

KOSHIHARA LAB.

[Symbiosis of forest and city -Timberize City as recycling resource]

Department of Humans and Social Systems

Wood Engineering

Department of Architecture

<http://wood.iis.u-tokyo.ac.jp>

Earthquake recovery / Seismic reinforcement

Even if it is not a cultural property, even if it is an existing incompetent building such as the old standard, even a damaged building, if you want to leave it and use it safely it is possible.



Taisho Romantic House (Fukushima)

It was reborn while leaving memories of the earthquake disaster as the essential part of creating the bustle of the symphony of the doctor's office, disaster damaged by the 2011 East Japan great earthquake disaster, reconstruction.

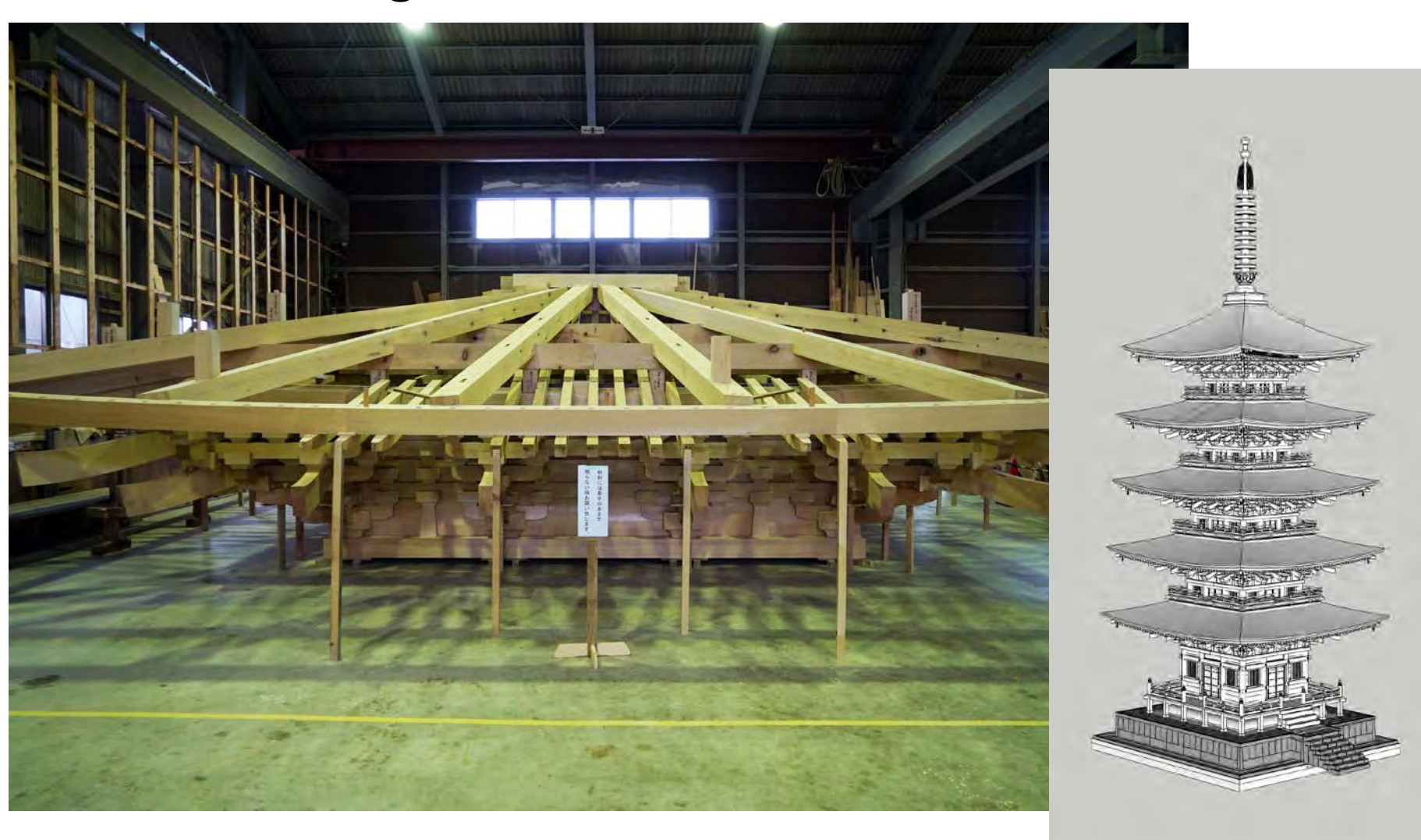


Existing wooden house in Yangon (Myanmar)

