

# Basis of Assessment of Structural Robustness

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**ABSTRACT:** Recent developments of high-performance materials, construction technologies and methods of structural analysis enable to design increasingly complex and slender structures. Such structures incline to be vulnerable and their robustness is becoming an issue of a great importance. Submitted paper attempts to summarise findings concerning the assessment of structural robustness and provide background information on a risk-based decision making. It appears that a crucial task is to propose a definition of robustness, indicating which types of consequences should be included in the assessment of robustness. The numerical example reveals that it may be important to take into account effects of human errors and distinguish between local and global effects of adverse events. A risk-based approach seems to provide a useful tool for decision making concerning robustness measures.

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