



## MATERIALS

### *Kulikova N.G.* **Modern technology of facade cladding**

Article deals with modern technology of facades and buildings facing with the use of one of the new materials: decorative tile – flexible stone. It is elastic, flexible coating consists of water-acrylic copolymers, natural marble chips of various fractions and auxiliary additives. Product is manufactured by the «Attica» company (p. 8).

### *Andrey Zherebtsov.* **PENOPLEX® Plates as an effective filler of buildings and structures expansion joints**

This paper analyzes properties and competitive advantages of PENOPLEX® plates in various types of expansion joints (p. 10).

### *Irina Kudrina.* **Office instead of a factory, or Criteria for the selection of materials for the facade**

At the turn of 1990-2000, the preferred option to rent offices were space research institutes and renovated apartments. Gradually, a modest shift to business sites came «offices with a claim» – a lot of glass, concrete, open space. And in our time, and altogether there was a fashion for building with a history, in which the suit premises popular loft style. And here in the place of the favorite of the office market expect the former factory buildings. This is the topic of the paper (p. 13).

## EQUIPMENT

### *Redko Yu.B.* **Plasterboard soundproofing walls**

A methodology and the experimental data of frequency characteristics of sound insulation of some types of internal frame and plasterboard walls are proposed on the basis of information analysis (p. 17).

## TECNOLOGIES

### *Solomakhin A.S., Kamenev Yu.A.* **The application of non-autoclave polymer cement foam concrete and supporting frame made of lightweight metal in heat-insulating constructions of buildings and structures coverings**

This paper describes the most common design of buildings flat coverings insulation and constructions using mineral wool materials. The disadvantages of this structure: high water absorption, low compressive strength, a loss of a given size over time. The modern, operational quality construction insulation flat coverings with application of polymer-cement non-autoclave foam concrete, which has advantages over mineral wool insulation is considered. Calculation design of thermal insulation of light steel thin-walled designs of flat coating of buildings and structures is implemented. The substantiation of the durability

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Копылов И.А. Главная строительная выставка России MosBuild-2016: подводя итоги..... 44

of structural elements made of galvanized profiles in adverse conditions is analyzed (p. 21).

*Kotov A.A., Kremenchuk E.I.* **Modeling of metal profiled sheets in final element complex**

Object of this research is the behavior under the loading of trapezoidal metal sheet used as load-carrying structure in designing coatings of buildings and structures. The work purpose is the selection of the optimum form of the rod element section modeling trapezoidal sheet in the construction design. Thin-sheeled rod with I-shape section hinged to the underlying construction with no possibility to rotate free in coating plane turned out is the most equivalent to the basic construction (p. 24).

*Sidorov A.L.* **The role of the enclosing structures in the formation of buildings climate**

Questions of comfort for the construction and heat protection of buildings in combination with heating ventilation systems as well as due to the properties of construction materials are considered in this article (p. 29).

#### INFORMATION

*Maria Davydova.* **How to save the country house from fire?**

In the last few years in many regions of Russia the summer season becomes really hot time for fire-fighters. The change of climatic conditions, sometimes the abnormal heat and often criminal negligence of the inhabitants themselves are often the causes of ignition of private country houses located in the immediate proximity to the forest zones. How to protect your home from fire and minimize the damage in case of fire? This article provides answers to frequently asked questions from the owners of suburban property (p. 33).

*Irina Orlova.* **Flat roofs: what's new?**

This paper describes new technologies that can be applied in the reconstruction of apartment houses roofs. Article informs about the advantages of modern solutions as well (p. 36).

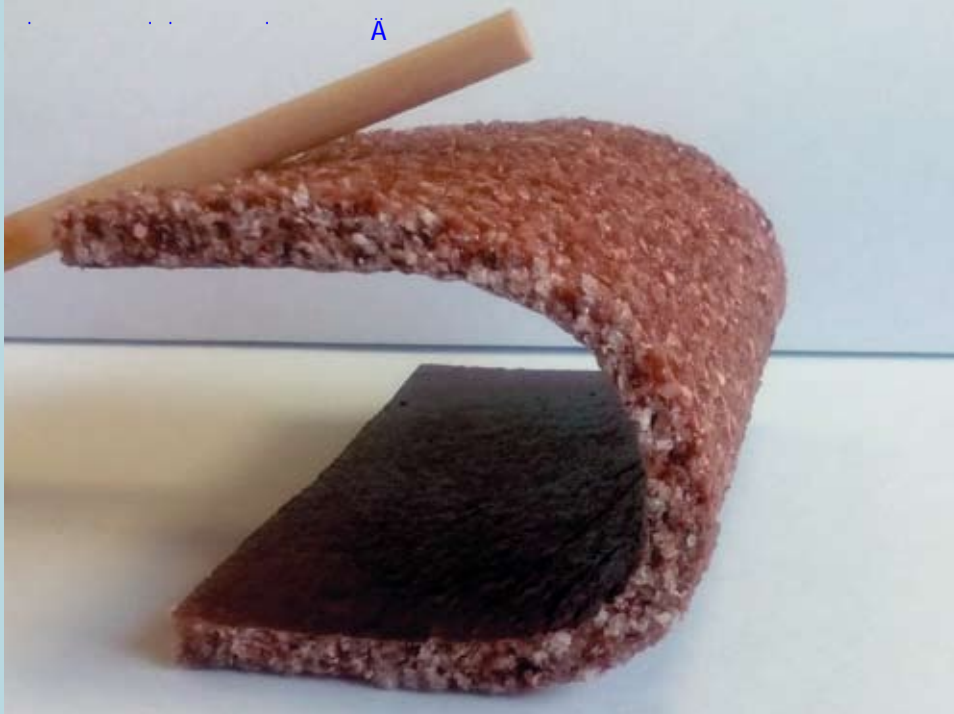
**Merging with nature. Home-invisible**

Article is the story of the architectural features of buildings, able to blend in with the environment thanks to the use of an effective method of «invisible» architecture – they are lined with a mirrored surface (p. 38).

#### EVENTS

*Kopylov I.A.* **MosBuild-2016 is the main construction exhibition in Russia: summing up**

The largest Russian exhibition of building and finishing materials MosBuild was held traditionally in Moscow «Expocentre». Publishing house «Kompozit XXI vek» tells about technologies and materials of some companies-exhibitors, presented their products at the show (p. 44).



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