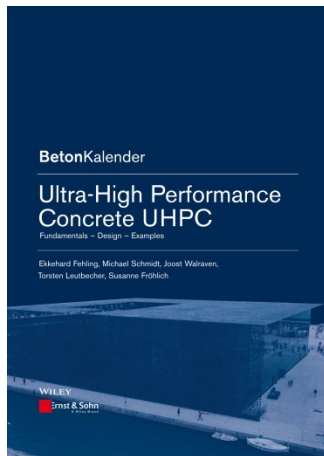


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Ekkehard Fehling, Michael Schmidt, Joost C. Walraven,  
Torsten Leutbecher, Susanne Fröhlich

## Ultra-High Performance Concrete UHPC Fundamentals, Design, Examples

**Ultra-High Performance Concrete (UHPC) becomes attractive because of life cycle cost and sustainability analysis for structures. This book gives a comprehensive overview from material properties and manufacturing to design and dimensioning aspects. With worldwide examples from bridge and building engineering.**

UHPC is a milestone in concrete technology and application. It permits the construction of both more slender and more durable concrete structures with a prolonged service life and thus improved sustainability

This book is a comprehensive overview of UHPC - from the principles behind its production and its mechanical properties to design and detailing aspects. The focus is on the material behaviour of steel fibre-reinforced UHPC. Numerical modelling and detailing of the connections with reinforced concrete elements are featured as well. Numerous examples worldwide - bridges, columns, façades and roofs - are the basis for additional explanations about the benefits of UHPC and how it helps to realise several architectural requirements.

The authors are extensively involved in the testing, design, construction and monitoring of UHPC structures. What they provide here is therefore a unique synopsis of the state of the art with a view to practical applications.

Selected chapters from the German concrete yearbook are now being published in the English "Beton-Kalender Series" for the benefit of an international audience. The chapter UHPC was published in the Beton-Kalender 2013.

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**Table of content:**

- |   |                       |
|---|-----------------------|
| 1. Introduction                                   | 6. Connections        |
| 2. Principles for the production of UHPC          | 7. Projects completed |
| 3. Mechanical properties of the hardened concrete | 8. Acknowledgements   |
| 4. Durability                                     | 9. References         |
| 5. Design principles                              |                       |

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