

Assessment of Timber Structures



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Philipp Dietsch and Jochen Köhler

Assessment of Timber Structures

COST Action E55 *“Modelling of the
Performance of Timber Structures”*

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Foreword

This report is a publication of the European network COST E55 “Modeling of the Performance of Timber Structures”.

The COST Action E55 is a research network established under the aegis of the COST domain “Forests, their Products and Services”. The main objective of COST action E55 is to provide the basic framework and knowledge required for the efficient and sustainable use of timber as a structural and building material. The Action is structured into three working groups; 1) assessment of failures and malfunctions, 2) vulnerability of timber structures and 3) robustness of timber structures.

Within the scope of Working Group 1, focus was laid on studying structural failures of timber structures around Europe, resulting in a scheme to classify failures in the future. Another objective was to discuss and develop guidelines on implementing inspections on structures to improve their structural reliability over the anticipated lifetime, resulting in a reduction of possible failures. To complete this domain, it seemed appropriate to append a collection and evaluation of existing assessment and monitoring methods.

This Task Group Report is the result of the efforts to fulfil this objective. Following a two-day Task Group meeting at TUM in Munich, Germany on the 2nd and 3rd of September 2009, all Task Group members contributed within the area of their expertise. The contributions were subsequently discussed within the task group and with other members of COST Action E55 before publication.

Gratitude is addressed to the COST Office for funding the Task Group meeting and the publication of this report. The commitment and contributions of all members of this task group and COST Action E55 towards this report are greatly appreciated.

Philipp Dietsch, Chair Task Group
Jochen Köhler, Chair COST E55

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