

## The SLB and USDA Forest Service Invest in Mass Timber Installation Skills Training

Through its funded programs, the Softwood Lumber Board (SLB) is constantly working to identify, understand, and overcome barriers to wood use as part of its overall mandate and program strategy. In recent years, multiple surveys conducted by Think Wood, WoodWorks, and third parties have cited the lack of qualified mass timber installers as a key challenge that dissuades developers and designers from choosing or following through with mass timber and thus limits the expansion of mass timber construction in the United States.

To help solve this issue, the SLB and the USDA Forest Service recently pledged an additional \$100,000 each to expand mass timber installation training nationwide. With this funding, WoodWorks is developing construction mock-ups and will launch high-quality, hands-on installer training at training centers in Portland, Boston, New York state, Philadelphia, and Los Angeles in partnership with local carpenter unions. Together, these locations anticipate providing more than 8,500 hours of training annually starting in 2022. The program seeks to partner with additional training centers, ultimately expanding to a dozen or more localities nationwide by 2023.

These efforts are in addition to several ongoing WoodWorks collaborations targeting installers and construction practitioners, including with the Pacific Northwest Carpenters Institute in Portland, Oregon, the Chicago Carpenters Training Center, and Michigan State University's Construction Management Program. Each of these programs aims to support current and future construction professionals to

better understand mass timber components, connections, and materials and to apply learning in the form of effective designs, accurate costing, and quality construction, thereby removing a key barrier to mass timber construction.

The expanded installer training exemplifies the SLB's approach of balancing strategy with data, being nimble enough to pivot, address, and solve problems, and collaborating with those who can extend reach and impact in the form of increased market demand and consumption of softwood lumber.

*"The USDA Forest Service and SLB's additional investment, coupled with WoodWorks' expertise and extensive networks, can make a real difference in developing this vital workforce and, in doing so, opens the door to more mass timber buildings and all of the economic and sustainability benefits that come with them."*

*– Brian Brashaw, Assistant Director  
U.S. Forest Service, Cooperative Forestry*

**504 MILLION BOARD FEET  
OF INCREMENTAL DEMAND**

**GENERATED IN Q2 2021**

**THE CARBON BENEFIT  
FOR 2021 Q2 REPORTED PROJECTS**

is the equivalent to taking **526,800 cars off the road for a year** or 2.5 million metric tons of carbon dioxide.

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## PROGRAM UPDATE

### The AWC Leads Charge for Wood at Group A Committee Action Hearings

The American Wood Council (AWC) successfully stewarded nine of its 12 proposals through recent International Code Council (ICC) Group A committee action hearings and contributed to the disapproval of 49 of 51 proposed changes that threatened the softwood lumber industry.

Among the most promising changes recommended for approval, G147-21 would allow for 100% exposed mass timber ceilings in buildings up to 12 stories, compared with the 20% permitted in the 2021 International Building Code (IBC). The five- to 12-story segments already present important growth opportunities for mass timber over the coming decade. If approved, G147-21 will create immediate opportunities for developers and designers to incorporate more wood into their commercial and multifamily projects and bring greater sustainability and biophilic benefits to building occupants.

The AWC's unequivocal support of G147-21 is premised on evidence generated through AWC-sponsored compartment fire tests at the Research Institute of Sweden (RISE). These tests, which were funded through the USDA Wood Innovation Grant Program, proved the fire safety and performance of the latest generation of cross laminated timber (CLT) adhesives and were cited extensively during the committee action hearings.

The AWC will continue to maximize opportunities to express support for G147-21 and other wood-friendly proposals ahead of upcoming public comment hearings, which will be held in Pittsburgh in September.

### Think Wood Increases Wood Use Through Enhanced Lead Nurturing

Think Wood continues to use multiple marketing channels to meet the industry's mandate to increase wood use and specification in residential and commercial projects. The Think Wood database—which now exceeds 79,000 contacts—is a key tool that allows the team to nurture and qualify specifiers over time.

