



Mass Timber, Simplified



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What Is Mass Timber?

A family of engineered wood products capable of replacing concrete and steel up to 18 stories.

- 70% faster than traditional construction
- 80% less greenhouse gas emissions
- Better to live in and comparable costs, yielding stronger real estate investment returns

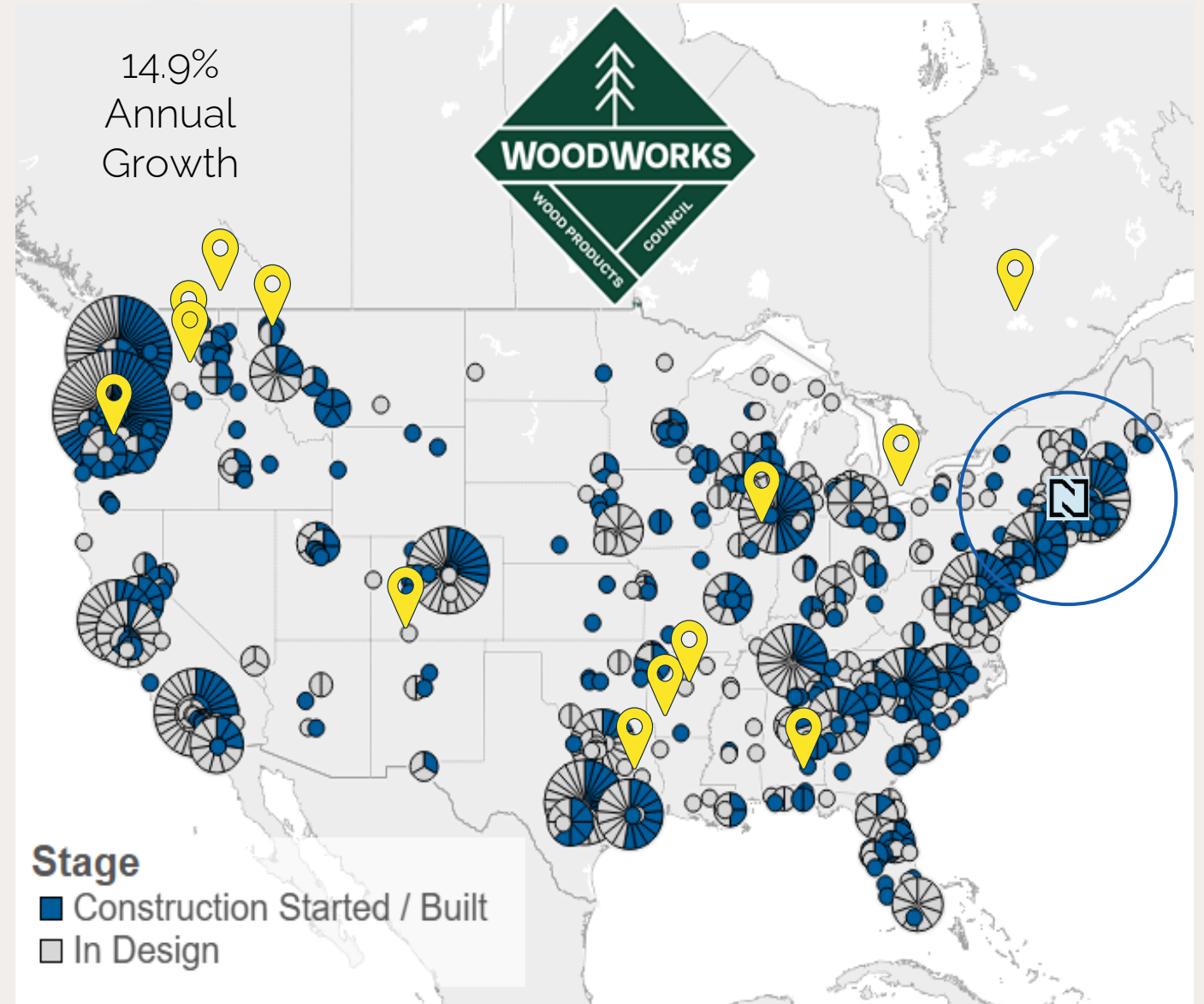


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Mass Timber is experiencing tremendous growth in the U.S.

