



Timber Building Design and Construction for a Sustainable Future

Guest Editors:

Dr. Hüseyin Emre Ilgin

School of Architecture, Faculty of
Built Environment, Tampere
University, 33100 Tampere,
Finland

Prof. Dr. Markku Karjalainen

School of Architecture, Faculty of
Built Environment, Tampere
University, 33100 Tampere,
Finland

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Message from the Guest Editors

Dear Colleagues,

Wood is one of the most abundant biomaterials worldwide, having traditionally been used for construction. Recent studies on advanced engineered wood products highlight its vast but largely untapped potential to tackle global sustainability challenges. Alongside this, significant technological advancements are pushing the boundaries of wooden construction. Moreover, it has become more economically viable to use wood for buildings beyond low-rise structures. Consequently, there has been a notable shift in public perception, increasingly accepting wood as a material for high-rise buildings. This Special Issue focuses on timber building design and construction for a sustainable future.

Dr. Hüseyin Emre Ilgin
Prof. Dr. Markku Karjalainen
Guest Editors





Editor-in-Chief

Prof. Dr. David Arditi

Construction Engineering and Management Program,
Department of Civil,
Architectural, and Environmental
Engineering, Illinois Institute of
Technology, 3201 South
Dearborn Street, Chicago, IL
60616, USA

Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

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Buildings Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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