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REMOVABLE WALLBOP CERAMIC BRICK BASED ON LOCAL HOM MATERIAL IS A PROSPECT OF MODERN ARCHITECTURE

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Annotation: In this scientific article, the physical and mechanical properties of ceramic wallbop brick based on low-quality loam soil and local hom material are studied.

Keywords: ceramic brick, ceolite composition gender, Energy Engineering, Resource Engineering. Energy saving, silicate binders, silicate brick, silicate parts, magnesium binding, resource saving.

Further deepening economic reforms in the construction materials industry in our republic and the rapid development of the network, the production of new modern building materials, structures and itemsbe it the expansion of its types of graftingcomprehensive measures are being implemented in yicha and certain results are being achieved. In 2017-2021, will further development of the Republic of PAthe yicha Action Strategy defines important tasks, including increasing the competitiveness of the national economy, reducing energy and resource consumption in the economy, the widespread introduction of energy-saving technologies in production, etc. The implementation of these tasks, including the construction networkini with quality material and structures that improve the energy efficiency of buildings using local raw materials for mining purposes, the specified texture and cohave rsatcherslgan ceramic wallbop gone of the important tasks is the development of the energy-efficient technology of the structure of work and its production.

This is what the analysis of the state of the raw material base for the production of effective wallbop ceramic products looks like?he said, the Republic of nonconditioned raw materials due to the lack of the presence of deposits of quality soils in rice godsllanilin. Due to this, mainly low-quality loam gilt-tubes are used, and the current situation is to obtain high-quality ceramic products due to the fact that the products being obtained do not meet the required requirements and operational properties? is shining. Therefore, are the properties of existing local soils by material scientists and experts regarding their strength and energy efficiency to improve and modern requirementsthere are scientific studies aimed at expanding the raw material base for obtaining walltop ceramic products that respond is growing. And in this way, many proposals are expressed by our scientists on the economy of low-quality soil raw materials and the production of high-quality, energy-efficient building materials from low-quality soils. In particular, low-quality, a gender with a seolite composition and a wall-shaped energy-efficient bricks based on a crushed Acorn STEM are also considered to be included. The plus of this type of Wall-shaped materials itself is: crushed Acorn stem grains cause burning pores in the process of burning the brick and lead to an increase in energy efficiency indicators of this material, while when the composition of lyose gills includes rocks with a seolithic composition, they have a corrective effect on the ceramic mass?sir ko?rsatib improves the molding-specific properties of ceramic mass, another efficiency of using rocks with a seolithic composition is the structural-rheological constant o?the character of zgarishi is counted. We can see this through the table below.

Table-1.

№	Defarmation indicators		
	ε^1_0%	ε^1_2%	$\varepsilon^1_1 \tau$ %
1	52,14	43,27	4,59
2	23,65	75,68	0,675
3	41,41	59,21	1,86
4	43,68	54,11	2,204

From the results of the experiment, we can see that the crushed grain of acorns, which are added to the composition of a wallbop ceramic brick with local hom objects at a length of 2cm, burns due to the high-level heat in the baking oven and forms small pores. Porous bricks from this low-quality soil differ not only in their low cost, but also in the fact that their strength is sufficient and their energy efficiency indicators differ from traditional bricks. And in turn, it also allows you to use quality soil resources wisely.

In coal mining, 10 million tons of coal were produced in the khudududu of coal basins. Hydro layers with a content of up to 20% coal have been formed in more than a ton, and these basins occupy a very large area of cultivation without polluting the environment. These hydro layers are not used anywhere in the present time. The study we conducted shows that there is a real possibility of using this waste in the production of baked bricks and cement.

Use of coal waste:

- the possibility of obtaining a brick with high technical performance in the manufacture of bricks gives and fuel-energy in exchange for the burning of coal in the composition of coal waste allows you to save resources;
- in the development of the portlandtsement clinker, coal waste completely or partially replaces the soil component of the raw material slurry, in which they reduce the gas consumption used to burn the clinker and improve the work of the stove aggregate allows.

The resulting clinker has a high activity, while the cement produced will have a high construction-technical performance.

Development of a new composition of ceramic Mass for the production of finishing brick, floor - laying tile and ceramic tile from local hom-material with conducting industrial experiments.

Today in the construction sector of respublkamiz there is a great need for high-quality oblitsovka and roofing materials. At the same time, our republic is a large raw material for the production of decorative bricks, ceramic tiles that are laid on the ground and tiles has a reserve.

By choosing the composition of the ceramic mass on the correct scientific basis, there is a real opportunity to organize their development with the acquisition of competitive building materials.

Preliminary research has shown that it is possible to obtain high-quality materials. In case of a positive solution to the issue of financing this production, our republic will be provided with high-quality and export-oriented decorative brick, floor-laying tiles and tile.

The decision of the president of the Republic of Uzbekistan "on measures to ensure the rational use of Energy Resources"dated November 8, 2017 PQ-3379 noted that insufficient attention was paid to the use of energy-saving materials and technologies in the construction and reconstruction of buildings

and structures. The issue of updating and improving most of the building materials available today is very relevant. Considering the huge energy consumption for the purpose of heating buildings, the issue of using thermal insulation and relatively inexpensive and local raw materials-based building materials in the construction of structures has become acute. A vivid example of such materials is taking ceramic bricks with Acorn stem granules in a composition with reduced density and thermal conductivity. This type of wallbop ceramic bricks is considered as a solution to the problem of heating in residential buildings of the Republic of Uzbekistan and is a promising thermal insulation material for the production of this material. It is characterized by reliability durability, simplicity of technological solutions, widespread availability of raw materials in production.

