

Bamboo culm structures: traditional and innovative applications

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ABSTRACT

Nowadays, bamboo, as a readily available, inexpensive, and renewable raw material is increasingly used in construction in more than 50 different countries around the world. In this context, the use of bamboo culm for structural applications is one of the key concepts increasingly grown over the past few decades. This is motivated by the fact that regardless of being a rough-and-ready (low-tech) material, round bamboo culms are found to be easy to implement and capable of yielding architectural and structurally high-performing light-weight constructions and building designs. In this study, we aim to review the effectiveness of this organic material in different structural systems, and the recent state-of-the-art methods for constructing with bamboo.

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