

Makhaly BA

Formulation and Thermomechanical characterization of raw earth, stabilized with lime and reinforced with Typha fiber

The use of raw earth materials has been experiencing renewed interest in our cities for some time, especially to reduce environmental impacts and improve the thermal comfort of buildings. But their use for the realization of social housing faces a number of problems related to the unsustainability of the construction and the relatively high cost of constructions with BTC (Brick in Compressed Earth) which are currently proposed. To remedy these constraints, research is being carried out on bricks stabilized with slaked lime and adapted to local materials to find formulas of good quality and at low cost. The general objective of this research is the valorization of local materials to arrive at a generalization of their use by a formulation and a thermomechanical characterization of the earthlime-fibers composite.