1,114 projects under construction or completed

1,139 in pipeline



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Existing and new players are marking big investments in growth



HASSLACHER
NORICA TIMBER
From **wood** to **wonders**.

PE Deals

Kensington-backed Element5 gets funding from Hasslacher Group

Element5 is a mass timber producer based in St Thomas, Ontario.

Irian Joseph - 20 February 2024

< Share A+ 100%

- Hasslacher provides integrated system services for modern timber construction
- The company is based in Carinthia, Austria
- Kensington Capital is an asset manager

- 2020 PE-backed **Element5** begins manufacturing mass timber in Toronto
- 2023 \$30MM sales
- 2024 Hasslacher strategic investment for \$100M expansion (\$40MM sales)
- 2030 Projected sales \$100MM



TIMBERLAB'S SOUTH CAROLINA MASS TIMBER PRODUCTION FACILITY REACHES FULL CAPACITY

Posted on June 24, 2024

Mass-timber firm acquires Oregon glulam manufacturer

By: **Hilary Dorsey** // May 17, 2024 // **Timberlab to Grow America's CLT Market with New 100,000m³ Plant**

Timberlab Sets Its Sights on Millersburg as Home for Its Cross-Laminated Timber Facility



WOOD CENTRAL
WED 18 SEP 24

- 2021 Begin mass timber fab, design, and installation in Oregon
- 2023 Opens fab shop in South Carolina
 - South Carolina shop fully utilized in 1 year of operations (1M SF material)
- 2024
 - Acquires glulam manufacturer
 - Announces plans for 2027 greenfield CLT manufacturing



NASDAQ: MERC

Mercer International Inc. acquiring former Katerra plant in Spokane Valley for \$50 million

Tue., Aug. 10, 2021

Mercer Mass Timber completes \$81.1 million Structurlam acquisition

By Larry Adams June 16, 2023 | 10:05 am CDT

PRINT

- 2021 Acquires Katerra CLT plant in Washington State (\$50M)
- 2024 Acquires Structurlam plant at \$81.1M, including Google and Walmart HQ contracts (investment from Walmart \$34M)

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However, supply chain bottlenecks hinder market adoption

Manufacturers are forced to ignore 75% of market share in favor of fewer, high-dollar, lengthy projects to hit production targets.

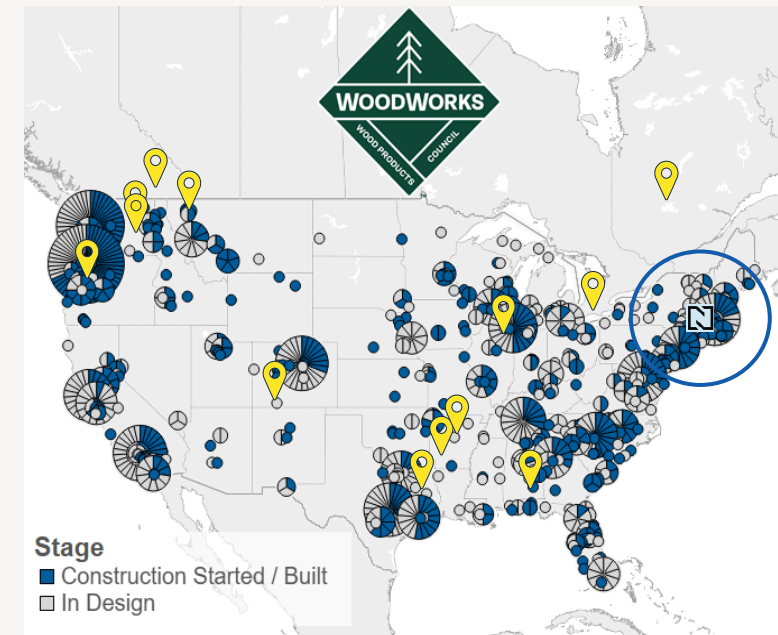
This is due to operating inefficiencies:

- **Costly Rework**
Design Teams lack guidance on material optimization
- **Inefficient Manufacturing**
CNC bottlenecks manufacturer capacity by 50%
- **Large, Variable Lead Times**
Manufacturers are far from growth markets
- **Lack of Skilled Labor**
41% of construction labor force will retire by 2031.

