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PROPOSITION OF A METHOD FOR MEASURING AND ASSESSING THE GEOMETRY OF AN ARCHITECTURAL OBJECT WITH FACADE COVERED WITH THERMAL INSULATION LAYER

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The negative effects of underground mining activities are often observed in the form of deformation of the land surface and the resulting damage or destruction of material substance, such as buildings. Especially the latter is an important issue from the point of view of human health and life safety. The steps taken to monitor and assess this type of threat are mainly focused on the use of surveying techniques. The submitted work presents the results of an experiment to evaluate the author's method of measuring and estimating the deformation of an architectural object. A combination of measurement techniques, namely laser scanning and total station measurements, was used to achieve the main objective of the work. It is also worth noting that the proposed measurement solution effectively eliminates the presence of a thermal insulation layer, preventing direct measurement of the research object solid architectural structure (a two-storey building with commercial use located in the zone of influence of underground mining activity) based on characteristic points.