



Precast Concrete Structures

Hubert Bachmann & Alfred Steinle

2018

272 pp

Paperback

ISBN: 9788126574179

Price: 1,025.00

About the Book

The book reflects the current situation in precast concrete construction. Besides general observations regarding building with precast concrete elements, the book focuses first and foremost on the boundary conditions for the design of precast concrete structures, loadbearing elements and façades. Connections and specific structural and constructional issues are covered in detail and stability of precast concrete structures is another central theme. The requirements brought about by the emergence of the European Single Market are explained and the diverse possibilities for façade design are presented. A chapter on the production processes provides the reader with an indispensable insight into the characteristics of this form of industrialised building.

The book is a practical tool for engineers, but certainly also architects and students.

One of the authors' intentions is to demonstrate to engineers and architects the possibilities that factory prefabrication can offer, and hence pave the way towards the economic application and ongoing development of precast concrete construction.

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About the Author

Hubert Bachmann :- (b. 1959) began his career in 1976 with a training course on concrete and precast concrete construction in a precasting plant. After studying construction engineering and completing his doctorate at the University of Karlsruhe, he accepted a post in the structural engineering office of Ed. Zublin AG, where he has worked since 1993. His duties include the detailed design of structures of all kinds plus research and development in the civil and structural engineering sectors. He has been presenting the series of Hahn lectures at the University of Stuttgart on the subject of the prefabrication of concrete components since 2003.

Alfred Steinle :- (b. 1936) turned Hahn's lecture notes into a manuscript in the early 1970s, which then became the starting point for this book. After a number of years in bridge-building, Alfred Steinle also became heavily involved in precast concrete construction at Zublin. His theoretical work covered bridge-building with torsion and section deformations in box-girder bridges and in precast concrete structures within the scope of the 6M system with corbels, notched beam ends and pocket foundations. In addition, he was a key figure in many precast concrete projects such as the 6M schools, the University of Riyadh, schools with foamed concrete wall panels in Iraq, Zublin House and the construction of a modern automated precasting plant. Alfred Steinle retired in 1999 and by that time he had risen to the post of authorised signatory in the engineering office at Zublin headquarters.