

# The accomplishment of Portuguese Thermal Code exigencies in old housing buildings' interventions

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**Abstract.** The energetic certification system was implemented in Portugal in 2006, with repercussion after 2008, and motivated by the transposition of European Energy Performance Building Directive (EPBD) from 2002. The system was reviewed in 2013, after the EPBD recast in 2010. The new legislation came up with restrictive parameters in terms of constructive solutions in order to decrease the energetic consume and Greenhouse Gas Emissions (GGE) from built environment. These parameters, such as U-values for example, are presented through reference and maximum values, and is mandatory that the analyzed building present a nominal cooling and heating needs inferior than a reference building. The thermal code is not mandatory for some buildings, considering some specific characteristics, and are an exception to the norm. It is possible not to apply it in the situation when the code compromises traditional buildings in terms of architectural value and/or patrimonial interest. The aim of this work focused on the analysis of some interventions, the existent solutions and the intervention actions, in old buildings where the thermal code was not applied. These data were compared with the thermal code exigencies in order to understand what extra efforts are required in order to accomplish the reference values and its implications in buildings architectural characteristics as well as its impact in patrimonial relevance and value.