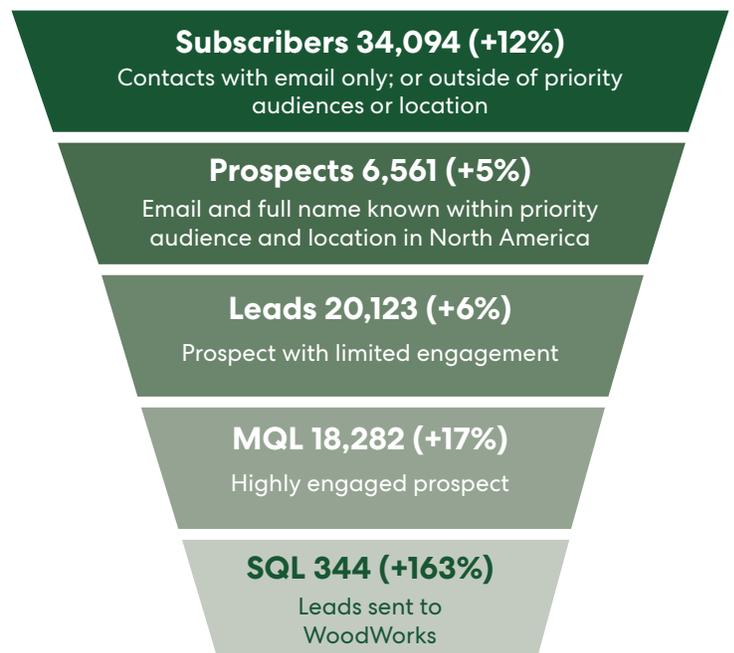
In the second quarter of 2021, Think Wood's email marketing and lead nurture efforts accounted for 14% (1,101) of new database contacts, and all phases of the lead nurture funnel increased with new contacts arriving and engaging with Think Wood content. Think Wood's systematic efforts in lead nurturing are delivering a growing number of design-ready projects to WoodWorks and, in doing so, are making it more efficient for WoodWorks to identify projects and specifiers' familiarity with wood. Eighty percent of now-active projects, the majority being mass timber, and more than 150 support requests are linked to the *Mass Timber Design Manual*, which Think Wood jointly developed with WoodWorks.

Think Wood tracks engagement both quantitatively and qualitatively, and this quarter tracked:

- A request from a top architecture firm to profile its work comparably to a peer firm.
- An Oregon-based architect's journey from entering their contact information via the *Mass Timber Design Manual* landing page to opening and sharing architect-specific content 29 times within their professional networks to share both knowledge and their growing enthusiasm for wood.
- A North Carolina-based municipal employee as they increased their knowledge and awareness of mass timber design through downloads and education, and ultimately requested WoodWorks' support for a potential mass timber project on an existing brownfield.

Tracking and customization continue to increase Think Wood's performance metrics and allow contacts to choose content that is most useful and meaningful for them and their projects. Think Wood is in the process of launching five customized miniseries to meet ongoing content demand from specifiers, covering mass timber, demonstration projects, expert Q&As, decarbonizing the built environment, and biophilic design.

### Q2 Lead Scoring Funnel (QoQ)



## Shift in Education Suggests Evolving Trends

Based on Q2 trends, the SLB and its program partners are bracing for more shifts in how they deliver education programs as some design and engineering professionals return to in-person workspaces and events and potentially forego virtual training options.

Both WoodWorks and the AWC recorded below-average education hour delivery, and Think Wood recorded less CEU test taking compared with the previous quarter and previous years. The timing and size of the declines, which averaged between 25% and 30%, suggest an audience-wide drop in learning interest. Resource downloads, driven especially by the *Mass Timber Design Manual*, were a bright spot and more than doubled year over year. Similarly, course completions on the Wood Institute were also up, due to high engagements within and referrals from Think Wood.



