

Literature Review on Progressive Collapse of Structures

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Abstract: *Progressive collapse is the collapse of all or a big part of a structure caused by damage or failure of a relatively small part of it. The wonder is of particular concern since progressive collapse is often (though not always) disproportionate, i.e., the collapse is out of proportion to the event that activates as per expansion in industry, the public are elaborate towards, new ideas to plan the structures with the irregularities in plan as well as in elevation. On other side structural engineer's aim is to provide the structure safe against all the forces. The structural engineer's role becomes challenging when such buildings which are irregular in plan as well as in elevation. All these structures are analyse and design as per Indian standard (IS800:2007, IS1893:2016) with all combination of loading. After that these structure are again analysis for progressive collapse. These types of analysis are considered i.e. linear static and non-linear static with load six case and critical location suggested by GSA guidelines. From this study following observation are made, as height of structure affect the collapse behaviour, as height increases progressive collapse decreases which is seen from D.C.R. values, joint displacement, and bending moment. Linear static analysis results are more conservative than nonlinear static analysis.*

Keywords: *Progressive collapse*

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