

# ESG Innovators in Real Estate

**November 1st, 2023**  
**1:00 – 2:30 pm PT**  
**West Hall, 408A**



**FALL MEETING**



# Mass Timber Trends

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Hines



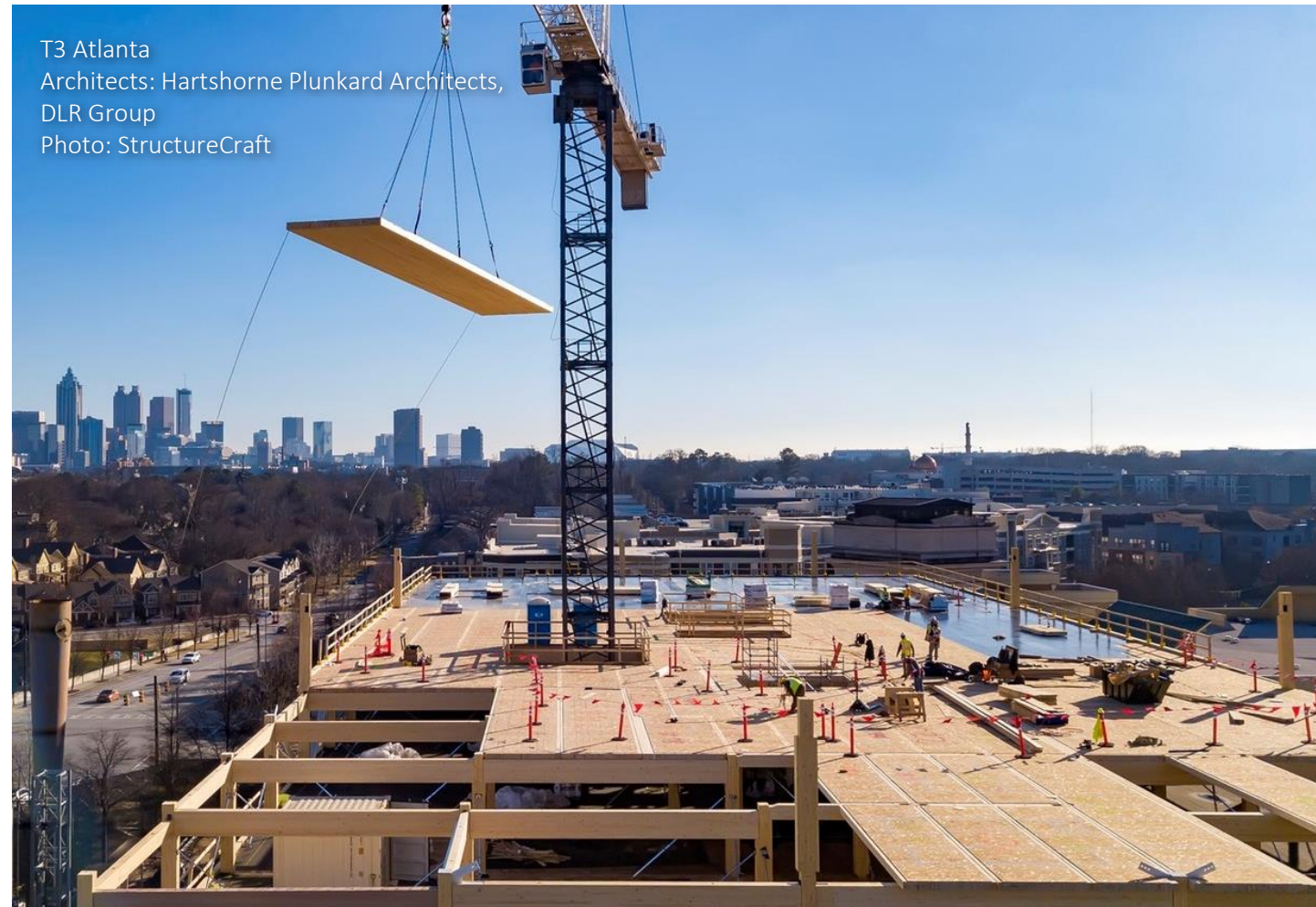
FALL MEETING



# Free Assistance for Developers & Design Teams

- Innovative mass timber applications
- New tall wood code provisions
- Maximizing heights and areas
- Finding experienced designers and builders
- Environmental performance
- Structural and other systems

