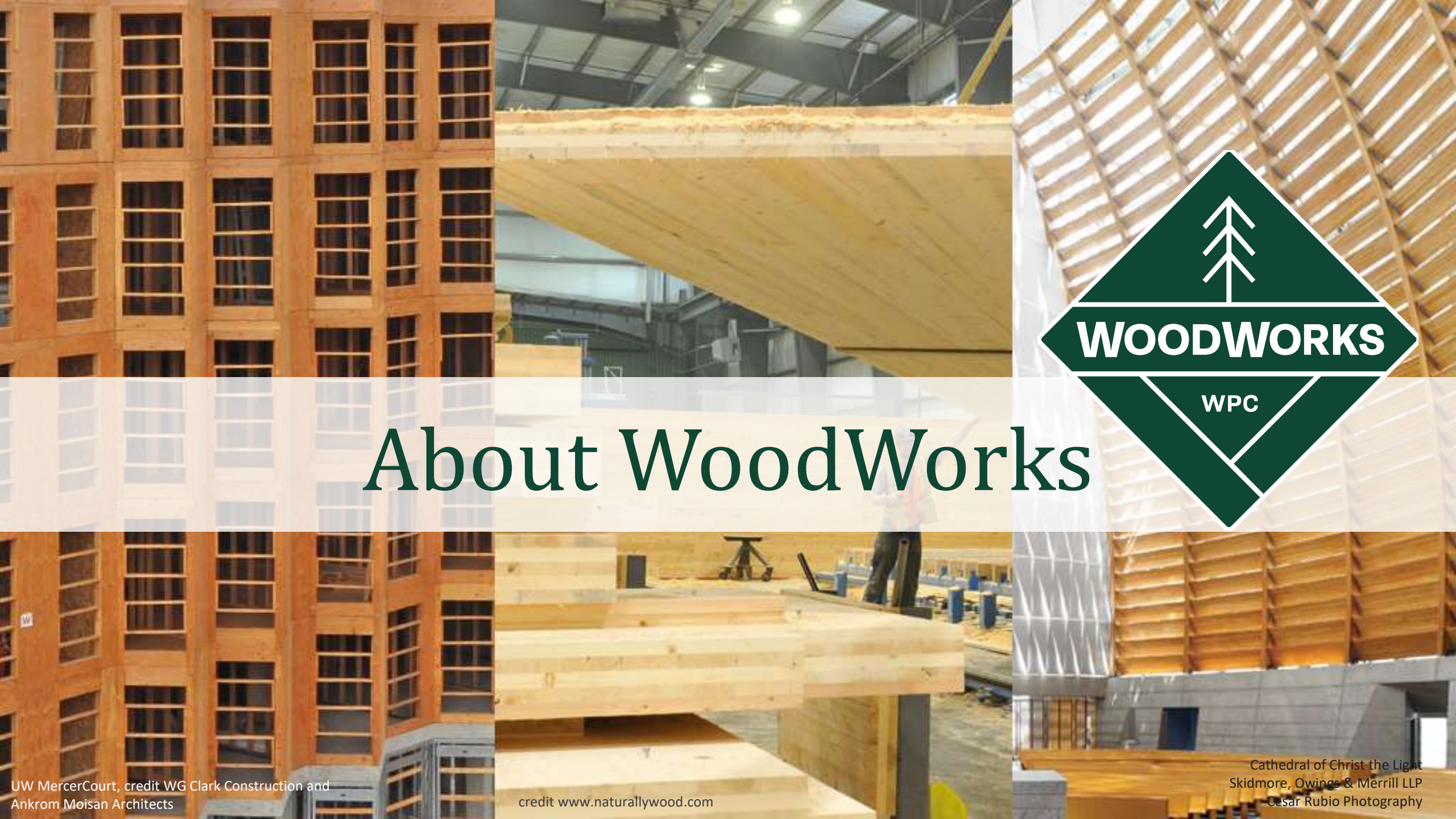
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1. Understand the unique attributes and considerations of mass timber construction.
 2. Determine how to manage mass timber building sites and mitigate potential risks to personnel, material and ultimately, schedule.
 3. Discuss project workflows to identify potential construction schedule savings and maintaining thorough construction safety practices.
 4. Explore best practices for coordination with the mass timber manufacturer, planning and scheduling for cost efficiency, and safety on site.

