

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

Mass Timber Case Studies in Contemporary Construction

Case Studies in Contemporary Construction is a series of experimental seminar/labs that explore the complex forces that influence and shape the final physical form of a building through its development, documentation and delivery. The course seeks to understand the interrelationships of material flows, logistics, labor, and climate among other pressures that are changing the way buildings are conceived and developed. The main interest is in how this wide range of evolving issues are changing architectural practice.

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 research a range of factors which influence the final outcome of the design and construction process, including building codes, material limitations, construction sequencing and logics, 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 complete mass timber buildings are planned for the semester.