

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>



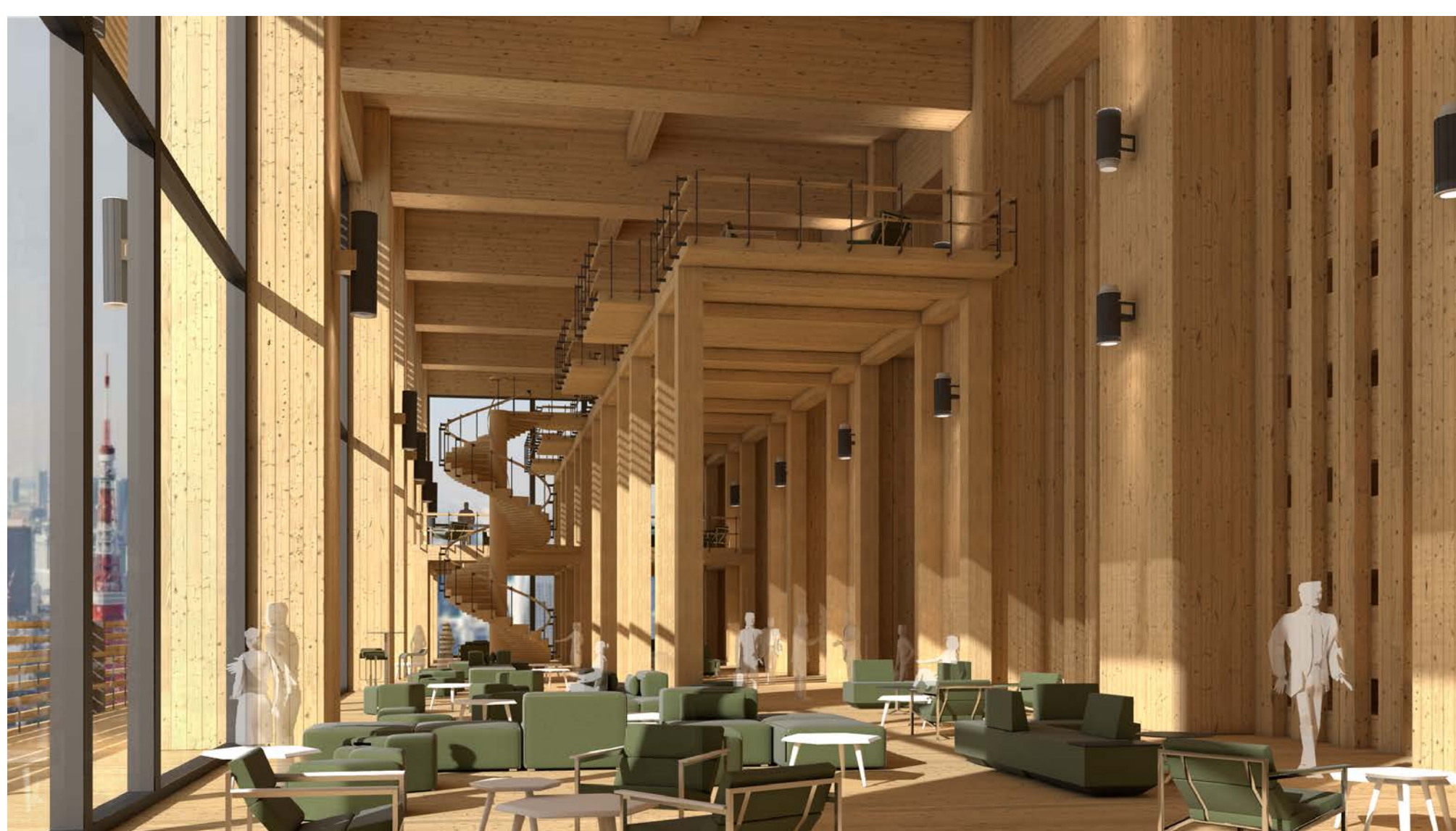
Cultural property preservation

A Kintai Bridge that has been repeatedly repaired since 1673 and has maintained its scenery and passed on technology for over 300 years. We will clarify how to maintain the wooden bridge and how to inherit the technology from the accumulated data.

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.

