Analysis of Plates with Varying Rigidities Using Finite Element Method

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Abstract : This paper presents Finite Element Method (FEM) for analyzing the internal responses generated in thin rectangular plates with various edge conditions and rigidity conditions. Comparison has been made between the FEM (ANSYS software) results for displacement, stresses and moments generated with and without the consideration of hole in plate and different aspect ratios. In the end comparison for responses in plain and composite square plates has been studied.

 ${ { { Keywords: } ANSYS, finite element method, plates, static analysis } }$

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