We need to “commoditize” mass timber

75% Buildings built in the US are under 3 stories.
47% Single family home construction

Manufacturers are far from major markets



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The Solution

NotchSB has the solution to **establish Maine as the east coast leader in mass timber** by flattening the mass timber value chain.

- Establish local CNC facilities to increase volume, justifying manufacturing.
- Flexible 3D CAD modeling and systems-based design avoids missteps and costly rework.
- Unlock new typologies and use cases.
- NotchSB panelized Building System decreases reliance on specialized labor availability.

With NotchSB, clients have greater confidence in cost and timelines with less variability after a project commences.





NotchSB Building System

- In-house Design & Engineering compliant with NotchSB Building System
- Offsite panelization
- Self-perform installation or coordination within network

Mass Timber Design & Procurement

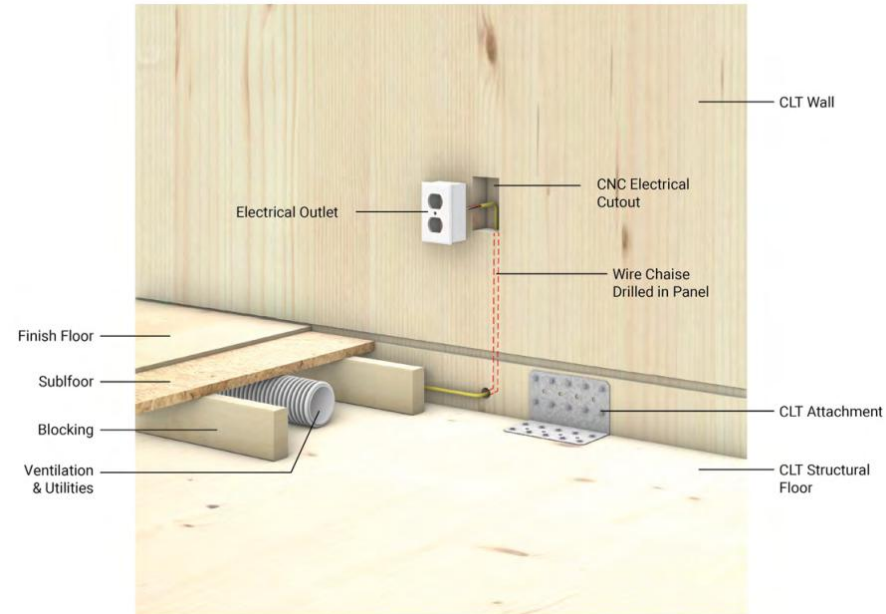
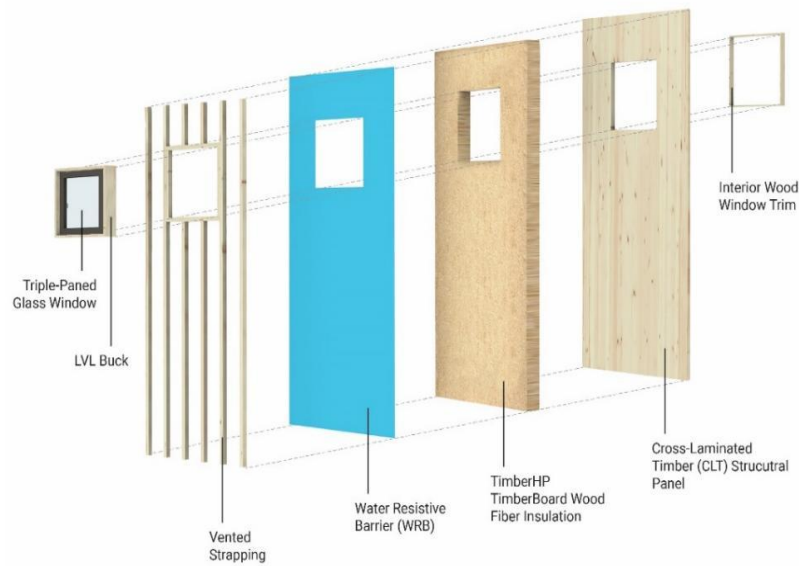
- 3D CAD coordination with Design Team
- Predictable, competitive mass timber procurement
- Self-perform installation or coordination within network

