

Determination of the mechanical and thermal properties of the Compressed Earth Block (BTC) reinforced with plant fibers, namely corn cob



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ABSTRACT

Sustainable development finds its full meaning in the sense that it promotes the use of renewable resources, available in sufficient quantity to meet the diverse needs of a society in the present and in the future. This concept includes social, economic and environmental factors which must all be taken into account because they are decisive in the absolute availability of the resource.

The cob is the part of the maize which bears its seeds and which, after shelling, is thrown away as vegetable waste. Corn is a food grain of the Gramineae family, whose tight kernels on a long cob are rich in sugar and gluten. This plant grown in Africa and around the world whose use of its different parts is varied.

Corn was probably domesticated in southern or central Mexico.

In recent years and in the context of the need to use renewable resources, the use of locally available raw materials has literally exploded, particularly in the field of construction. At the origin of the research, we find first of all the desire to valorize the corn cob. It is dried and then

KEY WORDS :

Compressed earth, corn, corn cob flour, mechanical and thermal properties, conductivity.

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