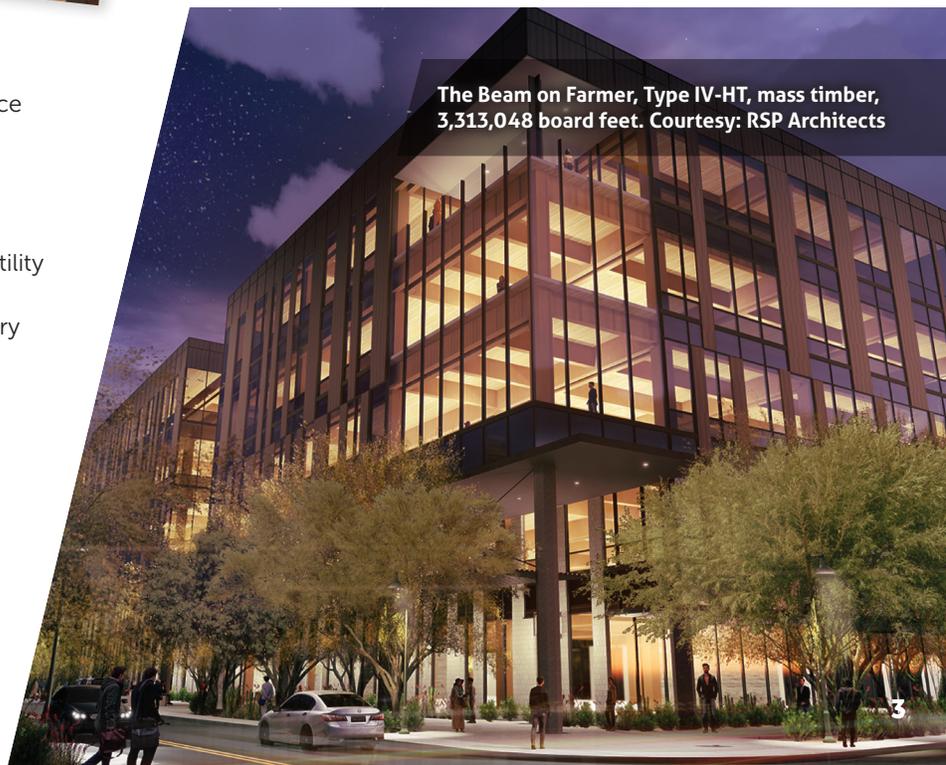
The SLB and its funded programs will continue to track these trends as well as the overall pace of return to workspaces among key audiences. In advance of these trends unfolding, WoodWorks, for example, has determined that it will remain virtual or hybrid for the remainder of 2021 because of the ongoing, dynamic nature of the pandemic. Partner education programs displayed remarkable adaptability and versatility in their shift to all-virtual formats at the start of the pandemic and similarly will be ready to pivot to delivery models that best meet audience demand and interest in the future.

## WoodWorks-Enabled Mass Timber Capacity on Display in Arizona

The story of the 185,828-square-foot, mass timber office building The Beam on Farmer, in Tempe, Arizona, began in 2018 when WoodWorks responded to a request for assistance from project developer/construction firm Mortenson. At the time, Mortenson had never used mass timber and was undergoing an internal review to determine if it should pursue the mass timber market. Following multiple presentations and training by WoodWorks on mass timber materials, design specifications, and construction management, Mortenson decided not only to pursue the market but to become a local leader in the construction method. Thus, when The Beam on Farmer project opportunity materialized, Mortenson proceeded with confidence in choosing a CLT structural system.

According to Mortenson's senior staff, "WoodWorks has been a valuable resource when it comes to understanding mass timber construction...Their knowledge sharing and willingness to help our team as we navigated design, logistics, and planning efforts, including for The Beam on Farmer, have been the foundation to a great partnership."

The Beam on Farmer is under construction and will become Arizona's first office building with an exposed CLT primary structural system. The project will consume more than 17 board feet per square foot, compared with a more typical light-frame baseline of 8 to 9 board feet, and it exemplifies how volume opportunity goes up dramatically when mass timber is used for a structural system. Mortenson currently has two other mass timber projects in development.



# Q2 PROGRAM HIGHLIGHTS

Code:

## American Wood Council

- The AWC released a new pre-standard, [Fire Design Specification for Wood Construction](#), after six years of development and contributed to the development of ASCE 7-22 standard Minimum Design Loads and Associated Criteria for Buildings and Other Structures, which will be finalized in 2022.
- The AWC worked hard to clarify the appropriate use of non-North American lumber in response to misleading and incorrect public statements in North Carolina. The AWC added a new table to the NDS Supplement for design values on multispecies grade marks and released an addendum to Design Values for Joists and Rafters to help mitigate against incorrect interpretations in the future.
- The AWC's Fire Service Relations program continued to build relationships across the United States by meeting with and presenting to local and state fire officials to identify common ground and share the latest data on mass timber's fire performance.

