

MODERN INFORMATION ON THE PRODUCTION OF MULTI-LAYER REINFORCED CONCRETE PANELS

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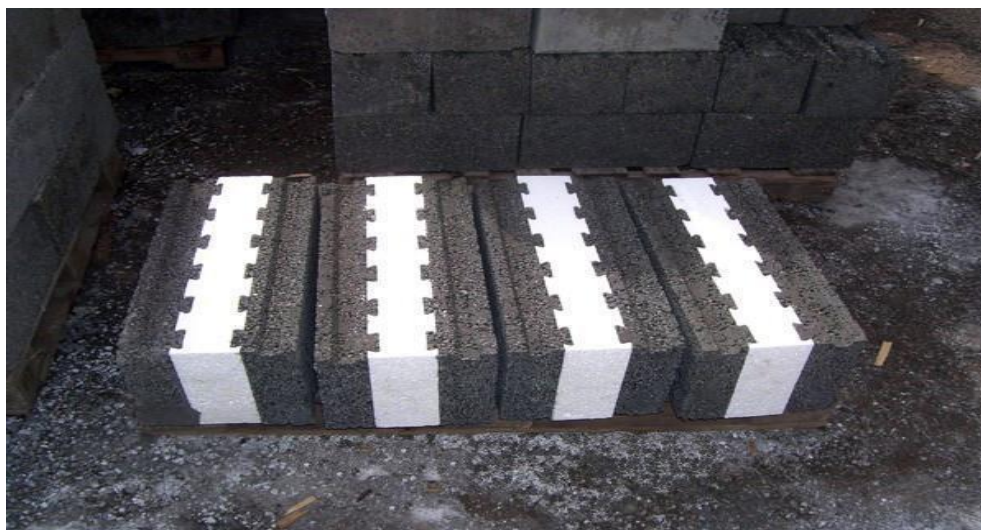
ABSTRACT

Multi-layer panels should be used and improved in order to unify the construction, accelerate the construction and commissioning of residential buildings. Currently, the demand for energy-efficient, economically efficient materials and products in the field of construction around the world is increasing. In addition, rational use of metal and heat-insulating materials used for reinforced concrete structures is currently a topical issue.

Keywords: multi-layered, energy-saving, heat-insulating, cement.

INTRODUCTION

Today, the conservation of consumable resources and fuel energy resources is an important issue for every professional. Builders and manufacturers of building materials are no exception. Among the building materials, there are building materials, blocks, constructions that save heat energy resources and retain heat.



A three-layer concrete block with a middle layer of expanded polystyrene.

In most cases, multi-layer panels can be seen as three-layer panels. Three-layer panels can have different appearances. For example, two sides are metal, and the middle part is a heat-insulating material. Another type is heavy concrete on both sides with a heat insulating material in the middle (light concrete, arbolite concrete, penoporisterol, etc.). Multi-layer walls can be found today in monolithic form. In many developed and European countries, we can see that three-layer wall panels are used in the construction of single-story and multi-

story buildings. In addition to three-layer wall panels, you can see monolithic wall-like three-layer walls made directly in construction facilities. In the case of monolithic wall panels, the heat-retaining layer, which does not transmit heat and cold well, is located on both sides of the wall, and the middle part can be a layer made of heavy concrete that carries the main load. On the contrary, in some construction sites, two sides of the wall are made of heavy concrete, which carries the main load, and the middle part of the wall can be a heat-retaining building material or concrete based on other light fillers.



Monolithic casting of multi-layer panels

In the process of using three-layer barrier structures, even if the thickness of the walls and roofs is reduced (2-3 times) due to the thermal resistance of the heat-retaining layer, it is possible to increase their resistance to heat conduction by 2-2.5 times, to reduce material consumption, factors arising from the point of view of operational requirements, that is, moderation of the heat-humidity regime in rooms where the given climate is of decisive importance is achieved.

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