

عنوان مقاله:

Compare combination of lateral loads in nonlinear static analysis of progressive collapse in double steel structures

محل انتشار:

دومین کنفرانس بین المللی مهندسی و علوم کاربردی (سال: 1395)

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خلاصه مقاله:

One of the destruction in the last decade due engineers are responsible for designing projects has attracted, is progressive collapse. In this unusual loading due to malfunction, such as blows, crash, explosion and earthquake. A number of structural elements suddenly becomes corrupted and then all the members of the same failures of a structure in Germany began to deteriorate. In recent years various committees to review the mechanism, and its standards for presenting and promoting the design of progressive collapse. Among these committees can be America Department of Defense, General Services Department named America and European standards. It should be noted, in these regulations, the loss of the bearing capacity of the column as a phenomenon likely to abnormal loading the performance of the structure, is intended. In this research the first three steel structure system with dual side frame average flexural bearing and special coaxial bracing 5, 10 and 15 floors in Etabs 2013 design then use regulations GSA2003 and choose the alternative path load transfer method of structures described in the OpenSEES for three-dimensional modeling and stability analysis using nonlinear to examine structures in front of the default failure is progressive And the results of the non-linear stability analysis under uniform lateral loads and modal blend (distribution fits the shape of the first vibration-mood) compared with each other. After checking it was observed that nonlinear static analysis under modal load pattern will be more critical

کلمات کلیدی:

Progressive collapse, non-linear static analysis, the combination of lateral loads, double steel structures, regulations GSA2003

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