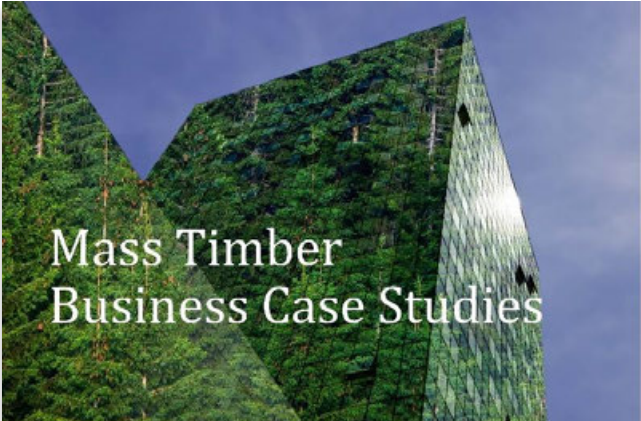
[help@woodworks.org](mailto:help@woodworks.org)




# Resources for Developers/Owners

Scan for website





## Mass Timber Business Case Studies



### WOODWORKS

#### Meeting Sustainability Objectives with Wood Buildings

Healthy Buildings, Carbon Impact, Resilience, Circularity

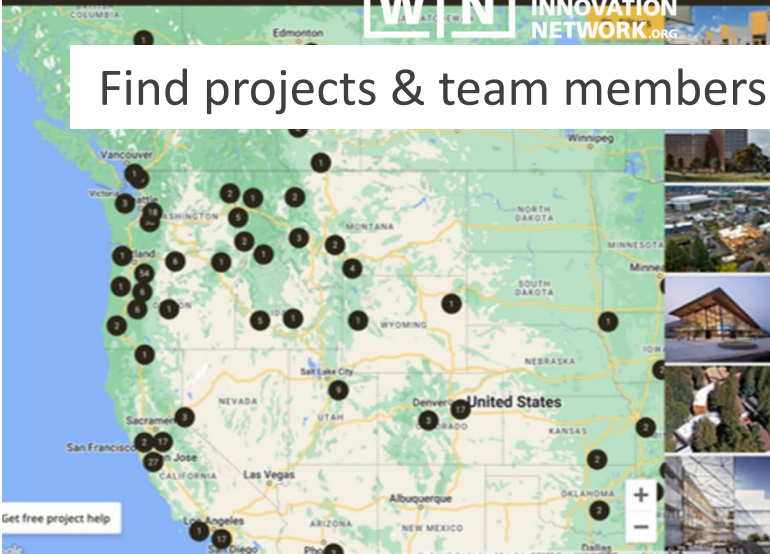
Mass timber structural systems help meet several development objectives that fall under the broad sustainability umbrella, including healthy buildings, reduced carbon impact, resilience, and circularity. Developers and owners can take advantage of wood's benefits to create buildings that contribute value by attracting tenants, align with evolving policy requirements, and appeal to investors who are increasingly seeking sustainable investments.

**Carbon Benefits of Wood Buildings**  
Less Embodied Carbon • Stored Carbon • Lower Carbon Impact

**Low embodied carbon:** Wood products have low embodied carbon compared to steel and concrete. Embodied carbon is a measure of the greenhouse gas (GHG) emissions associated with materials and construction processes throughout the lifetime of a structure. Embodied carbon, especially upfront emissions associated with producing materials and constructing a building, can be significant?

As trees grow, they absorb carbon dioxide (CO<sub>2</sub>) from the air, release the oxygen (O<sub>2</sub>), and store the carbon in trunks, branches, and roots. Wood elements used in a building store this carbon for the building's lifetime—longer if the wood is reused or recycled.

