

عنوان مقاله:

PROGRESSIVE COLLAPSE ANALYSIS OF RCC STRUCTURES

محل انتشار:

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خلاصه مقاله:

The study aims to investigate the progressive collapse behaviour of RCC building under extreme loading events such as gas explosion in kitchen, terroristic attack, vehicular collisions and accidental overloads. The behavioural changes have been investigated and node displacements are computed when the building is subjected to sudden collapse of the load bearing elements. Herein, a RCC building designed based on Indian standard code of practice is considered. The investigation is carried out using commercially available software. The node displacement values are found under the column removal conditions and collapse resistance of building frame is studied due to increased loading for different scenarios. This simple analysis can be used to quickly analyse the structures for different failure conditions and then optimize it for various threat scenarios.

کلمات کلیدی:

progressive collapse, RCC building frame, moment, force

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