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Titolo	Applied Building Physics and Materials Science of Natural Fiber Reinforced Plastics : A Guide for Study and Practice / / by Daniel Friedrich
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Nota di contenuto	The Construction Products Regulation 305/2011 -- Novel bio-based composites in construction -- On building physics in the building envelope in connection with LFK materials -- Thermal insulation in the building envelope -- Moisture protection in exterior walls -- Sound insulation in the building envelope -- Use assessment of WPCs in façades.
Sommario/riassunto	The transfer of theoretical learning content to the practical application of previously unregulated bio-based building materials is the focus of this technical book. To this end, planning and design principles of thermal, moisture and sound insulation are presented and demonstrated using new types of natural fibre-reinforced plastics (NFRP) in façade applications. Results from current research on NFRPs, and in particular on wood-plastic composites (WPC), are explained in a

comprehensible way and presented graphically. It is aimed at students of architecture and civil engineering and offers numerous exam-like exercises and sample solutions to reinforce the contents. Students learn the basics of building physics and practise their application to concrete problems in building design. The content Novel bio-based plastic composites in the construction industry The Construction Products Regulation 305/2011 Building physics in the building envelope in conjunction with NFRP materials Thermal insulation in the building envelope Moisture protection in exterior walls Sound insulation in the building Utility assessment of WPCs in the façade WPCs for plastic avoidance from an economic point of view The author Prof. Dr. Daniel Friedrich, born in 1972, is an engineer and economist with many years of industrial experience in building physics and materials technology. Today he researches and teaches at several universities on the topic of "natural fibre reinforced plastics". He is author and reviewer for publications on sustainable materials and research spokesperson for the EU COST ACTION CA16114 "RESTORE". The translation was done with the help of artificial intelligence. A subsequent human revision was done primarily in terms of content.