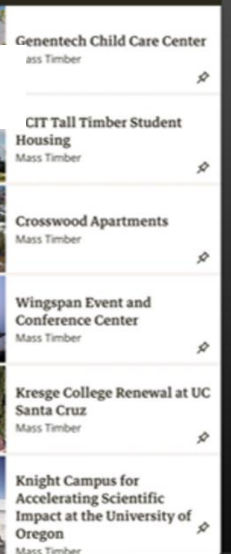
Wood generally has three choices: materials, wood, steel or concrete. Wood is the most sustainable choice in the life cycle assessment (LCA), a speculative office development project. Wood's low embodied carbon, its ability to sequester carbon, and its alignment with goals for the project team and clients. This successful development project is one of Denver's highest performing buildings, and it's been recognized as one of the best in the world.



### WOODWORKS INNOVATION NETWORK

Find projects & team members

Map showing project locations across the United States, including cities like Vancouver, Seattle, Portland, San Francisco, Los Angeles, San Diego, Phoenix, Dallas, Houston, Austin, Chicago, Minneapolis, St. Paul, Denver, Salt Lake City, and Sacramento.



- Genentech Child Care Center
- CIT Tall Timber Student Housing
- Crosswood Apartments
- Wingspan Event and Conference Center
- Kresge College Renewal at UC Santa Cruz
- Knight Campus for Accelerating Scientific Impact at the University of Oregon




## Mass Timber Cost and Design Optimization Checklists

WoodWorks has developed the following checklists to assist in the design and cost optimization of mass timber projects. The design optimization checklists are intended for building designers (architects and engineers), but many of the topics should also be discussed with the fabricators and builders. The cost optimization checklists will help guide coordination between designers and builders (general contractors, construction managers, estimators, fabricators, installers, etc.) as they are estimating and making cost-related decisions on a mass timber project. The pre-design checklist should be reviewed by the developer/owner, designers and builders.


WoodWorks offers a wide range of resources at [woodworks.org](http://woodworks.org), many of which are referenced in this document. We also recommend that designers and builders download the following:

- Mass Timber Design Manual** – Includes technical papers, continuing education articles, expert Q&As and more, and is updated regularly. Published in partnership with Think Wood.
- U.S. Mass Timber Construction Manual** – Provides a framework for the planning, procurement

**1 Do Here**  
San Francisco, CA  
ARCHITECT  
PERKINS+WILL  
ENGINEER  
OO Engineers  
CONTRACTOR  
Hatchway Development

