

1. Record Nr.	UNINA9910822024203321
Autore	Whittle Robin
Titolo	Failures in concrete structures : case studies in reinforced and prestressed concrete // Robin Whittle
Pubbl/distr/stampa	Boca Raton, Fla. : , : Talyor and Francis, , 2012
ISBN	0-429-20654-2 1-135-17173-4 0-203-86127-2
Descrizione fisica	1 online resource (145 p.)
Classificazione	TEC009020
Disciplina	624.1834
Soggetti	Concrete construction Reinforced concrete construction
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.
Nota di contenuto	Front Cover; Contents; Foreword; Acknowledgements; Introduction; Chapter 1 - Failures due to Design Errors; Chapter 2 - Problems and Failures due to Errors in Structural Modelling; Chapter 3 - Failures due to Inappropriate Extrapolation of Code of Practice Clauses; Chapter 4 - Failures due to Misuse of Code of Practice Clauses; Chapter 5 - Problems and Failures due to Inadequate Assessment of Critical Force Paths; Chapter 6 - Problems and Failures due to Poor Detailing; Chapter 7 - Problems and Failures due to Inadequate Understanding of Materials' Properties Chapter 8 - Problems and Failures due to Poor Construction Chapter 9 - Problems and Failures due to Poor Management; Chapter 10 - Problems and Failures due to Poor Construction Planning; Chapter 11 - Problems and Failures due to Deliberate Malpractice; Chapter 12 - Problems Arising from the Procurement Process; Chapter 13 - Contributions of Research and Development toward Avoidance of Failures; References; Back Cover
Sommario/riassunto	Foreword Errare humanum est. We structural engineers are human and so have made a number of errors over the years resulting in narrow escapes, badly performing structures, and even fatal collapses. But as Seneca continues. sed perseverare diabolicum, we must not repeat our

errors. To avoid this means that we must learn from our past mistakes; we must know what went wrong and why. Some of the lessons from our past errors get embodied in clauses in codes of practice, but many do not, and the collective memory of the profession tends to fade as the generation of engineers who learnt from the mishaps and catastrophes retires. Past books on the subject of structural failures tended to deal with the general causes of failures and methods of investigation, illustrated with the more spectacular examples. However, details of some failures that have not made the headlines, but nevertheless hold important lessons, are hard to find or may not even be in the public domain. In the past, Robin Whittle and I worked together at Arup R&D on a variety of problems of concrete structures. Some of these arose from failures, and others were encountered when forestalling undesirable outcomes of the enthusiasm--untempered by experience--of some of our younger colleagues. Robin was also in close contact with researchers at the now sadly defunct Cement & Concrete Association, the Polytechnic of Central London, and the universities of Leeds, Durham, and Birmingham, and so was privy to much of the background for the initial draft and subsequent revisions of--
