Record Nr. UNINA9910483317503321
Autore Bustillo Revuelta Manuel

Titolo Construction materials : geology, production and applications / /

Manuel Bustillo Revuelta

Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2021]

©2021

ISBN 3-030-65207-6

Edizione [1st ed. 2021.]

Descrizione fisica 1 online resource (IX, 602 p. 712 illus., 696 illus. in color.)

Collana Springer textbooks in earth sciences, geography and environment

Disciplina 624.151

Soggetti Geotechnical engineering

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di contenuto Introduction -- Dimensional Stone -- Aggregates -- Portland Cement

-- Lime -- Gypsum Products -- Concrete -- Mortar -- Ceramic Materials -- Metals and Alloys -- Bituminous Materials --

Geosynthetics and other Plastics -- Wood and Cork -- Construction

and Demolition Waste (CDW).

Sommario/riassunto Construction Materials is a comprehensive textbook covering all raw

materials and products related to the construction processes, and not only those applied to building structures. The book is organized to help readers achieve competent knowledge about construction materials. At the beginning of the book the author offers the general concepts. definitions, and standards adopted worldwide for these materials to be used along the book. The central part of the text covers the primary construction materials required to manufacture concrete and mortars, the most relevant construction materials in the last century. Expressly, concrete and mortar are treated in detail in dedicated chapters per component. In addition, the author addresses other relevant materials in construction such as ceramic materials, metals and alloys, bituminous materials, and geosynthetic materials. Finally, since the construction industry is one of the largest single waste producing sector in the world, the last chapter outlines the main types and characteristics of construction and demolition waste (e.g. recycled aggregates). The book appeals to students but also professionals

interested in construction materials and construction and civil