

Building Details of a *Tabique* Dwelling in *Trás-os-Montes e Alto Douro* Region

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ABSTRACT

Tabique is one of the main Portuguese traditional building techniques which use earth as a building material. In general, a *tabique* building component is formed by a simple timber structure covered by an earth based mortar on both sides. The mortar has an important role in this system because it protects the internal timber structure as well as it is a coating. *Trás-os-Montes and Alto Douro*, is the northeast region of Portugal and it is rich in terms of *tabique* heritage construction. Meanwhile, previous research works have shown that the existing *tabique* constructions, in this region, show a generalized advanced stage of deterioration. This aspect associated to the fact that there is still a lack of scientific studies done in this field motivated this research work, which its main objective is to identify and to understand the structural system of *tabique* dwellings. A two storey *tabique* dwelling located in *Lamego* Municipality, near *Douro* River, in the UNESCO classified heritage area, is used as reference in this study. Building details of the original applied structural system solutions are shown and described. The adopted connection solutions between structural components are some of the above building details which are introduced and described. Finally, the conservation stage of these elements is also analysed.

KEYWORDS

Tabique, building detail, raw materials, traditional building techniques, EC5

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