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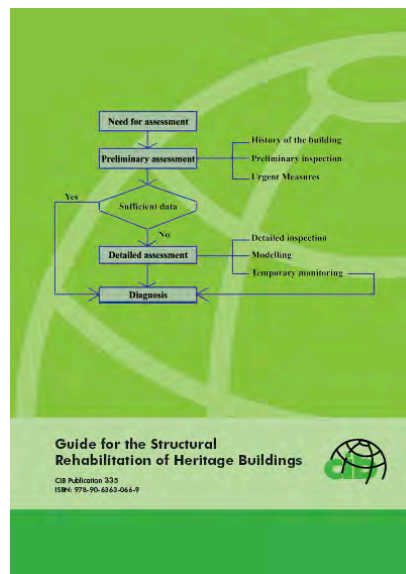
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New CIB Publication

W023 - Wall Structures

Guide for the Structural Rehabilitation of Heritage Buildings



CIB Publication 335

ISBN 978-90-6363-066-9

Editor: Dr. Silvino Pompeu Santos

Background

Rehabilitation of heritage buildings has become an issue of great importance around the world, particularly in the most developed societies. It is the result of the need to improve existing buildings for new conditions of use, and also of the recognition of the importance of conservation of the architectural heritage. Existing buildings are subjected to processes of degradation with time, which leads to a situation in which they became not able to fulfil the purpose for which they were built. Sometimes, there is also the need to improve the conditions offered by existing buildings or to adapt them to new functions.

Furthermore, in the most developed societies, as they progress, the feeling grows that it is necessary to

maintain the existing architectural heritage. As a kind of counterpoint to the changes caused by rapid technological evolution, the feeling grows of keeping the existing built environment and passing it on to future generations. Rehabilitation of heritage buildings is a way of sustainable development and also an act of culture.

The most sensitive aspect of the rehabilitation of existing buildings is their structural rehabilitation, i.e., their structural safety. However, assessment of the structural safety of existing buildings is, in general, a complex task, because the methodologies used differ from those adopted in the design of new structures. Furthermore, the eventual strengthening of existing buildings can conflict with their cultural value.

Therefore, the type of intervention on a heritage building will depend on its cultural value, ranging from simple maintenance, where the objective is not to change the cultural value of the building, to complex rehabilitation, when it is intended to improve the performance of the building.

CIB Commission W023

Being aware of the importance of the issue, CIB Commission W023 - Wall Structures developed a document containing guidance for the rehabilitation of heritage buildings, with a special emphasis on the assessment of the structural safety: Guide for the Structural Rehabilitation of Heritage Buildings.

The Guide has as its basis the CIB Publication Structural Assessment and Redesign of Masonry Wall Structures, edited in 1992, being now the focus the masonry buildings with significant cultural value. It has been developed in line with the Publication of ICOMOS (ISCARSAH) Recommendations for the Analysis, Conservation and Structural Restoration of Architectural Heritage, approved in 2003, which philosophy and main concepts and have been adopted.

The Guide has been prepared by an Editing Panel consisting of CIB W023 Commission members and invited experts in this field, convened by the Commission Coordinator, with contributions coming from other Commission members.

Contents

The table of contents is set out in the following 6 main chapters:

- Introduction
- General aspects
- The existing information on the building
- Structural assessment of the building
- Repair and strengthening
- Quality of the intervention work.

Availability

The electronic publication with 53 pages is available as a free downloadable document from the CIB website (see [here](#)).

In the near future the publication will also be free downloadable from the ICONDA@CIBlibrary website.

Additional Information

For additional information about W023 contact the Coordinator: Silvino Pompeu Santos, pompeu.santos@lnec.pt.



You can find more information on the activities of CIB W023 at www.cibworld.nl - Databases - select "Go to Database" - in the shown search engine: type W023 in the field "Commission number".