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Nota di contenuto	Introduction -- Production processes, application and testing -- Mechanical Model for the single paperboard sheet -- Engineering Model for Paperboard Laminates -- Analysis of in-plane loading – case studies -- Design methodology -- Conclusion and outlook.
Sommario/riassunto	The present book deals with the structural characterization of paperboard materials. The main focus is set on the development of an engineering model for paperboard laminates for use in design processes. Furthermore, the bi-axial limits are examined and related to those of the single paperboard sheet, in order to enable the estimation of laminate performance from the properties of the single paperboard sheet on. Finally a simple model for failure estimation during bi-axial loading is established which relies on simple material tests. Nihat Kiziltoprak, born in 1990 in Torbali, studied civil engineering at Technische Universität Darmstadt from 2010 to 2016. He specialized in structural engineering, mechanics and material modeling. From 2017 to 2022, he worked at the Institute of Structural Mechanics and Design at TU Darmstadt and participated in the subprojects Design+Joining Techniques and Structural Mechanics of the interdisciplinary LOEWE project "BAMP! - Building with Paper", among others. In July 2022, he

defended his dissertation with the topic "On the Bi-Axial In-Plane Behavior of Laminated Paperboard Components in Construction: A Representative Engineering Model". Since then, Nihat Kiziltoprak has been working for Krebs+Kiefer in Darmstadt, mainly on projects related to "Hot Design - Load-bearing Structures under Fire Loads".