

Special Issue

Seismic Design and Performance of Timber Structures

Message from the Guest Editors

Every year, earthquakes cause damage and destroy a sizeable portion of the building stock across the globe. Among traditional constructions, those built with timber are considered the most effective earthquake-resistant structures, provided that the continuity in the load path is not compromised, the joints are intact, and moisture-induced problems are kept at bay. On the other hand, in the last decade, a large variety of timber building systems has been developed in Europe that complements traditional timber frame buildings. The performance and advancement of innovative timber building systems in case of earthquake loading must be investigated, while great lessons can be taken from traditional constructions that are commonly accepted as seismic-resistant. The aim of this Special Issue is to collect results and to promote discussion and developments from recent research related to timber elements used to build new structures or to reinforce those existing in seismic-prone areas.

Guest Editors

Dr. Jorge Manuel Branco

Institute for Sustainability and Innovation in Structural Engineering (ISISE), University of Minho, Guimarães, Portugal

Prof. Dr. Beatrice Faggiano

Department of Structures for Engineering and Architecture, University of Naples Federico II, 80125 Naples, Italy

Deadline for manuscript submissions

closed (30 August 2023)



Buildings

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 4.4



mdpi.com/si/69344

Buildings
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
buildings@mdpi.com

[mdpi.com/journal/
buildings](https://mdpi.com/journal/buildings)





Buildings

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 4.4



[mdpi.com/journal/
buildings](https://mdpi.com/journal/buildings)



About the Journal

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.

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

Author Benefits

High Visibility:

indexed within SCIE (Web of Science), Scopus, Ei Compendex, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Construction and Building Technology) /
CiteScore - Q1 (Architecture)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).