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ANALYSIS AND DEFINITION OF RESTORATION STRATEGIES WITH H-BIM APPLICATIONS. THE CASE STUDY OF VITTORIO GIORGINI'S "CASA ESAGONO" IN BARATTI, ITALY

Denise ULIVIERI ^{a*}, Stefania LANDI ^{b*}, Cristina PARDINI ^c, Marco Giorgio BEVILACQUA ^d,
Massimiliano MARTINO ^e, Marco DEL FRANZIA ^f

^a Prof. University of Pisa, DESTeC (Department of Energy, Systems, Territory and Construction Engineering),
Largo Lucio Lazzarino, 1, 56122 Pisa, Italy, ORCID 0000-0001-6173-927X

*E-mail address: denise.ulivieri@unipi.it

^b Eng. PhD; University of Pisa, DESTeC, Largo Lucio Lazzarino, 1, 56122 Pisa, Italy, ORCID 0000-0002-3822-4451

*E-mail address: stefania.landi@ing.unipi.it

^c Eng.; University of Pisa, DESTeC, Largo Lucio Lazzarino, 1, 56122 Pisa, Italy

^d Prof; University of Pisa, DESTeC, Largo Lucio Lazzarino, 1, 56122 Pisa, Italy, ORCID 0000-0002-6063-0333

^e Arch.; University of Pisa, DESTeC, Largo Lucio Lazzarino, 1, 56122 Pisa, Italy

^f Arch.; B.A.Co (Baratti Architettura e Arte Contemporanea) Association, Via X Settembre, 15, 57025 Piombino, Italy

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Abstract

This contribution is focused on the "Casa Esagono" realized in 1957 by Vittorio Giorgini in Baratti (LI), Italy. The research objective is to lay the foundations for a restoration plan of this experimental wooden architecture, which is now in precarious conditions due to its location near the sea, and whose constructive features, has always raised great questions about the technical feasibility of a full restoration. The paper describes the workflow for the implementation of the H-BIM model, aimed to organise all the data deriving from the historical and on-site research, and the restoration programme. The historical analysis about the house and the architect was the basis for the geometric survey and the analysis of building materials. All building components were subjected to visual analysis aimed to identify deterioration forms. The proposed conservation approach aims to maintain as much of the original elements as possible, while increasing their durability. H-BIM revealed to be the ideal tool to manage the entire restoration process, whose ultimate goal is to celebrate Giorgini's work, to exploit the potential of the house as a cultural attraction.

Keywords: Casa Esagono; Conservation; H-Bim; Modern Architecture; Vittorio Giorgini; Wooden architecture.