Using Outrigger Systems from Steel Plates in Tall Reinforced Concrete Buildings

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Research Abstract

The aim of this research is to use thin steel plates as a replacement of the truss elements in RC tall buildings. The literature demonstrated that thin steel plate offers a high improvement in both resistance and ductility in comparison with using truss elements under lateral loading. However, most of the previous studies have introduced a steel plate to steel frames, whereas very rare works have been conducted on using steel plate in the existence of RC frames. Therefore, the performance of high-rise RC buildings in the presence of steel plates is one of the challenges of this research.

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