Advanced Manufacturing *(in development)*

- CNC fabrication
- Material warehousing for just in time delivery
- Self-perform installation or coordinate within network

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Predictability realized through standard shell panels and bathroom pods executed in optimized offsite assembly shop in Belfast, Maine.



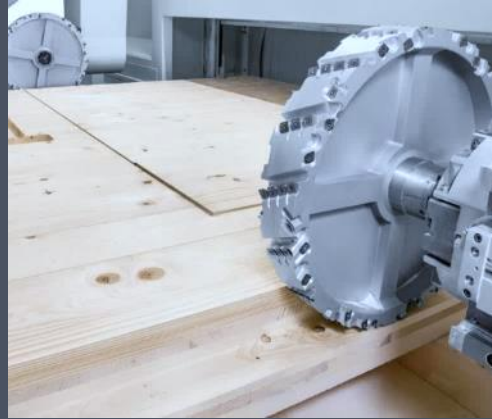
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The NotchSB Building System is an end-to-end package bringing predictability, speed, & cost effectiveness to high performance construction across typologies.



Integrated Design

Designed to budget with standard elements



Prefabrication

Assembled offsite by skilled craftspeople



Onsite Install

1-week installation to house in the dry

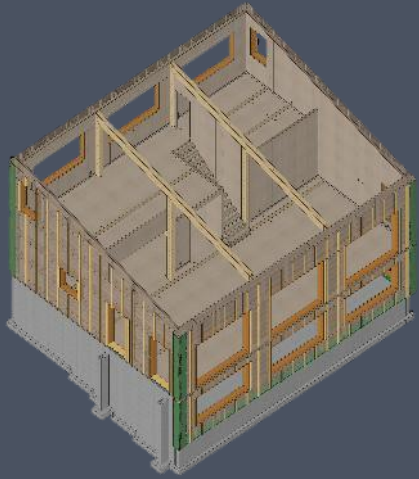


Local General Contractor

Coordinates site work and final finishes

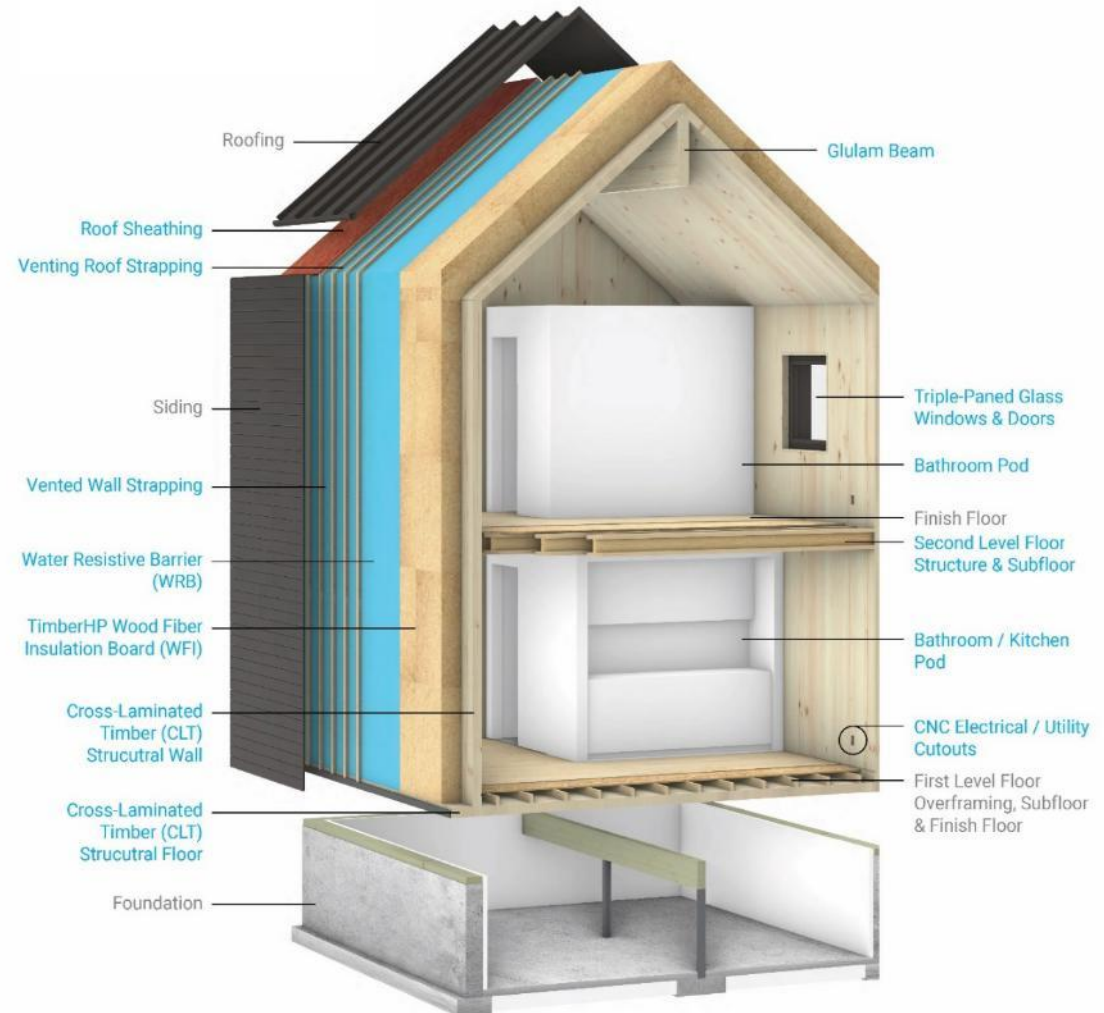
