

UTILIZATION OF COMPOSITE MATERIALS IN SADDLE-SHAPE CABLE ROOFS

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A saddle-shape cable roof, which is formed by two orthogonal groups of cables joined with tensioned cables, is considered in the paper. The kinematical invariability of the roof achieved by prestressing the cables enables us to refuse from hard ferroconcrete slabs in the construction and to use light composite materials.

The main rational geometrical characteristics of the cable roof were ascertained by a numerical experiment for different materials of the cables, including composites.