Record Nr. UNINA9910818845603321 Autore **Tandler Jens Titolo** Collapse analysis of externally prestressed structures / / Jens Tandler Pubbl/distr/stampa Hamburg, : Diplomica Verlag, 2009 **ISBN** 3-8366-2298-X Edizione [1st ed.] Descrizione fisica 1 online resource (148 p.) Disciplina 624.28 624/.28 Soggetti Prestressed construction **Building failures** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from cover. Nota di bibliografia Includes bibliographical references. Nota di contenuto Collapse analysis of externally prestressed structures: Abstract: Contents at a Glance; Contents; Acknowledgements; Notation; 1 Introduction; 2 Behaviour of externally prestressed structures; 3 Collapse analysis: 4 Results: 5 Discussion of the results: 6 Conclusion and Recommendations: References; Codes of practice; Appendix The use of external prestressing is becoming more popular throughout Sommario/riassunto Europe due to their expected higher durability and the possibility of active maintenance of the prestressing cables. Questions have been raised about the behaviour of these structures beyond service loads.A comprehensive numerical analysis has been carried out comparing the behaviour of three different types of externally prestressed bridges to a conventionally internally prestressed bridge. The external types are a

bridge with external tendons and

monolithically built bridge with external tendons, a monolithically built