Evaluation of seismic performance and seismic retrofit of wooden houses that have been traditionally built in Asia is a future issue.

Traditional wooden building

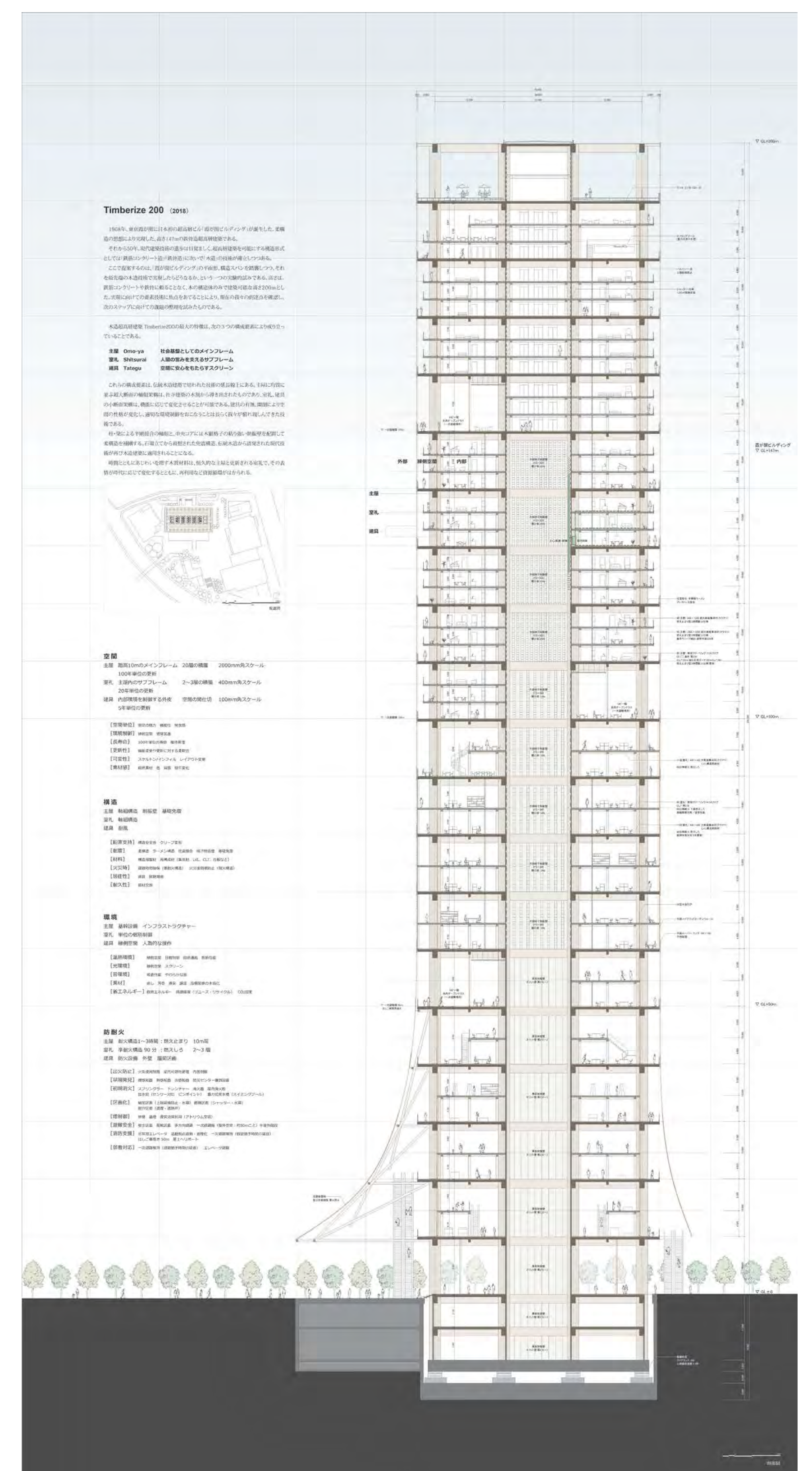
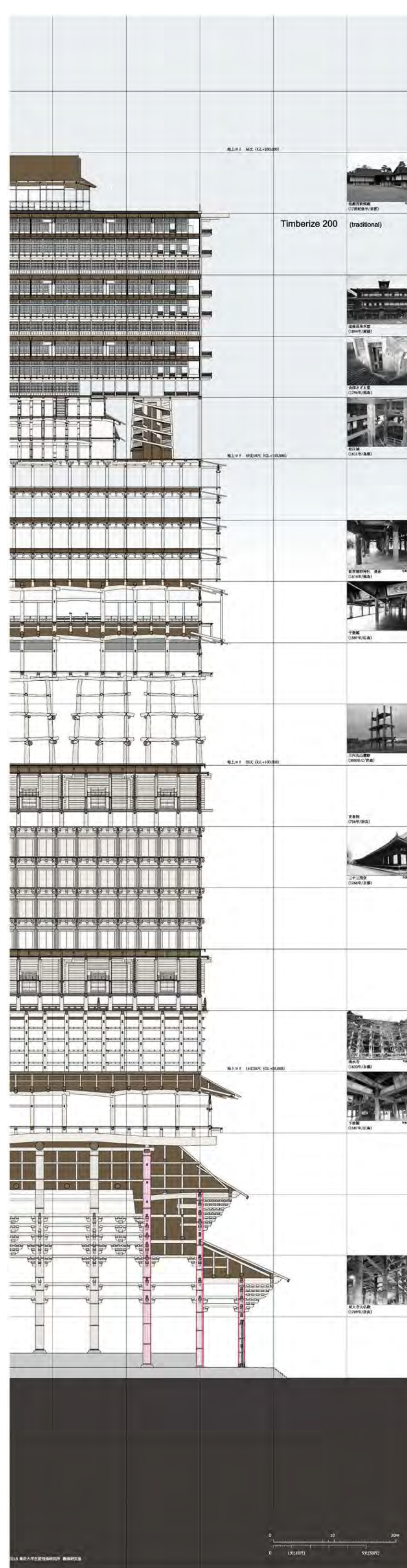
Traditional wooden building technology that has been developed in empirical studies, from a new engineering point of view, it will inspire the structural plan of modern wooden building.



New five storied pagoda in JOAN-JI (2019/Yamagata)

Timberize City

Timber buildings have changed according to the life style and social system of the times. We are proposing the future of timber construction built in urban areas.



Timberize 200 (2018)

In densely developed contemporary urban environments, the high verticality and multi storied composition of buildings is premised upon the effective use of high-value property. There are few historically based techniques for timber high-rises in Japan, yet several elements that inspired urban timber construction can be seen. Toward rationalization in contemporary architecture, the aim is to achieve simple and clear structural forms, however in traditional timber construction, a traditional measuring formula to determine the dimensions for each member, called *kiwari*, was used.

In contemporary timber structures, posts and beams with large cross-sections and thick floors and walls are made possible by engineered wood materials such as Laminated lumber or CLT, and through their application, processing and construction methods, and structural and fire-proof design methods are being established. Timber high-rises suitable for urban environments will be realized through the incorporation timber construction in modern-day building technology.