

ON HIERARCHIC MODELS FOR NONHOMOGENEOUS
ANISOTROPIC ELASTIC PRISMATIC SHELLS ¹

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(Received: 09.06.2003; revised: 01.09.2003; accepted: 01.10.2003)

Abstract

In the present paper static boundary value problems for nonhomogeneous anisotropic elastic prismatic shells are considered and corresponding two-dimensional hierarchic models are constructed. The existence and uniqueness of solutions to the obtained boundary value problems are proved and the relation of the models to the original three-dimensional problems is studied.

Key words and phrases: Static boundary value problems for prismatic shells, linear theory of elasticity, modelling error estimation.

AMS subject classification: 74K25, 65N30, 42C10.

¹Dedicated to the memory of Professor Victor Kupradze on the occasion of the 100th anniversary of his birth