

ON STATIC PROBLEMS OF ANTIPLANE STRAIN (SHEAR) OF ORTHOTROPIC NON-HOMOGENEOUS PRISMATIC SHELL-LIKE BODIES

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Antiplane strain (shear) of orthotropic non-homogeneous prismatic shell-like bodies is considered when the shear moduli depending on the body projection (i.e., on a domain lying in the plane of interest) variables may vanish either on a part or on the entire boundary of the projection. The dependence of well-posedness of boundary conditions on the character of vanishing the shear moduli is studied in the general case and in the particular case when the shear moduli have the following form

$$\mu_r(x_1, x_2) = \mu_0^r x_2^{\lceil r \rceil}, \quad 0 \leq x_2 \leq l, \quad \mu_0^r, l = \text{const} > 0, \quad r = 1, 2.$$