

Normative Problems of Calculating Dynamic Parameters of Buildings and Structures

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key words

buildings and structures, natural vibrations, dynamic characteristics, determination of parameters

We discussed the theoretical foundations of computational modeling of dynamic characteristics of building structures in the article. There are objective reasons for slowing down its implementation in civil construction, we have shown. On the basis of the theory and method of vibro-acoustic analogies by Prof. Hlystunov M.S. algorithms for calculating dynamic characteristics are obtained. The results of a critical analysis of GOST 34081–2017: Buildings and structures are presented. Determining the parameters of the fundamental tone of natural vibrations. In addition, we conducted comparative studies of the fundamental differences in the amplitude-frequency characteristics of real building structures and calculated materials of Appendix D to GOST 34081–2017.

We believe that to solve the existing problems, a significant modernization of higher education programs is necessary, starting with the course of higher mathematics and ending with General professional and special disciplines of the graduating departments in the profile Industrial and civil construction.

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