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In-house 3D design & engineering consolidates design times while ensuring builds are grounded in real client budgets, carrying costs, and return targets.



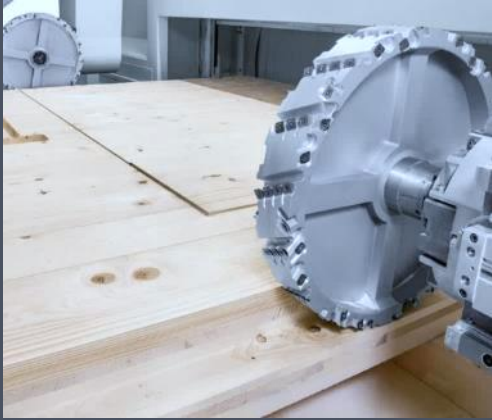
Integrated Design

Designed to budget with
standard elements



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Materials are CNC cut from 3D shop model to the precision of a millimeter. Shell and pods assembled offsite reducing complexity and onsite labor coordination.



Prefabrication

Assembled offsite by
skilled craftspeople



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NotchSB Site Captain coordinates installation to dry-in of shell and pods.



Onsite Install

1-week installation to
house in the dry



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NotchSB pre-plans MEP and specs finishes, decreasing reliance on specialized trades, saving both time and money.



Local General Contractor

Coordinates site work and final finishes



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Plus, it's better for the planet.