WHAT WE WILL ADDRESS TODAY:

Mass Timber Construction Management

- Brief WoodWorks Overview, Mass Timber Primer, Construction Manual
- Case Study: Ascent Milwaukee
- Case Study: Google Sunnyvale Campus
- Case Study Nashville Warehouse Company Office – DPR Construction
- Q&A Panel Discussion





About WoodWorks

Design Professionals: One-on-One Support & Assistance

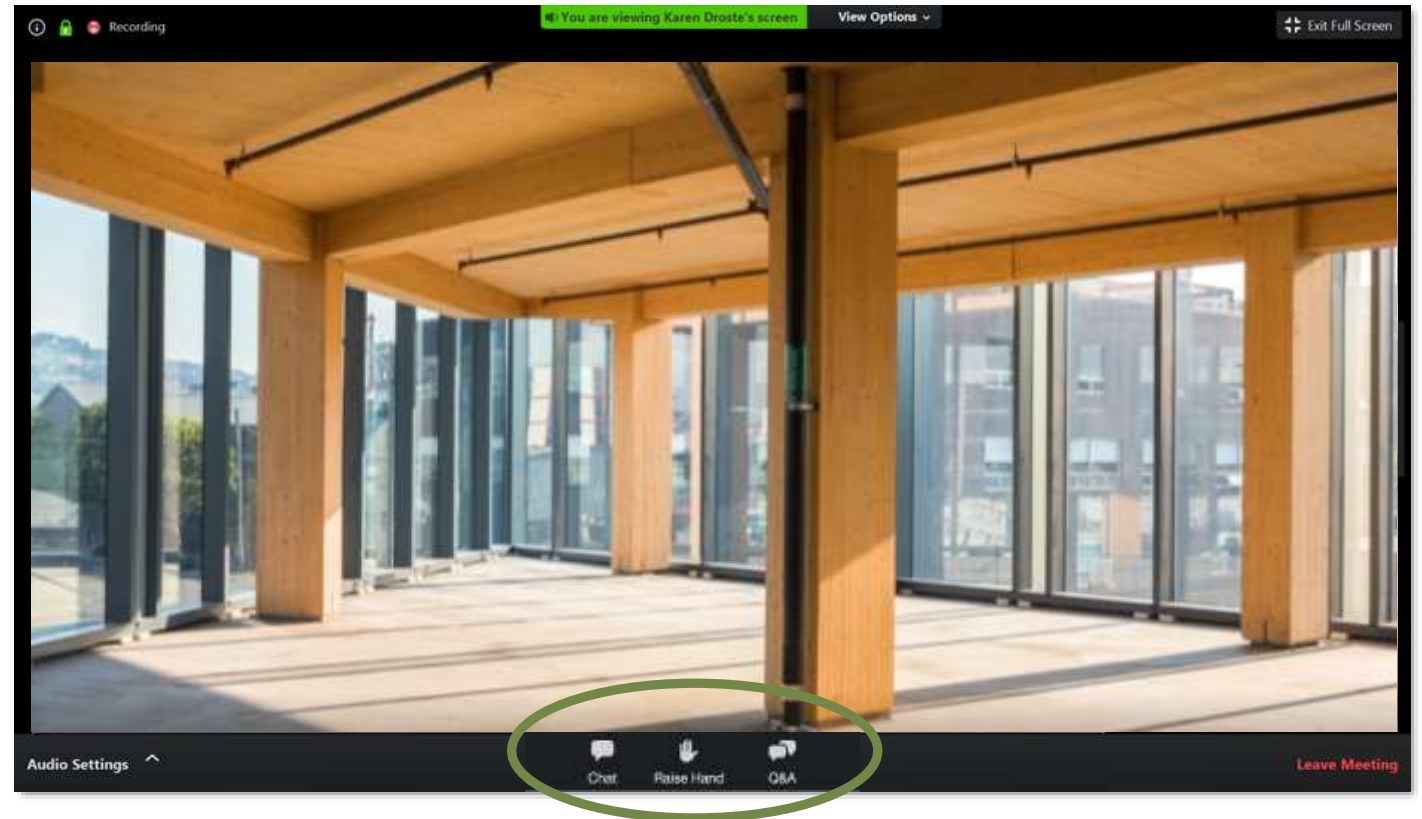
PROJECT SUPPORT FIELD DIVISION



Watch the Chat Window, Ask Questions through the Q&A Box



- » During today's event will be sending links, files and other pertinent information through the **Chat** window, located at the bottom of your screen.
- » Submit questions in the **Q&A** box at the bottom of your screen as they come up in the presentations. We will get to as many questions as possible.



