1. R	Record Nr.	UNINA9910298610403321
A	Nutore	Cuenca Estefanía
Т		On Shear Behavior of Structural Elements Made of Steel Fiber Reinforced Concrete / / by Estefanía Cuenca
Ρ	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
IS	SBN	3-319-13686-0
Е	dizione	[1st ed. 2015.]
D	Descrizione fisica	1 online resource (221 p.)
С	Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190- 5053
D	Disciplina	620.0042 620.11 691
S	Soggetti	Structural materials Building materials Engineering design Structural Materials Building Materials Engineering Design
Li	ingua di pubblicazione	Inglese
F	ormato	Materiale a stampa
Ĺ	ivello bibliografico	Monografia
N	Note generali	Description based upon print version of record.
N	Nota di bibliografia	Includes bibliographical references.
N	lota di contenuto	Introduction and objectives Literature survey on shear in frc beams Experimental tests Shear database Conclusions and Recommendations.
S	Sommario/riassunto	This book sheds light on the shear behavior of Fiber Reinforced Concrete (FRC) elements, presenting a thorough analysis of the most important studies in the field and highlighting their shortcomings and issues that have been neglected to date. Instead of proposing a new formula, which would add to an already long list, it instead focuses on existing design codes. Based on a comparison of experimental tests, it provides a thorough analysis of these codes, describing both their reliability and weaknesses. Among other issues, the book addresses the influence of flange size on shear, and the possible inclusion of the flange factor in design formulas. Moreover, it reports in detail on tests performed on beams made of concrete of different compressive

strengths, and on fiber reinforcements to study the influence on shear, including size effects. Lastly, the book presents a thorough analysis of FRC hollow core slabs. In fact, although this is an area of great interest in the current research landscape, it remains largely unexplored due to the difficulties encountered in attempting to fit transverse reinforcement in these elements.