

# Highlighting the Unique Challenges and Differences of Building with Mass Timber

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As the construction industry shifts towards sustainability and owners seek to construct buildings that are sustainable - built from natural and renewable materials, and pleasing for their occupants to work in - mass timber is becoming the popular alternative to traditional steel and concrete buildings. An abundance of information is available on mass timber products and their properties and applications, but little information on the process of actually building a mass timber project.

## Objective:

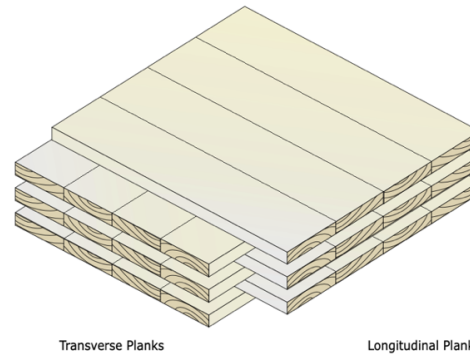
Extend practical knowledge of building with Mass Timber by:

- Highlighting specific differences and challenges of building with mass timber
- Creating general guidelines and recommendations for building with mass timber
- Identifying new areas of research



Glue-Laminated Timber (glulam)

## Types of Mass Timber



Transverse Planks

Longitudinal Planks

Cross-Laminated Timber (CLT)

## Specific Challenges:

- Longer project duration
- Increased preconstruction time and complexity
- Difficulties getting timely plan approvals
- Differing design and material procurement methods
- Necessity of MEP coordination at the beginning of the job
- Unique transportation, storage, and handling requirements
- Different installation procedures and requirements

## Methodology:

- Conduct qualitative interviews with two commercial contractors building mass timber projects in the California Bay Area

## Guidelines & Recommendations:

- More steps & parties involved in precon – longer precon time
- Design build or IPD would be helpful
- City building officials may need to be educated about mass timber
- Early MEP coordination is necessary
- More sensitive to weather conditions