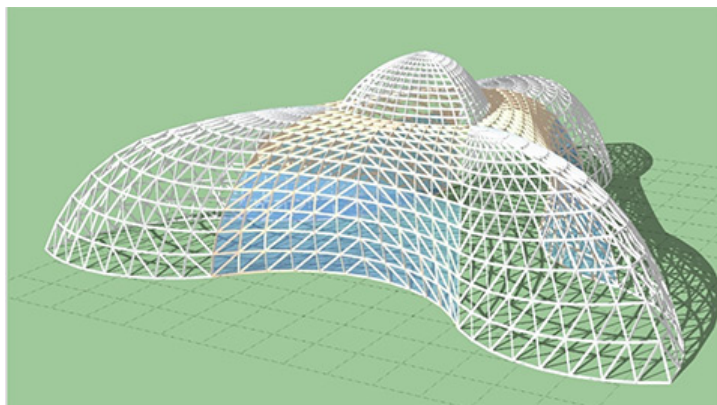


SibFU scientists offered comfortable houses to live in the Arctic

The team of scientists from the SibFU School of Engineering and Construction consisting of Naum Abovsky, Lev Endzhievsky, Ivan Inzhutov, Sergey Amelchugov and others over the past 20 years has developed more than 50 innovation technologies of building wooden prefabricated houses for the Arctic and Zapolyarniy areas that will create comfortable conditions for living in the harsh climatic conditions.



The complex of the construction technology is the know-how in many ways. Wooden prefabricated modules are more mobile comparing with the currently used structures of simple and laminated veneer lumber, which facilitates their logistics to the installation and assembly site. In addition, their production is much more economical: it is expected that after the setting for mass production, **the cost of building a house will be 2-4 times lower than the current prices**. The modules are made from environmentally friendly materials so they can be recycled easily in contrast to metal and concrete structures, which are all over the Russian North after intensive construction in the Soviet period. Moreover, arctic homes are planned to be equipped with intelligent systems (analogue of "smart home"), incinerators, micro conservatories, and multi-stage energy use.

These houses were designed for professionals involved in the development of the northern territories, who could be with their families during their long expeditions. According to Doctor of Technical Sciences Sergei Amelchugov, maintenance of the house cheaper than usual by 60 %.

At the moment, the construction technologies of the SibFU scientists are still in the process of registration of intellectual property rights, and expect further implementation into real life processes, which requires establishing of the production system of the proposed houses. Today, Scandinavian technologies (Norway, Denmark, and Finland) are often used for the construction in the Arctic. However, the climatic and economic conditions in these countries are significantly different from the Russian ones. The key difference between Russian and foreign Arctic housing is the amount of practical knowledge based on years of tests and observations, which have been focusing on **creating the most comfortable living conditions and ensure the safety of people**. Using the innovative construction of the SibFU experts could significantly improve the quality of housing in the North and replace imports with the Russian technology. Especially as foreign countries have expressed their interest in the Russian wooden modular construction in order to use it for oil and gas producers housing in the North.

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