

Survey research on the Tabique constructions in the *Associação de Municípios da Terra Fria do Nordeste Transmontano*

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ABSTRACT

Tabique is one of the main Portuguese traditional building techniques which use, basically, natural and local building materials such as earth and timber. A tabique building component, such as a wall, is build up using a simple timber structure covered on both sides by an earth based mortar. The earth based mortar has an important role in this building system technology since it not only protects the internal timber structure, but it also acts as finishing. The use of earth based mortar has the advantages of being abundant, natural, local and recycled, which gives to this technique a special importance in the sustainability context. This traditional building technique has an expressive incidence in the region of Trás-os-Montes and Alto Douro, Portugal, which force the development if this survey. The scarcity of scientific studies concerning the constitution and properties of partition walls in this region motivated this research work. Considering the extent of Trás-os-Montes and Alto Douro region and the spread distribution of its constructions, it was divided into more manageable areas for this work. They are the six Municipalities Associations, namely: Alto Tâmega, Terra Quente Transmontana, Terra Fria do Nordeste Transmontano, Vale do Douro Norte, Vale do Douro Sul and Douro Superior. This research work is focused on the Municipalities Association of Terra Fria of Nordeste Transmontano. In this survey, a representative number of constructions where selected for analysis. Experimental characterization was made in material samples collected at those constructions, in terms of: finishing texture, chemical and mineralogical composition of coating materials, filler commonly used, wood species identification, and nails hardness.

Keywords: *MACROBUTTON MACROBUTTON Tabique in existing constructions in Trás-os-Montes e Alto Douro; research survey; materials characterization.*

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