1. Record Nr.   UNINA9910159433603321

   Titolo   Construction projects : improvement strategies, quality management
                       and potential challenges / / Kimberly Hall, editor

   Pubbl/distr/stampa Hauppauge, New York : , : Nova Science Publishers, Incorporated, ,
                       [2017]
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   ISBN   1-5361-0743-3

   Descrizione fisica 1 online resource (194 pages) : illustrations

   Collana   Construction materials and engineering

   Disciplina   624.068/4

   Soggetti   Building - Superintendence

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Nota di bibliografia   Includes bibliographical references and index.

2. Record Nr.	UNINA9910568289303321
Autore	Proske Dirk
Titolo	The Collapse Frequency of Structures : Bridges - Dams - Tunnels - Retaining structures - Buildings / / by Dirk Proske
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	9783030972479
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Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (149 pages)
Disciplina	624.171
Soggetti	Buildings - Design and construction
	Lightweight construction
	Building, Iron and steel
	Building construction
	Building Construction and Design
	Light-weight Construction, Steel and Timber Construction
	Solid Construction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction and Initial Position -- Preliminary Considerations -- Bridges -- Dams -- Tunnel -- Retaining Structures -- Buildings and Structures -- Stadiums -- Wind Turbines -- Nuclear Power Plants -- Concluding Remarks.
Sommario/riassunto	The mathematical verification of the safety of structures can be done by determining the probability of failure or by using safety elements. Observed damages and collapses are usually assessed within the framework of expert reports, which seems reasonable due to the large number of unique structures in the construction industry. However, there should also be an examination of observed safety across all structures. Therefore, in this book the collapse frequencies are determined for different types of structures, such as bridges, dams, tunnels, retaining structures and buildings. The collapse frequency, like the failure probability, belongs to stochasticity. Therefore, the observed mean collapse frequencies and the calculated mean failure probabilities

are compared. This comparison shows that the collapse frequencies are usually lower than the calculated failure probabilities. In addition, core damage frequencies and probabilities are given to extend the comparison toanother technical product. About the Author: Prof. (FH) Dr.-Ing. habil. Dirk Proske MSc. studied civil engineering in Dresden and London. He worked at various universities, such as the TU Dresden, the University of Natural Resources and Applied Life Sciences Vienna and the TU Delft. He has also worked for various engineering firms and on various construction sites, including in South Africa and Indonesia. Since 2018, he has been a professor of risk management at the Bern University of Applied Sciences.