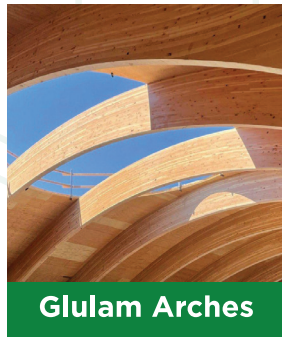


What is mass timber?

Mass timber is an umbrella term for a variety of large-format engineered wood construction materials made from layers of dimensional lumber or veneer. **Mass = massive** which is why the materials are most frequently used in big commercial buildings and apartment buildings.

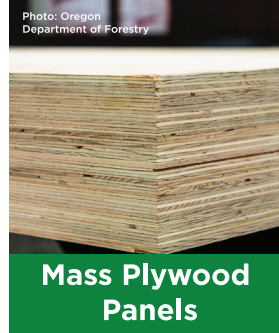
Types of mass timber

Glulam Beams & Columns



Glulam Arches

Cross-Laminated Timber Panels



Mass Plywood Panels

Nail-Laminated Timber



What are mass timber's benefits?

Building with mass timber can **speed up** construction timelines.

Manufacturing it can create **new jobs** and economic development opportunities.

People who live and work in mass timber buildings may be more productive or happier due to **biophilia**—the benefits of bringing nature indoors.

Mass timber offers powerful sustainability benefits:

Made from a renewable resource: Mass timber construction reduces reliance on finite resources, promoting long-term ecological balance.

Stores carbon long term: The mass timber stored in MSU's STEM Teaching and Learning Facility stores an amount of carbon equivalent to the emissions of driving a car 4.7 million miles.

Can reduce the carbon footprint of buildings: Replacing carbon-intensive materials with mass timber in large buildings can significantly decrease their carbon footprints.

Can support healthy forest management: The demand for sustainably sourced timber supports responsible forest management practices

The MI Healthy Climate Plan cites mass timber as a tool in the State's toolkit to achieve net-zero carbon by 2050.





Mission & Partners

MassTimber@MSU leverages research, education, communications, outreach, policy, and collaboration to advance sustainable mass timber manufacture and construction. This work is in close collaboration with the State of Michigan and a wide range of stakeholders from multiple sectors – architecture, engineering, and construction (AEC), forestry and forest products; mass timber manufacturing; labor and workforce; NGOs; local and regional government; academia, and more.

Outreach & Engagement

Fostering a multi-faceted mass timber community by:

MSU STEM Facility Tours and Presentations:

~2300+ participants have participated in these mass timber-focused tours and presentations.

Michigan Mass Timber Community of Practice:

Quarterly, virtual technical assistance and peer-learning gathering for mass timber-engaged professionals in Michigan.

Michigan Mass Timber Update:

An annual year-end gathering of more than 150 Michigan-based mass timber stakeholders. Produced in partnership with Michigan Department of Natural Resources (MI DNR).

Research & Education:

Michigan Mass Timber Supply Chain Analysis and Great Lakes Demand Survey:

Providing critical insights for prospective mass timber manufacturers; funded by DNR.

Developing Lignin-Based Mass Timber Adhesives: Lignin is an extract from trees and plants; these adhesives can offer biodegradable, sustainable alternatives to fossil fuel-based products.

Mass Timber Curriculum Development: Developing modular mass timber design, engineering, and construction curriculum for two- and four-year institutions nationally.



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