

LOW CARBON SOLUTIONS

SHAPING THE SKYLINE: MASS TIMBER

McCarthy Building Companies, Inc. (McCarthy) is leading the way in sustainable building by incorporating mass timber, a strong, low-carbon alternative to concrete or steel, into our building projects. Mass timber is made by bonding smaller pieces of wood to create large, solid panels, beams and columns. Common types include Cross-Laminated Timber (CLT), Nail-Laminated Timber (NLT), Dowel-Laminated Timber (DLT), and Glued-Laminated Timber (Glulam).

With its exceptional strength and stability, mass timber is ideal for load-bearing structures. It offers a sustainable alternative by reducing carbon emissions, minimizing environmental impact, and improving energy efficiency.

Integrating this renewable material reduces McCarthy's carbon footprint while delivering high-performance, resilient buildings for clients. Mass timber enhances efficiency and durability, aligning with our commitment to innovation, teamwork, and operational excellence—ensuring our buildings stand the test of time and support client goals.

SUSTAINABLE BENEFITS:

- **Lower Emissions**^[1] – Replacing steel and concrete with mass timber cuts material emissions by 13%–26.5%
- **Reduced Waste** – Repurposes lower-grade timber, minimizing waste
- **Biophilic Design** – Exposed wood enhances well-being, reducing stress and promoting comfort
- **Construction Efficiency**^[2] – 25% faster than concrete, with 90% less traffic and 75% fewer workers on deck
- **Cost Benefits**^[3] – Uses up to 15% less energy and cuts construction time by 20–25%
- **Fire Resistance**^[4] – Chars at 0.65–0.80 mm per minute, maintaining structural integrity

TRANSFORMING CONSTRUCTION WITH MASS TIMBER

Google/YouTube Campus Expansion, San Bruno, CA
324,000 SF Building; 230,000 SF Parking



This project highlights innovative construction techniques and a commitment to sustainability. Using prefabricated mass timber components, the team significantly reduced build time. This method sequestered carbon, promoted sustainable forest management, and enhanced fire resistance through charring. Designed to be climate-positive, the project minimizes embodied emissions with optimized facades and interior systems.

Brookhaven City Centre, Brookhaven, GA
74,000 SF Building



Georgia's first mass timber municipal building exemplifies sustainability with renewable, carbon-sequestering mass timber. Designed for WELL and LEED certification, it features a three-story atrium, rooftop garden and public spaces, promoting environmental responsibility and biophilic benefits. This project highlights the flexibility and durability of mass timber, setting a new standard for sustainable construction.

1. What Is the Impact of Mass Timber Utilization on Climate and Forests? (U.S. Forest Service, 2022, <https://research.fs.usda.gov/treesearch/63853>) 2. Mass Timber in North America (Think Wood, <https://www.thinkwood.com/wp-content/uploads/2017/12/REPRINT-AR0420-CEU-THINKWOOD.pdf>) 3. Engineered Wood, Advantages (Wikipedia, Advantages, 2025, https://en.wikipedia.org/wiki/Engineered_wood?) 4. Canadian CLT Handbook (FPInnovations, 2019, P. 23, <https://web.fpinnovations.ca/wp-content/uploads/clt-handbook-complete-version-en-low.pdf>)