MASS TIMBER OVERVIEW



**WOOD
PRODUCTS
COUNCIL™**



Heavy Timber
Photo: Benjamin Benschneider



Mass Timber
Photo: John Stamets

Glue Laminated Timber (Glulam)
Beams & columns



Cross-Laminated Timber (CLT)
Solid sawn laminations



Cross-Laminated Timber (CLT)
SCL laminations



Photo: Freres Lumber



Photo: StructureCraft



Photo: LendLease



Photo: LEVER Architecture

Dowel-Laminated Timber (DLT)



Photo: StructureCraft

Nail-Laminated Timber (NLT)



Photo: Think Wood

Glue-Laminated Timber (GLT)
Plank orientation



Photo: StructureCraft



Photo: StructureCraft

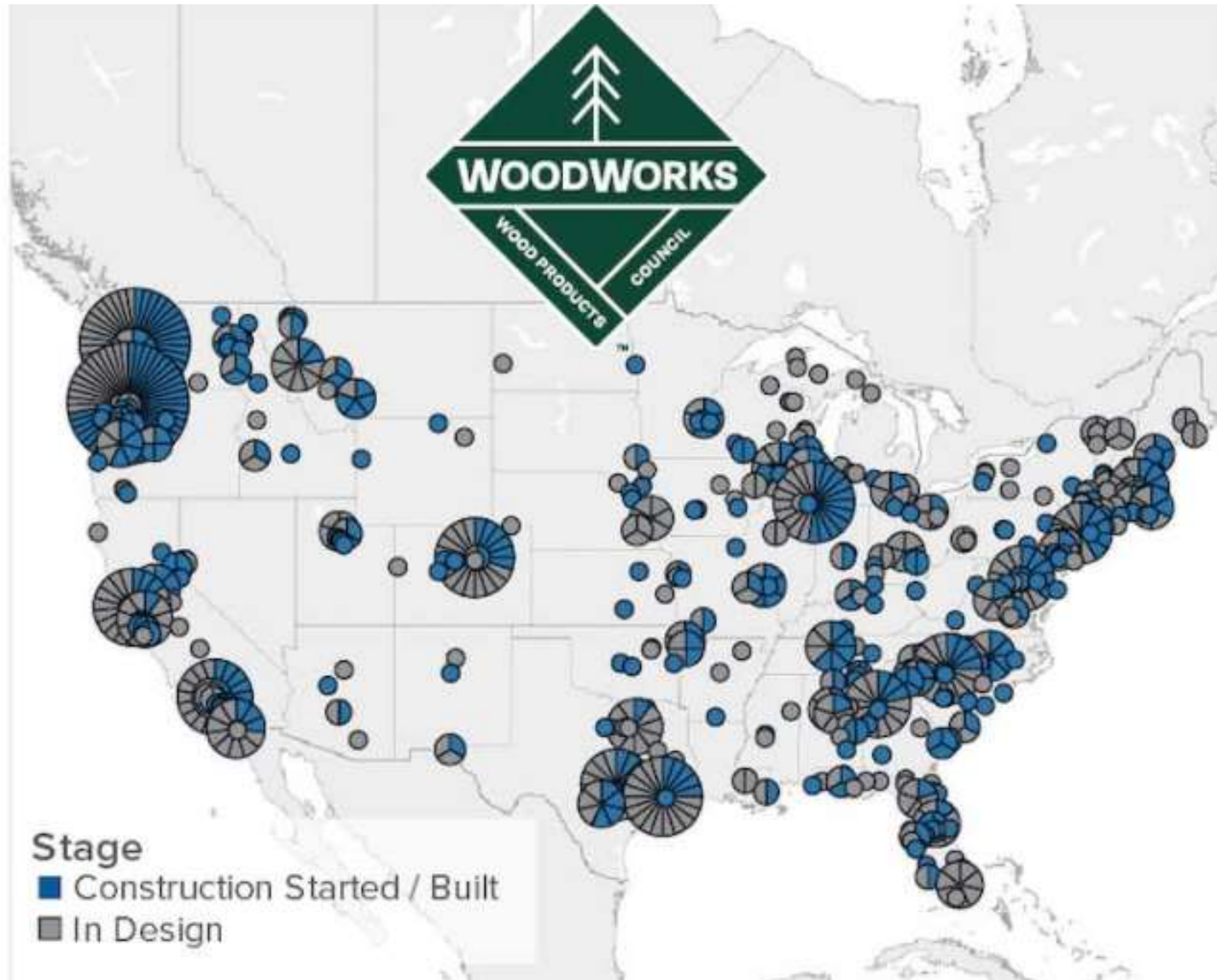


Photo: Ema Peter



Photo: Manasc Isaac
Architects/Fast + Epp

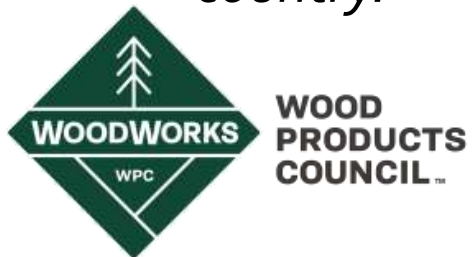
Current State of Mass Timber Projects



As of September 2021, there are **1,241** multi-family, commercial, or institutional projects constructed with, or in design/under construction with, mass timber across the US