Today, in any direction of construction in our country, attention is being paid to the production of materials obtained on the basis of quality, ecalogically clean, affordable and local raw materials of our own.

We know that brick today is one of the most basic building materials in all types of construction work. There are also several types of brick products, among which ceramic bricks are the most common.Due to the very high consumption demand for this type of material, the production footage of this material is increasing day by day. In the Chinese state , for example, in the last 20 years of mobayini, the production of ceramic bricks increased by 70% compared to the usual hajmi [1], while in the Federation of Rassia this figure shows an increase of 35% [2] in the last 7 years. And it should also be said that in addition to the growing demand, the requirements for this material are also changing over time. For example: light ceramic brick weight, improved teplaisalation displays at the expense of porosity, cheaper product recognition price and several other similar requirements. In the process of studying and analyzing this master's thesis work, it became clear that the main requirement for ceramic products in foreign countries is that it is hollow and porous, and its wide use of this type of Wall products has become evident. Examples of these in particular include “POROTON”, “UNIPOR”, “THERMOTOK” manufacturers produce ceramic bricks with densities ranging from 750 kg/m3 to 1,000 kg/m3 and strength ranging from 4mpa to 28 Mpa with thermal conductivity of 0.145 W / C) and higher.

In order to obtain a thermo – technically efficient walltop ceramic product, its thermal conductivity coeficent 0.24 – 0.36 W/(m0C) product must have a gap of 30-55% and optimal configuration. The thermal resistance of air layers increases only when they increase their thickness to 5 cm. Then it stabilizes. It is also worth saying that due to the convection of internal air, it is possible to form very large gaps in the volume of the product but this only leads to the fact that the product reacts poorly to the properties of thermal conductivity [28]. However, more than 40% gap products can be obtained in amalyot but this is done with great technological difficulties. In addition to the quality of the product, vertically oriented spaces do not give the thermal effect as we expect. . And the reason for this is that in the process of building walls from such products, they are partially flooded with a building mixture, and they are therefore not hermetic [17]. For the traditional 1800-1900 kg/m3 density of ceramic brick product to decrease its average density to 1000 kg/m3, the gap of ceramic brick should be 45%.

Another effective pore-forming method is the introduction of coal dust and crumbs into the raw material mass. But in this it is necessary to take into account, the value of such material with additives should not exceed 80 - 100% of the fuel to be spent. Coal extraction and coal enrichment waste can be used as primary homashyo for up to 8% of the content. At such a value of flammable components, the average density of the earthen brick is negligibly reduced, and tunnel ovens with a length of 120 meters are required for cooking.

The complete non-combustion of carbon is considered a serious problem, that is, the soil mass is characterized by low gas permeability. The remaining excess carbon should not exceed 2%, otherwise the life of the products will be significantly reduced. The general disadvantage of adding such flammable additives is that the appearance of the product does not satisfy the requirements.

In addition to the quality of the product, vertically oriented spaces do not give the thermal effect as we expect and the reason for this is that in the process of building walls from such products, they are partially flooded with a building mixture, and they are therefore not hermetic [17]. For the traditional 1800-1900 kg/m3 density of ceramic brick product to decrease its average density to 1000 kg/m3, the gap of ceramic brick should be 45%. And such a result can be achieved only by ceramic bricks and stones made of horizontal blanks, but, according to the current standards, this type of stone is characterized by low strength, and the application for barrier structures is produced under an inappropriate label.

This article provides detailed information on the chemical composition of silicate materials based on the lime Binder, a description of technological processes associated with the production of silicate materials, composites based on Lime and magnesium Binder, the correct use of fillers in obtaining artificial stone materials, as well as energy conservation and resource conservation in the production of silicate materials.

Worldwide, the use of new types of environmentally friendly materials in the construction industry, the rational use of domestic hom-products, the effective application of energy-efficient technologies are increasing. In developed countries, including countries such as Russia, Germany, Japan, certain progress has been made in creating and producing new building materials and improving the physical condition of buildings and structures through this, and building buildings and structures, ensuring their strength and priority is becoming important. In this respect, special attention is paid to the creation of local raw material-based compositions of materials and energy-intensive technologies of their production in the production of new building materials, including wall-shaped materials.

To increase the strength, time tolerance and resistance to various climatic conditions of the world, heat- in order to improve its technical properties, in particular, to produce a solid building material by forming a dense structure during the cooking process, to use additives that improve material properties based on local hom-objects, to optimize the structure of the material using mineral additives, to create energy-efficient technologies for their production, to improve existing ones, research is underway. In this regard, it is important to develop efficient dense, durable wall-shaped product compositions based on low-quality local raw materials and using industrial and agricultural waste, and energy-efficient technology for the production of these items.

In accordance with the relevant decision of the president of the Republic of Uzbekistan Shavkat Miromonovich Mirziyoyev "on measures to ensure the rational use of energy resources", it was noted that insufficient attention was paid to the use of energy - saving materials and technologies in the construction and reconstruction of buildings and structures. The issue of updating and improving most of the building materials available today is very relevant. Since the first years of our independence, a number of positive works have been carried out in our country aimed at the development of the construction industry, the development of new promising types of building materials, objects and structures based on maxalli hom-objects, which are modern, energy-efficient and have high technical performance.

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