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## **The Use of Limestone Blocks in a New Masonry Technology**

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### **Abstract**

The present study aims to contribute to the knowledge of the mechanical properties of limestone blocks extracted from mines in the Republic of Moldova and used in a new masonry technology. The initial shear strength is examined based on laboratory work carried out on 5 samples from each of the 3 mines in different areas of Moldova. The strength calculation of the proposed masonry technology is carried out based on the standards for load-bearing walls and corresponds to the requirements. The results showed that Moldovan limestone blocks have high mechanical properties. The proposed masonry technology is based on the use of local materials and to increase the strength, instead of steel mesh, fibreglass mesh and epoxy resin will be used, which can be implemented in the Republic of Moldova. This research based on the use of local materials is significant for the development of the construction technology branch in Moldova.

*Keywords: limestone blocks, masonry technology, local materials*