Application of Modern Technologies in Assessing Facade Condition of Building Structures

Marko Markovic, Mirjana Laban, Tatjana Kuzmic, Marijana Vujinovic and Suzana Draganic (Serbia)

Key words: Deformation measurement; Engineering survey; Laser scanning; Photogrammetry; Urban renewal

SUMMARY

After many years of exploitation, the building structure itself in most cases still fulfills its intended purpose. However, its exterior, especially the facade, most often does not meet the quality requirements, whether as a result of the process of deterioration or changed requirements regarding the technical characteristics and appearance of the object. Exploring the possibility of restoration of the building exterior requires determining the technical condition of the facade. In the modern practice of facade inspection, there are several technologies of data acquisition and processing in order to optimize the process itself: to obtain the best possible knowledge about the degree of facade's deterioration and damage, with minimal time consuming. With the development of modern instruments and sensors, as well as the rapid growth of data processing capabilities in various software solutions, the approach to the realization of facade inspection projects has changed. This paper will review the technologies used in the facade inspection process with a focus on how data is collected.

Application of Modern Technologies in Assessing Facade Condition of Building Structures (10678) Marko Markovic, Mirjana Laban, Tatjana Kuzmic, Marijana Vujinovic and Suzana Draganic (Serbia)