

1. Record Nr.	UNINA9910299495103321
Titolo	Mechanical Properties of Self-Compacting Concrete : State-of-the-Art Report of the RILEM Technical Committee 228-MPS on Mechanical Properties of Self-Compacting Concrete // edited by Kamal H. Khayat, Geert De Schutter
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-03245-3
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (283 p.)
Collana	RILEM State-of-the-Art Reports, , 2213-204X ; ; 14
Disciplina	620.136
Soggetti	Building materials Structural materials Mechanics Mechanics, Applied Building Materials Structural Materials Theoretical and Applied Mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Preface -- List of Authors -- 1. Introduction and Glossary, by G. De Schutter and K.H. Khayat -- 2. Mechanical Properties, by P. Desnerck, V. Boel, B. Craeye and P. Van Itterbeeck -- 3. Creep and Shrinkage, by A. Leemann and P. Lura -- 4. Bond Strength, by K.H. Khayat and P. Desnerck -- 5. Structural Behaviour, by M. Lachemi, A.A.A. Hassan, C. Mazzotti and M. Sonebi -- 6. Fiber Reinforced Self-Compacting Concrete (FR-SCC), by L. Ferrara -- 7. Specialty Self-Compacting Concrete, by M. Vieira, L. Ferrara, M. Sonebi and C. Shi -- 8. Summary and Conclusions, G. De Schutter and K.H. Khayat.
Sommario/riassunto	The State-of-the-Art Report of RILEM Technical Committee 228-MPS on Mechanical properties of Self-Compacting Concrete (SCC) summarizes an extensive body of information related to mechanical properties and mechanical behaviour of SCC. Due attention is given to

the fact that the composition of SCC varies significantly. A wide range of mechanical properties are considered, including compressive strength, stress-strain relationship, tensile and flexural strengths, modulus of elasticity, shear strength, effect of elevated temperature, such as fire spalling and residual properties after fire, in-situ properties, creep, shrinkage, bond properties, and structural behaviour. A chapter on fibre-reinforced SCC is included, as well as a chapter on specialty SCC, such as light-weight SCC, heavy-weight SCC, preplaced aggregate SCC, special fibre reinforced SCC, and underwater concrete.