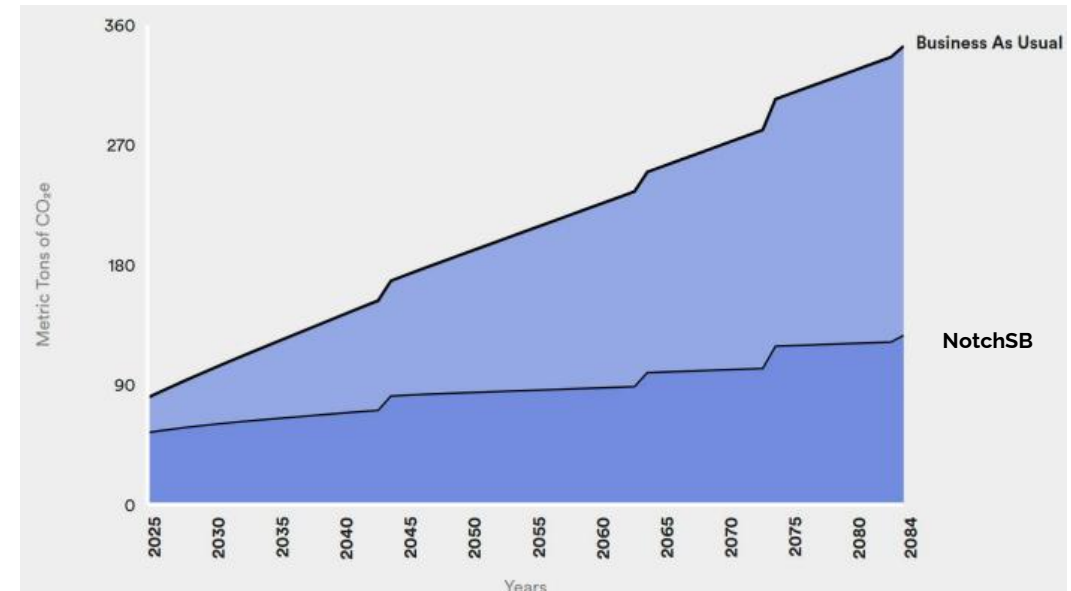


350 MT CO₂e



90 MT CO₂e

NotchSB building systems
reduce carbon footprint by
75 - 100%



NOTCH^{SB}

We partner with high-performance design and building material firms.

OPAL

 **TIMBERHP**
BY GO LAB


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Design Partner

*Delivering high performance buildings
following Passive House principals.*

Insulation Partner

*Nation's first fiber insulation
manufacturer based in Madison, Maine.*

Pioneering use of repeatable,
panelized CLT home construction.

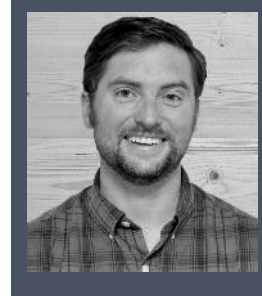




Decades of high-performance building construction experience



Matt O'Malia, Co-Founder and Advisor
4x Founder, Co-Founder and CEO of TimberHP. National reputation for innovation and expertise in design. Leader in the Passive House movement in North America and named to Architect Magazine's Architect 50 List in 2018.



Nick Farmer, President
Deep experience in mass timber optimization and prefabrication, including procurement, finance strategy, and project execution. MBA UVA Darden School.



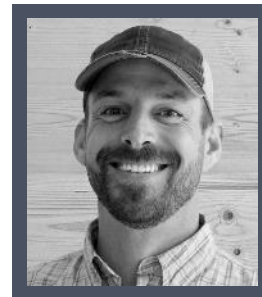
Riley Pratt, Head of Design
BA from Dartmouth, Masters of Architecture from Harvard University Graduate School of Design. Previously studio director for architectural services and prefabrication at Marmol Radziner in Los Angeles. Riley has also worked as a furniture maker and builder.



Nate Black, Head of Engineering, PE
Expert structural engineer and design for manufacturing and assembly professional. 15 years of experience in offsite construction. Holds BA Mechanical Engineering, University of Maine.



Cort Trejo, Project Manager
Ten years experience managing design and construction teams in traditional and offsite environments. Holds BA in Construction management from BYU, and a Masters in Architecture from the University of Utah.



Dave Miller, Head of Construction
Seasoned green builder with deep expertise and passion for sustainable construction practices. Led successful completion of first-ever certified Passive House in Maine, and world's first pre-insulated CLT building. Holds an Associates in Science from Unity college.



www.notchsb.com