STRUCTURAL SAFETY ANALYSIS OF THE BUILDING GLASS BANK IN MOSTAR

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Abstract: This paper presents the approach and methodology of structural safety analysis of the building so called "Glass Bank" in Mostar. This is a typical reinforced-concrete skeletal structure combined with reinforced-concrete wall panels. As the structure was built over 20 years ago and has never been fully put into operation, the analysis of safety of its structure appeared to be necessary. The structure has 11 stories in total, and in its ground plan it is divided by dilatations into three statically separate units. It was possible comprehensively to establish the present condition of its structure on the basis of experimental, field and numerical methods and activities, as well as the analysis of its existing technical documentations. Results of the analysis are presented in this work, with special emphasis on observed defects that should be repaired in order that the structure could serve its purpose.

Key words: structure safety, reinforced concrete, experiment, numerical procedure.

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