

## عنوان مقاله:

Seismic Evaluation of Hybrid Coupled Walls Building

## محل انتشار:

نهمین کنگره بین المللی مهندسی عمران (سال: 1391)

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## خلاصه مقاله:

Since the wind and earthquake forces in moderate to high structures are severe, the shear walls would have extreme dimension. One way to have a more efficient structural system is to coupling the walls This paper investigates coupling wall piers with steel coupling beams. Hybrid coupled walls (HCW) are comprised of two or more reinforced concrete wall piers connected with steel coupling beams. In this paper 12 15 and 18 story HCW system is designed following performance base design approach and is analyzed through push over analysis. This study is conducted to choose appropriate steel coupling beam with respect to the seismic evaluation of such systems, and it also investigates story displacement, coupling beam plastic rotation, push over diagram and concrete crushing at the base of wall piers The analyses show that hybrid coupled walls possesses sufficient stiffness, strength, and toughness for good performance in high rise building

## کلمات کلیدی:

Hybrid coupled walls, reinforced concrete, performance base design, seismic evaluation, push over analysis

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/165452>

