

9th Edition

Recommendations of the “Committee for Waterfront Structures Harbours and Waterways” EAU 2012



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 **Ernst & Sohn**
A Wiley Brand

**Recommendations
of the Committee for
Waterfront Structures
Harbours and Waterways
EAU 2012**

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Preface to 11th, revised edition (9th English edition) of the *Recommendations of the Committee for Waterfront Structures – Harbours and Waterways*

Eight years have passed since the 10th German (8th English) edition of the *Recommendations of the Committee for Waterfront Structures* was published. During that period the annual, in some cases six-monthly, technical reports of the years 2005 to 2011 have contained innovations and improvements. This 9th English edition (the translation of the 11th German edition), simply called the “EAU” by those in the know, represents a completely updated version of the recommendations of the Waterfront Structures Committee, a body organised jointly by the German Port Technology Association (HTG) and the German Geotechnical Society (DGGT). I feel sure that this edition, too, will become a standard work of reference for every engineer working on waterfront structures. The main changes to the content are to be found in chapter 1 (production of geotechnical report and calculation of undrained shear strengths), chapter 2 (calculations with total and effective stresses), section 8.1 (installation of sheet pile walls and supervision of such installation work), section 8.2 (verification of vertical load-carrying capacity) and chapter 13 (using the p - y method to design dolphins). The previous chapter 14 has been incorporated in other parts of the EAU and the old chapter 15 renumbered accordingly, leaving this edition with just 14 chapters. Furthermore, the notation has been amended to match Eurocode 7 and Germany’s National Application Document DIN 1054, which are now valid. The principle for constituting committees laid down by the German Institute for Standardization (DIN), i.e. appropriate representation of all groups with an interest and availability of the necessary expertise, is followed by the EAU committee. Therefore, the committee is made up of members from all relevant disciplines and drawn from universities, the building departments of large seaports, inland ports and national waterways, the construction industry, the steel industry and consulting engineers.

The following members of the working committee were involved in preparing EAU 2012:

Univ.-Prof. Dr.-Ing. Jürgen Grabe, Hamburg (chair since 2009)

Ir. Tom van Autgaerden, Antwerp

Dipl.-Ing. Dirk Busjaeger, Hamburg

Dr. ir. Jakob Gerrit de Gijt, Rotterdam

Dr.-Ing. Michael Heibaum, Karlsruhe

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Dipl.-Ing. Emile Reuter, Luxembourg
Univ.-Prof. Dr.-Ing. Werner Richwien, Essen (chair until 2009)
Dr.-Ing. Peter Ruland, Hamburg
Dr.-Ing. Wolfgang Schwarz, Schrobenshausen
Dr.-Ing. Hartmut Tworuschka, Hamburg
Dr.-Ing. Hans-Werner Vollstedt, Bremerhaven

In a similar way to the work of the DIN when producing a standard, new recommendations are presented for public discussion in the form of provisional recommendations in the annual technical reports. After considering any objections, recommendations are published in their final form in the following annual technical report. Annex I contains a list of the annual technical reports relevant to this edition. The status of the *Recommendations of the Committee for Waterfront Structures – Harbours and Waterways* is therefore equivalent to that of a standard. Seen from the point of view of its relevance to practice and also the dissemination of experience, however, the information provided goes beyond that of a standard; this publication can be seen more as a “code of practice”.

As the European standardisation concept is now fully incorporated in the EAU, this edition satisfies the requirements for notification by the European Commission. It is registered with the European Commission under notification No. 2012/426D.

The fundamental revisions in EAU 2012 made in-depth discussions with colleagues outside the committee necessary, even the setting-up of temporary study groups to deal with specific topics. The committee acknowledges the assistance of all colleagues who in this way made a significant contribution to the development of EAU 2012.

In addition, considerable input from experts plus recommendations from other committees and international engineering science bodies have found their way into these recommendations.

So, with such additions and the results of revision work, EAU 2012 corresponds to today’s international standards. Experts working in this sector now have at their disposal an updated edition adapted to the European standards which will continue to supply valuable help for issues in design, tendering, award of contract, engineering tasks, economic and environmentally compatible construction, site supervision and contractual procedures. It will therefore be possible to design and build waterfront structures that are in line with the state of the art and have consistent specifications.