Record Nr. UNINA9910299667703321 Autore Naboni Roberto Titolo Advanced Customization in Architectural Design and Construction / / by Roberto Naboni, Ingrid Paoletti Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2015 **ISBN** 3-319-04423-0 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (174 p.) Collana PoliMI SpringerBriefs, , 2282-2577 Disciplina 690 Soggetti Building—Superintendence Construction industry—Management Construction superintendence Computer-aided engineering Manufactures Design **Construction Management** Computer-Aided Engineering (CAD, CAE) and Design Manufacturing, Machines, Tools, Processes Design, general Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction -- The Third Industrial Revolution -- Advanced Machinery -- How to build (almost) anything customized -- Towards a 100% Customized Architecture -- Project credits. Sommario/riassunto This book presents the state of the art in advanced customization within the sector of architectural design and construction, explaining important new technologies that are boosting design, product and process innovation and identifying the challenges to be confronted as we move toward a mass customization construction industry. Advanced machinery and software integration are discussed, as well as an overview of the manufacturing techniques offered through digital methods that are acquiring particular significance within the field of digital architecture. CNC machining, Robotic Fabrication, and Additive

Manufacturing processes are all clearly explained, highlighting their

ability to produce personalized architectural forms and unique construction components. Cutting-edge case studies in digitally fabricated architectural realizations are described and, looking towards the future, a new model of 100% customized architecture for design and construction is presented. The book is an excellent guide to the profound revolution taking place within the fields of architectural design and construction, characterized by computational tools, advanced fabrication means and custom-made high-performance architecture.