

ECOTRENDS IN ARCHITECTURE AND CONSTRUCTION OF THE XXI CENTURY

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Abstract

This paper proposes and argues materials and solutions that should be implemented in ecological buildings and structures.

Keywords: environmental solutions, wood materials, insulation, environment

Анотація

У даній роботі запропоновано та аргументовано матеріали та рішення, які варто впроваджувати в екологічних будинках та спорудах.

Ключові слова: екологічні рішення, деревинні матеріали, утеплювачі, навколишнє середовище

The purpose of the work is to propose the use of eco-trends, justify their feasibility and benefits.

Today there is a design and construction "green boom" in the world. The latest technologies, design solutions, cost-effective materials, environmental trends are displacing traditional buildings and structures. Therefore, there is a need to build comfortable, budget housing.

Based on past experience, architects and designers need to pay close attention to the environment.

I offer environmental solutions, materials and ideas that already exist in the construction market and that should be respected, because behind them is our future:

- 1) it is necessary to use wood materials for walls and floors, as this will reduce the total cost of construction by 0.8%;
- 2) the use of renewable energy sources in heating, ventilation and air conditioning systems, will help save on energy;
- 3) insulation from fiberglass, polyurethane foam, ecowool, cotton, flax, moss and other natural materials. They have excellent permeability, heat and sound insulation;
- 4) use of windows with wooden frames. They are environmentally friendly, do not emit harmful substances, as well as durable;
- 5) installation of a two-type water system for consumption and technical for domestic purposes. This will save natural resources;
- 6) installation of biological wastewater treatment will reduce environmental pollution;
- 7) the use of vertical green walls, as well as landscaping interior and exterior will make the house aesthetic and environmentally friendly.

Conclusions

The dynamic development of construction requires quality, budget housing that combines environmental friendliness, comfort and energy efficiency. Taking into account and implementing environmental innovations in the initial stages of construction will make it possible to create an architectural and planning structure of buildings and structures in the long run.

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