

Thesis Title

Free Vibration Analysis of Shear Wall-  
Frame Structures by Spline Finite Strip  
Method

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### Abstract

Free vibration analysis of shear wall - frame structures using spline finite strip method is studied. The frames are modeled as equivalent wall using equivalent wall properties. Both shear walls and frames are idealized as rectangular strip. Representation of displacement fields is the product of B-3 spline functions along the height of structures and the basic polynomial shape functions in the transverse cross section direction.

Numerical analysis results using modern spline finite strip method are reliable and in good correlation with those obtained using the finite element method and the finite strip method.