

1. Record Nr.	UNINA9910254239803321
Titolo	Historical Earthquake-Resistant Timber Framing in the Mediterranean Area : HEaRT 2015 // edited by Helena Cruz, José Saporiti Machado, Alfredo Campos Costa, Paulo Xavier Candeias, Nicola Ruggieri, José Manuel Catarino
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-39492-4
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (450 p.)
Collana	Lecture Notes in Civil Engineering, , 2366-2565 ; ; 1
Disciplina	620
Soggetti	Light construction Steel construction Lightweight construction Engineering geology Mechanics, Applied Solids Buildings - Repair and reconstruction Buildings - Maintenance Technology History Building materials Light-weight Construction, Steel and Timber Construction Geoengineering Solid Mechanics Building Repair and Maintenance History of Technology Structural Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Cooperating Timber and Stone Antiseismic frames in Historic Structures of Greece -- The Role of a Post-Byzantine Timber Roof Structure in the

Seismic Behavior of a Masonry Building - The Case of a Unique Type of Timber-Roofed Basilicas in Cyprus (15th-19th century) -- Historic Earthquake-Resistant Constructive Techniques Reinforced by Wooden Logs in Algeria -- A Comparative Evaluation of the Results of Two Earthquakes: Istanbul and Lisbon Earthquake in 18th Century -- Some Examples of Turkish Houses With Wooden Frame in the Seismic Zone Anatolia -- Traditional Timber Housing Structure in Zeyrek -- Possible Precursors of Pombalino cage -- Local Seismic Cultures: The use of timber frame structures in the South of Portugal -- The use Of Wood With an Anti-Seismic Function in the Architecture of Palermo During the 18th Century.

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#### Sommario/riassunto

This book presents a selection of the best papers from the HEaRT 2015 conference, held in Lisbon, Portugal, which provided a valuable forum for engineers and architects, researchers and educators to exchange views and findings concerning the technological history, construction features and seismic behavior of historical timber-framed walls in the Mediterranean countries. The topics covered are wide ranging and include historical aspects and examples of the use of timber-framed construction systems in response to earthquakes, such as the gaiola system in Portugal and the Bourbon system in southern Italy; interpretation of the response of timber-framed walls to seismic actions based on calculations and experimental tests; assessment of the effectiveness of repair and strengthening techniques, e.g., using aramid fiber wires or sheets; and modelling analyses. In addition, on the basis of case studies, a methodology is presented that is applicable to diagnosis, strengthening and improvement of seismic performance and is compatible with modern theoretical principles and conservation criteria. It is hoped that, by contributing to the knowledge of this construction technique, the book will help to promote conservation of this important component of Europe's architectural heritage.

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