

NUMERICAL ANALYSIS FOR MIMETIC DISCRETIZATION OF REISSNER-MINDLIN PLATE PROBLEMS

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We present a mimetic finite difference (MFD) method [3, 4] for the Reissner–Mindlin plate equations. Together with the source problem, the free vibration and the buckling problems are investigated. The method [2, 1] uses deflections and rotations as discrete variables and applies to very general polygonal meshes, even with non matching or non convex elements. We will present a convergence result for the method uniformly in the plate thickness and some numerical tests.

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