Automatic project check based on BIM Objects

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Abstract

The purpose of this paper is to summarize the ways of approaching the "BIM Object" as the main element of automatic verification, automated compliance check or automated code check (ACC), comparing the models adopted for the association of the elements, identification methodologies and functionalities. A selection of 25 articles, published from 2018 to 2022 and available online, were reviewed to analyze how the object was treated, the resources used for recognition and analysis, as well as the programming tools and the results of the proposed verification. Overall, the publications presented valid tools, but were unable to check through a project completely, demonstrating the need for more evolved tools and processes. The involvement of stakeholders (suppliers, users and public authorities) also proves to be fundamental for the new proposals to adapt to real needs and thus gain conditions for use and development..

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