

Construction techniques and technologies

CHOOSING THE OPTIMAL FOUNDATION SOLUTION FOR THE CONSTRUCTION OF A LOW-RISE RESIDENTIAL BUILDING IN THE CITY OF USSURIYSK

A.G. KNYAZEVA, K.S.KOTOVA, I.A. ZAKHARENKOVA

The article discusses the structural solutions of foundations for residential low-rise buildings of point construction in the Primorsky krai of Ussuriysk. Various types of foundations used in construction in difficult soil and climatic conditions were analyzed.

Keywords: difficult climatic and soil conditions, bored piles-racks with widening, prefabricated ribbon foundation, Primorsky Krai.

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CHOICE OF THE OPTIMAL MATERIAL OPTION FOR ENCLOSING STRUCTURES IN PRIMORSKY KRAI

A.G. KNYAZEVA, K.S.KOTOVA

The article discusses the design solutions of enclosing structures for residential lowrise buildings of point development in the Primorsky krai of Ussuriysk. Various materials and products used for these design solutions during construction in difficult soil and climatic conditions were analyzed.

Keywords: complex climatic and soil conditions, materials of enclosing structures, Primorsky Krai.

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TYPOLOGY OF PREFABRICATED BUILDINGS

R.S. SUKHAREV

This article examines the history of development and typology of prefabricated buildings and structures, their advantages and disadvantages. Construction technologies are considered based on the fact that the main criterion for choosing a technology for the construction of prefabricated buildings along with the price is the speed of construction, which reduces the construction time.

Keywords: prefabricated buildings, frameless buildings, block container.

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Architecture and urban planning

FEATURES OF THE MODERN DEVELOPMENT OF BIONICS IN ARCHITECTURE AND CONSTRUCTION

YA. A. ZOLOTUKHINA, E.E. PROKSHITS, O.A. SOTNIKOVA, S.A. BORISOV

The paper considers the issues of studying the directions and principles of the development of architectural bionics, the application of knowledge about natural forms to solve technical problems, finding the correspondences of biological systems to construction and technical structures and facilities, the analysis of known architectural structures from the point of view of architectural bionics

Keywords: bionic architecture, interaction of architecture and nature, nature-like technologies, analogues of life in "inanimate" nature

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FRACTALS IN ARCHITECTURE AND URBAN PLANNING

E.E. PROKSHITS, YA. A. ZOLOTUKHINA, O.A. SOTNIKOVA, D.A. GUTKOVICH

The paper considers the issues of shaping in architecture based on the principle of constructing fractal structures in the design of buildings and structures. In this study, attention is paid to the consideration of various fractals. The interrelation and their influence on the shape and structure of the structure are established.

Keywords: fractals, nature-like technologies, architecture, urban planning

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CONCEPT OF REVITALIZATION OF A SEAPLACE HANGAR IN PAVIA, ITALY

A.A. TSENTKOVSKAYA, E.A. POLYAKOVA, E.E. PROKSHITS, YA. A. ZOLOTUKHINA

A variant of revitalization of the abandoned base of hydroplanes is being worked out. The goal is to make Idroscalo one of the busiest and most popular places for the local community. At the same time, the idea of the historical facade of the building should be preserved. Create a multifunctional exhibition complex that will positively affect the development of the city.

Keywords: hydroplane, bases, reconstruction, revitalization

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LANDSCAPE DESIGN, LANDSCAPING AND COLOR ARE IMPORTANT FACTORS OF PSYCHOLOGICAL STABILITY IN UNCOMFORTABLE NORTHERN CONDITIONS

K.V. NOVGORODSKAYA, E.E. PROKSHITS, YA. A. ZOLOTUKHINA

The influence of climatic conditions on northern cities, the provisions of the methods of landscaping and landscaping, the role of the coloristics of the city in the life of the population is considered.

Keywords: far north, landscaping, coloristics, cold climate.

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Management in technical systems

CALCULATION OF THE ECONOMIC EFFICIENCY OF THE USE OF ENERGYEFFICIENT STAINED GLASS STRUCTURES

E.A. SHEVCHENKO, T.V. BOGATOVA

The main mechanisms for increasing the energy efficiency of window structures of a public building are considered. The relevance of studies of the influence of resistance to heat transfer of translucent structures on the consumption of thermal energy of a building is substantiated.

Keywords: energy efficiency, resistance to heat transfer, heat loss, translucent structures

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Materials technologies

ENERGY-SAVING BUILDING ENVELOPES FOR RESIDENTIAL LOW-RISE BUILDINGS

AGEENKO A.S., AMONOV S.U., ABDULKHAKOV D.S.

A brief overview is given in which energy-saving structural solutions of enclosing structures of low-rise buildings are considered. The requirements for energy-efficient enclosing structures are given. Methods for insulating the outer walls of residential low-rise buildings are presented.

Keywords: energy saving, energy efficient building, low-rise buildings, external enclosing structures, heat loss, thermal insulation.

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