Communications:

## Think Wood

- In Q2, direct project leads from Think Wood to WoodWorks were up 550% quarter over quarter, with 150 projects identified. Eighty percent of Q2 projects were identified via engagement with the *Mass Timber Design Manual*.
- Year to date (YTD), Think Wood has assisted with 14 projects (6% of WoodWorks total reported projects), resulting in more than 19 million board feet of incremental softwood lumber demand.
- Think Wood's nurturing efforts advanced leads across all of its segments and are on pace to meet and exceed 2021 year-end targets. YTD, Think Wood has delivered 344 sales qualified leads (SQLs) to WoodWorks, 101% of the 2021 year-end target.
- The *Mass Timber Design Manual*, developed by Think Wood and WoodWorks, continued to deliver outstanding performance in driving engagement from key stakeholder audiences. In Q2 alone, the manual was downloaded more than 10,000 times, generating 12 active building projects and 5,000 new contacts in the Think Wood database.



Educational Events



Education Attendees



Contact Hours Provided



New Contacts



Resource Downloads



Marketing Qualified Leads

The Discovery Center, Type V-B, 120,000 board feet. Courtesy: Halkin Mason Photography

UW Health Sciences Building, Type IV-C, CLT roof/floor system 1,085,714 board feet. Courtesy: The Miller Hull Partnership



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WOOD  
COUNCIL

THINK  
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### Construction and Conversion:

## WoodWorks

- In Q2, WoodWorks directly influenced and converted 113 projects, a 9% increase over Q2 2020, and indirectly influenced an additional 319 projects. Together, these projects represent 24 million square feet of wood construction and 215 MMBF of incremental demand, a 17.5% year over year increase. Approximately 57% of these projects are multifamily, and 16% are business occupancies.
- WoodWorks converted 15 four- and five-story light-frame projects larger than 300,000 square feet, 88% above the historical average, and 28 light-frame projects greater than 150,000 square feet.
- WoodWorks began assisting 14 new tall mass timber projects (26 YTD) and is registering growth in opportunity for multifamily projects in the six- to 12-story range.
- WoodWorks finalized six AIA-accredited continuing education presentations focused on wood's sustainability and environmental performance in response to ongoing demand for this evidence and information from architects, engineers, developers, and contractors.

### Education:

- The Wood Institute approached 1,000 total registered users and nearly 1,400 course completions YTD for a total of 1,908 learning hours. Architects continued to form the majority of users. Top-performing courses were: "Details Make the Design Work: Coordinating Structural and Architectural Requirements in Light-Frame and Hybrid Wood Buildings" (WoodWorks); "Designing Sustainable Prefabricated Buildings" (Think Wood); and "Architecting Change: Design Strategies for a Healthy, Resilient, Climate Smart Future" (Think Wood).
- The SLB, in partnership with the Association of Collegiate Schools of Architecture (ACSA) and Georgia Tech's School of Architecture, launched the [2021-2022 Timber in the City 4: Urban Habitats Competition](#). This year's competition focuses on using wood design to support the interrelationship among housing, urban transit, equitable living, and climate change.
- WoodWorks delivered nearly 7,800 education hours at 64 hosted and third-party events, and YTD has exceeded 20,000 hours of education.
- More than 3,200 Think Wood's CEU courses were completed, generating over 1,171 new contacts in Think Wood's database.
- The AWC reached more than 5,000 professionals and provided over 7,750 education hours through 18 education and fire service training events.



Projects  
Converted



MMBF of  
Incremental  
Lumber



Education  
Hours



New  
Users



Courses  
Completed



Total Courses  
Available

Railyard Flats, Type V-A, three-story hybrid of DLT, 1,100,952 board feet. Courtesy: CO-OP Architecture

San Jacinto College, Type III-B, 3 stories of mass timber, 2,137,905 board feet. Courtesy: Kirksey Architecture



## Think Wood Inspires Homeowners and Residential Contractors to Choose Wood This Summer

To make the most of this decking season and an ongoing swell of home renovation and remodeling projects, Think Wood partnered with a Magnolia Network star and interior designer, Brian Patrick Flynn, to produce social videos and photographs to inspire homeowners and residential contractors to choose wood. The custom content includes a series of four 60-second social videos promoting wood porches, pergolas, ceilings, and feature walls, which are accompanied by custom photography of interior and exterior projects. Across all social media channels, these videos have garnered over 96,000 views and engagements thus far.

