

عنوان مقاله:

A Comprehensive Review on the Structural Performance of Cold-Formed Steel (CFS) Shear Wall

محل انتشار:

دوماهنامه نخبگان علوم و مهندسی، دوره 8، شماره 4 (سال: 1402)

تعداد صفحات اصل مقاله: 10

نویسندگان:

مسعود مهدوی - نویسنده مسئول

عباس بابافجعی - نویسنده دوم

سیدرضا حسینی - نویسنده سوم

خلاصه مقاله:

Cold-Formed Steel (CFS) Structure has attracted the attention of civil engineers around the world for about two decades. Lightness, high execution speed, high flexibility of the structure, low weight of materials and lighter foundation compared to conventional concrete and steel structures, etc., are among its advantages. The reduction of the seismic force on the structure due to the weight reduction of the system compared to concrete and steel structures is one of the reasons that make this type of structure suitable for seismic areas such as Iran. In this research, one of the most widely used lateral load bearing systems has been studied and comprehensively evaluated with the help of the results of important studies conducted in the world, on the CFS shear wall. The present research is a review of the results and achievements of six important articles in the field of CFS shear wall, which have very good citation indices (H-Index and Immediacy Index) in structural engineering journals. Five of the reviewed articles are in Latin and one is in Persian. The results showed that the CFS shear wall is affected by factors such as the presence of covering (especially double-sided) of any kind (such as steel, wooden board and fiber), increasing the thickness of the covering, the presence of the OSB system (even in walls with openings) and reducing the dimensions of the opening.

They experience improvement in seismic performance as a result of increasing elastic stiffness and shear capacity

کلمات کلیدی:

.CFS Shear Wall, LSF Structure, OSB System, Shear Wall Cladding, Review Article

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1795866>

