

## عنوان مقاله:

Cyclic Tests on the Internally Braced RC Frames

## محل انتشار:

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## خلاصه مقاله:

Directly-connected internal steel bracing of RC frames has received some attention in recent years, both as a retrofitting measure to increase the shear capacity of the existing RC buildings and as a shear resisting element in the seismic design of new buildings. Although its successful use to upgrade the lateral load capacity of existing Reinforced Concrete (RC) frames has been the subject of a number of studies, guidelines for its use in newly constructed RC frames need to be further developed. An important consideration in the design of steel-braced RC frames is the level of interaction between the strength capacities of the RC frame and the bracing system. In this paper, results of experimental investigations aimed at evaluating the seismic response of brace-frame system and the level of interaction between the bracing system and the RC frame are discussed. For these investigations, cyclic loading tests are conducted on scaled moment resisting frames with and without bracing. Test results confirm the ability of the bracing system to enhance the strength capacity of the RC frame while maintaining adequate ductility. They also provide an insight into the causes and the levels of interaction between the strength capacities of the bracing system and the RC frame.

## کلمات کلیدی:

Steel Bracing, Reinforced Concrete, Braced RC Frames, Cyclic Load Testing

## لینک ثابت مقاله در پایگاه سیویلیکا:

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