



METADATA

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Abstract

The book is a textbook for the 7th and 8th semesters of Architectural Composition and attempts to bring together Architectural Design and Building Technology. Its aims are to methodically analyse and classify the construction choices that serve architectural composition and to help fostering a deeper understanding of such selections. In addition, it aspires to develop criteria regarding the choice of materials and how construction details can be resolved. The book consists of eight (8) chapters, subdivided in three parts with explanatory and annotated illustrated material. Part 1 discusses the nature of load-bearing structures, their types in construction, the range of choices, the particular requirements of each material, and elements of the design of details. Extensive reference is made to the use of structural materials and their technological evolution. This is followed by a categorisation and a classification of load-bearing

structures and of the skin of the building. Furthermore, the elements that make up the skin and the environmental requirements which it must meet are examined. Part 2 introduces the key building materials, their mechanical properties, their physical limits and their compatibility in construction. It analyses their forming and processing techniques, as well as elements of their specification. In addition, each report methodically attempts to develop criteria for their use, as well as to discuss alternative approaches based on issues of economy, regulations and the image of the end result. Finally, part 3 provides information on the design management of the architectural project in the established practices, the approach and design rendering by hand and through CAD, and the specific requirements of integrated information assembly based on a variety of established practices and the requirements of regulations.

