1. Record Nr. UNINA9910337590603321

| | |
|---|---|
| Autore | Huang Zujian |
| Titolo | Application of Bamboo in Building Envelope / / by Zujian Huang |
| Pubbl/distr/stampa | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019 |
| ISBN | 3-030-12032-5 |
| Edizione | [1st ed. 2019.] |
| Descrizione fisica | 1 online resource (304 pages) |
| Collana | Green Energy and Technology, , 1865-3529 |
| Disciplina | 624.1897<br>721.044997 |
| Soggetti | Sustainable architecture<br>Building materials<br>Sustainable development<br>Building construction<br>Sustainable Architecture/Green Buildings<br>Building Materials<br>Sustainable Development<br>Building Physics, HVAC |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | Introduction -- Material Hygrothermal Properties Test -- Hygrothermal Performance Assessment on Building Component and Enclosed Space -- Building Envelope Hygrothermal Performance Optimization in Hot and Humid Climate Region -- Conclusion. |
| Sommario/riassunto | This book offers a comprehensive overview of the use of bamboo in building industry. It systematically demonstrates bamboo's utility in terms of its properties, describing the material properties of typical industrial bamboo products, and discussing their performance evaluation and optimization as building components and in the creation of building envelopes. The book also includes examples of the high-value utilization of bamboo forest resources. Further, it examines how building performance may be affected by conditions such as climate. Including insights from material science, construction design, building physics and building climatology, the book also provides data |

obtained from technology and market status investigation, laboratory test and the computer simulation. This book appeals to scientists and professionals, as it introduces and tests various bamboo products, demonstrating the advantages and disadvantages for each one. The book is also a valuable resource for civil engineers and students interested in this unique plant material and its application in the building industry.