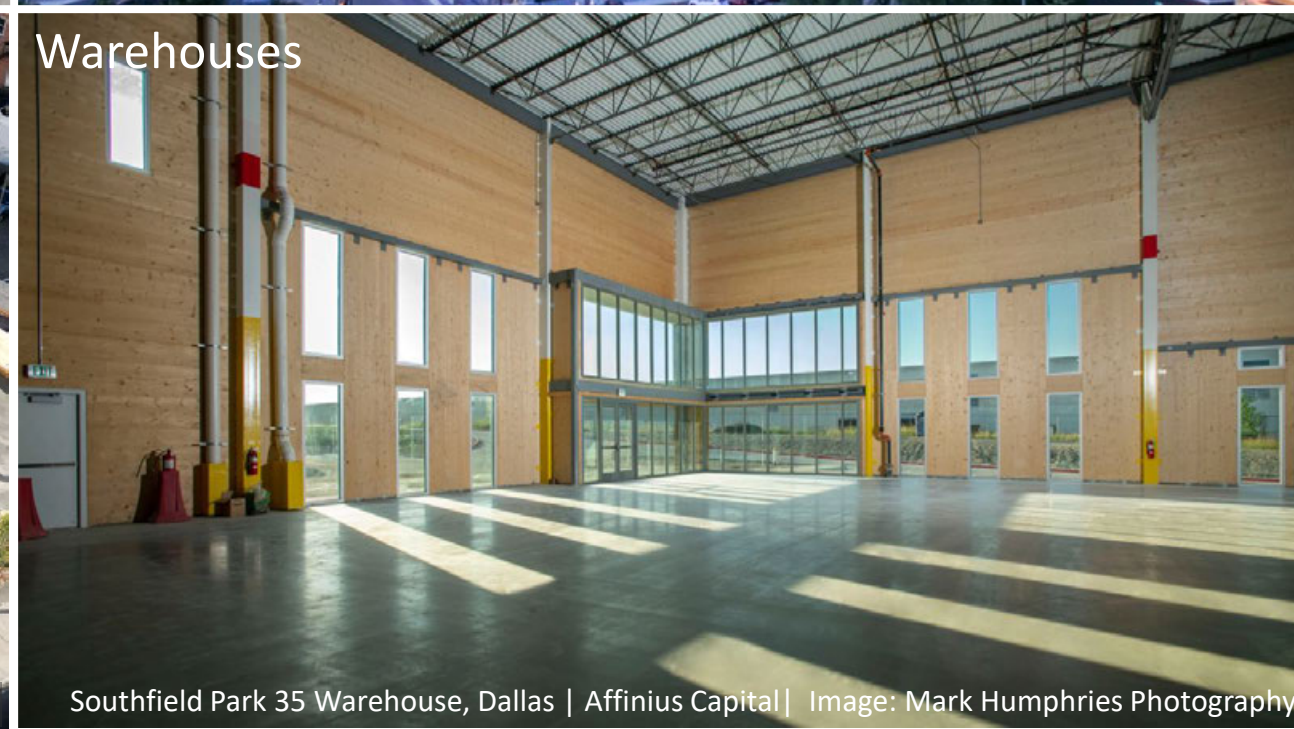
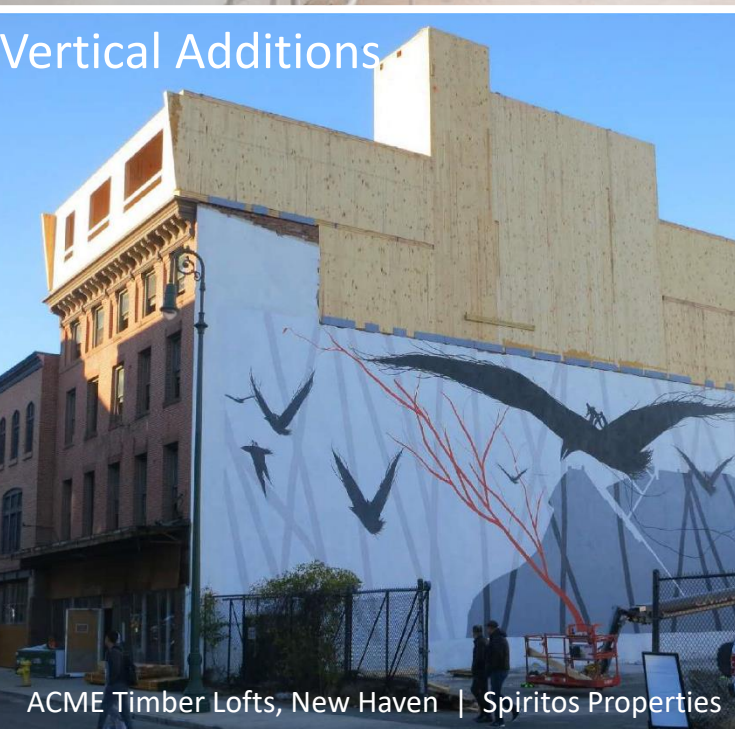


## U.S. Mass Timber Construction Manual



A photograph showing a construction site where a large, rectangular mass timber panel is being hoisted by a crane. Two workers in safety gear are visible on the ground, managing the process. The background shows a clear sky and some distant structures.







# T3 = YOUR GROWTH MARKETS



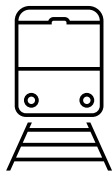
# T3: Timber, Transit, Technology



## Neighborhood

A powerful magnet for top talent in key tech cities around the globe

Place designed to attract the best talent



## Transit-Oriented

Located proximate or adjacent to multi-modal transportation systems

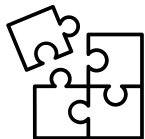
Walk, bike, ride, train, bus, trolley - skateboard if you like



## Sustainability

Sourced from managed forests using young trees not old growth

Over 3,860 tons of CO2 stored in the structure of each T3 building



## All Meets New

State-of-the-art connectivity systems and next-level innovations

Exposed wood charm paired with modern systems



## Hines Standard

Consistent operations, management, and experience across every location

Proven and reliable processes to deliver Class A quality





T3 Bayside  
Toronto



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