Social Housing and Its Pathological Manifestations: A Case Study in Piumhi, Brazil

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Abstract – Due to the increase of the deficit of Brazilian social housing in the last years, many actions from public politics were conducted by the Federal, State and municipal governments, as the “My Home My Life” (MCMV) program, considered a solution to reduce the deficit. In Piumhi-Brazil 434 houses were built, where several pathologies were identified in most of the buildings, what contributes to reduce the quality of the life of the inhabitants. This research aims to study the quality of the buildings and presents a proposal of an initial BIM model of a building. This proposal sets an architectonic design that reaches criteria of housing, accessibility and sustainability. 273 houses were visited in 6 different housing estates in the municipality, what enabled to evaluate the conditions of the buildings. Based on the evaluation of questionnaires an architectonic design was developed considering the basic requirements from the inhabitants, updating the proposal of the standard constructed, using the software Revit for a 3D model. It is expected that the model proposed contributes to reduce the pathologies and to increase the quality of the buildings.

Keywords: Pathological Manifestations, Social housing, Piumhi-Brazil.