



Detail, Four Corners, Ultramoderne, Boston Society of Architects, "Urban Timber," exhibition, 2014

Mass Timber

This seminar introduces and explores rapidly emerging mass timber construction methods. It looks closely at the complex forces that influence the selection, development, and detailing of mass timber construction techniques. The course will examine its development, documentation, and delivery. Students will gain insights into the interrelationships of material flows, logistics, labor, and mass timber's contributions toward carbon neutrality among other pressures that are changing the way mid and large scale buildings are conceived and developed with mass timber as an alternative to steel and concrete.

In this project-based lab, students will explore case studies of contemporary architectural constructions through case study research. Case studies will focus on pre-engineered mass timber construction methods and assemblies. Students will learn of a range of factors which influence the final outcome of the design and construction process, including building codes, material limitations, construction sequencing and logistics, the integration of building systems both active and passive, implications of various structural systems, building envelope performance, as well as methods of project delivery and workflow.

Team projects will be explored through drawings and physical models that describe the interrelationships of these various aspects of architectural form and the various forces that differentiate its complex material organization. The final deliverable will be a detailed physical model that seeks understanding through representation and gain knowledge through direct material engagement.

Class meetings will primarily be structured as workshops with short supplementary lectures by the instructor as well as guest architects, and engineers throughout the semester. Several site visits to construction sites and recently completed mass timber buildings are planned for the semester.