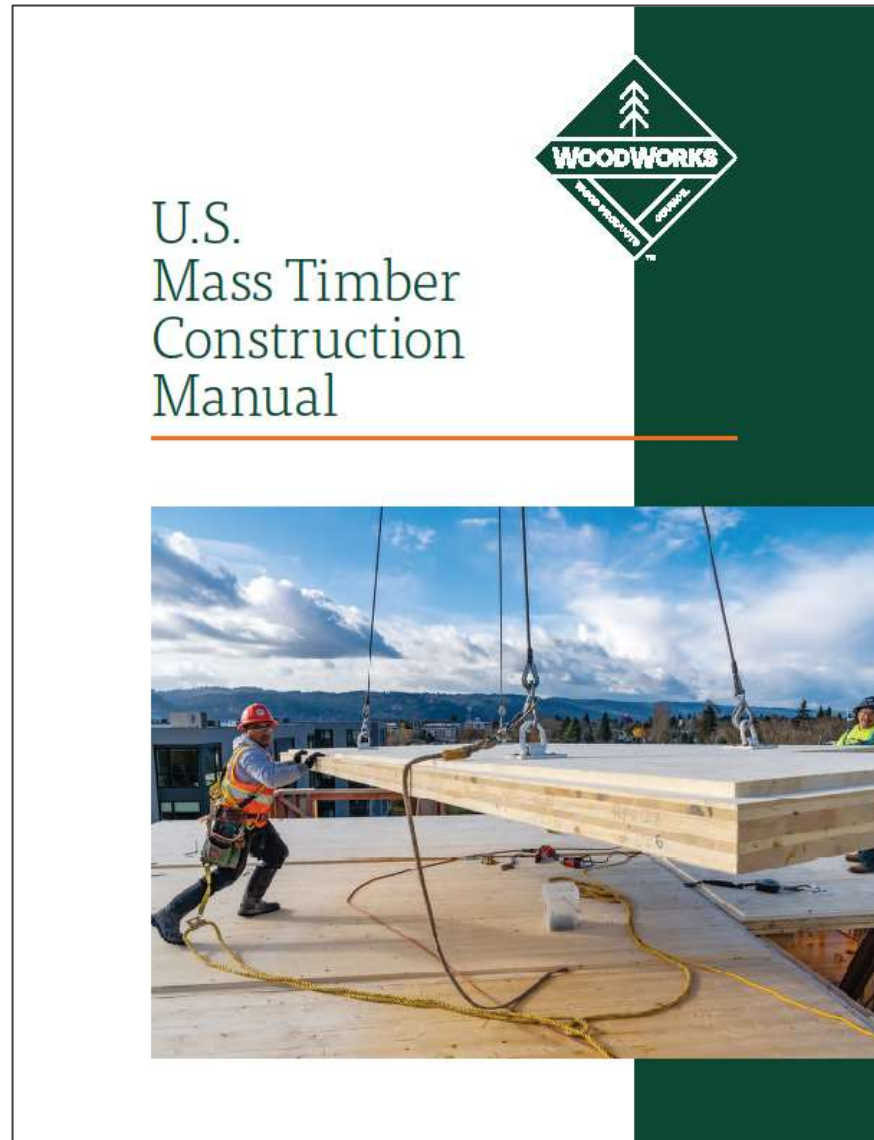
WoodWorks Construction Management Program

- *The WoodWorks CMP seeks to engage and educate contractors to improve bid quality and increase the number of projects that come to market. We also seek to train installation labor through partnerships with training centers around the country.*





Released on 20 October 2021
<https://www.woodworks.org/mass-timber-construction-management-program/>





We're stronger together.

Our network of affiliated professionals offer a wealth of shared knowledge, expertise, and opportunity for growth. Find experienced professionals who share a mutual interest in the future of timber design and construction.

ARCHITECTS

ENGINEERS

CONTRACTORS

INSTALLERS

DEVELOPERS

[+ VIEW ALL](#)



**WOODWORKS
INNOVATION
NETWORK**

Photo: Marcus Kauffman

Ascent Milwaukee

Workflow Mapping and Coordination

Dave Kwiatkowski
C.D. Smith



Chris Johansen
C.D. Smith



The Loading Dock, OZ Architecture,
KL&A, photo Joe Anastasi

Google Sunnyvale

*Optimizing Transportation and
Staging*

Dave Beck
XL Construction



The Loading Dock, OZ Architecture,
KL&A, photo Joe Anastasi

Nashville Warehouse Company

Kyle Wortendyke
DPR Construction



Nick Garzini
DPR Construction



The Loading Dock, OZ Architecture,
KL&A, photo Joe Anastasi



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First Tech Federal Credit Union, Hacker, photo Jeremy Bittermann