عنوان مقاله:

behavior of composite shear walls under pure shear loads

محل انتشار:

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خلاصه مقاله:

the paper form of composite walling system composes of two layers of profiled steel sheeting with a plane concrete core. The behavior of such walls under inplane shear is important in order to use the system as a shear element in building. For numerical modeling of shear behavior of such walls under pure shear load we used finite element method utilizing software and results are compared to the tests done before. the main difficulty of modeling is making sheet -concrete interface with nonlinear behavior. inthis paper we show that coupled node method which provides full buckling of steel sheet with preventing slip between steel and concrete achieve reliable and accurate simulation of actual steel concrete interaction in such walls with better convergence in solutions.

کلمات کلیدی:

shear wall, reinforced concrete, ansys,composite

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