As part of the collaboration with Flynn, Think Wood also published two [blogs](#) promoting outdoor living season and home renovation using wood. These have garnered over 1,000 views, with readers spending nearly four minutes on average (higher than average) on a blog about top residential trends in 2021.

Separately, Think Wood partnered with the AWC to develop a [deck safety Q&A](#) for May's Deck Safety Month and published a trend blog entitled [4 Things to Know Before Starting Your Shed-quarters Project](#). This saw the highest click-through rate on Facebook, receiving 414% more clicks than the Q2 average for residential contractor posts.

The SLB and several species association partners also recently joined the North American Deck and Railing Association (NADRA) to ensure wood's performance, aesthetic, and financial advantages are recognized and included in NADRA's overall efforts to promote and grow the U.S. decking sector.



## SLB Programs Working Group Considers Residential Market Opportunities

The SLB's Programs Working Group convened for an important discussion on current opportunities and challenges facing the softwood lumber industry's many and diverse market segments related to residential construction. The committee spoke at length on decking, siding, and trim; pressure-treated lumber; single-family and build-to-rent housing; and industrialized construction trends, including prefabrication and 3D printing, among other topics.

During the conversation, the SLB identified a need for and is now pursuing comprehensive market research and associated risk and opportunity assessments regarding these segments in partnership with University of Minnesota Duluth's Bureau of Business and Economic Research and Ben Romanchych Consulting. The committee expects to present research findings to the SLB Board at its November meeting as well as recommendations for how to move forward in three priority areas—Exterior Applications, Build-to-Rent, and Substitution & Industrialization—such that the SLB's finite resources make a difference and protect, grow, and promote opportunities and market share for softwood lumber.



## The SLB Launches New Carbon and Sustainability Initiatives

The SLB is proud to [announce the launch of new carbon transparency initiatives](#) to fill key gaps in expertise and data across the wood products value chain, jointly funded with the United States Endowment for Forestry and Communities (the Endowment). The more access the architecture, engineering, and construction (AEC) sector has to carbon accounting data, the better they can understand the full carbon impact of their structures.

The SLB will lead, execute, and finance three projects:

**The Wood Supply Shed Carbon Balance Tool** involves creating a credible and transparent digital tool to report growth/drain by wood supply area. This tool could be used to report land carbon value for reporting to the GHG Protocol as well as provide an "A0" add-on ('A zero' – a new life cycle stage that would include carbon on land) to the North American Wood Products environmental product declarations (EPDs) in the EC3 database.

**The Fiber Sourcing Transparency Tool** will be designed to provide sustainability and forest certification data in a framework that is practical and easily accessed. The tool targets the AEC community, which is interested in sustainability metrics associated with specified wood products and confused about the differences between forest management certification, fiber supply certification, and the sustainability metrics and assurances.

**The A4 Transportation Tool** will make the average CO2 equivalent transportation to site metric (A4) available for each region based on data about where products come from and modes of transportation and distances. The tool will be available to life cycle assessment (LCA) databases and WBLCA tools, such as BT/Tally, Athena Impact Estimator, and OneClick. The SLB will provide additional funding to the AWC to execute this project.

In addition to these efforts, the SLB will continue to work with industry partners such as the AWC, the National Alliance of Forest Owners (NAFO), and the Endowment to identify and address other needs in expertise and data across the wood product value chain. Increasing the availability of credible and comprehensive data will position forests and wood products as an attractive vehicle to address carbon mitigation and climate change and expand market share for wood products in the built environment.

The SLB's investment in this area is in response to the growing need and urgency for this work, including to counter arguments from competitors as they increasingly market their own carbon benefits. Backed by its recent strategic review, the SLB was well-placed to initiate and now lead this important work, and we look forward to sharing results with you over the coming months.