

Development and Evaluation of Removable Shear Link with Perforated Web

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Abstract : The objective of this paper is to investigate, through an analytical study, the behavior of both stiffened and un-stiffened removable shear link with perforated web considering different number and size of web openings. Removable shear link with perforated web is a novel shear link beam proposed to be used in eccentrically braced frame (EBF). The proposed link overcomes the difficulties during construction slab due to less cross-sectional areas of the link to control the plastic deformation on the conventional EBF with removable shear link. Finite element analyses were conducted under both cyclic and monotonic loading and from the results obtained design equations are developed.

Keywords : eccentrically braced frame, removable shear link, perforated web, non-linear FE analysis

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