ABSTRACT

THE DISSERTATION OF: KAROL POCHYBELKO "ASSESSMENT OF SELECTED FACTORS INFLUENCING ON THE QUALITY IN HOUSING CONSTRUCTION"

The dissertation presents the results of research on the identification of factors and determining their impact on high quality in construction. A critical review of the literature was made in the field of defining the role of quality in a construction company. The determinants of responsibility of persons who are participants in the investment process in the context of ensuring high quality were also defined. The stages of each investment project have been identified. The main goal of the work was achieved by the author's identification of factors influencing high quality in construction. In addition, on the basis of the collected data on the completed construction investments, a database structure was developed, and then a quantitative and objective analysis of defects occurring in 8 residential buildings built in 2017-2020 was carried out. On the basis of a database of 9362 reported construction defects, the types of defects most frequently and rarely occurring in residential premises and common areas were determined. The list of types of faults is presented in terms of their percentage share in all identified faults. Based on the performed calculations and statistical analyzes, it was determined which factors were the most and which were the least important. Then, the factors were compared, both in terms of the significance of their impact on the achievement of high quality in construction and the strength of this impact. It was determined which of the factors are the most important from the perspective of each position and the length of experience in construction work.

As a result of the conducted research and analyzes, interesting results were obtained, which are important from the point of view of managing a construction company and the investment process, supervising construction works and broadly understood construction knowledge and practice. Precise answers to the questions were found: how to influence the individual stages of the project, what decisions should be made by the management in order to obtain the highest quality of the product, which is the building object, despite so many factors, both dependent and independent on the participants of the construction process.

The doctoral dissertation ended with conclusions that confirm the achievement of the set scientific goals and set the directions for further research on the issue related to the quality and minimization of defects in housing construction.

Keywords: housing construction, quality, quality factors, defects in residential building, technical acceptance,

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