

## Selection of Structure and Production of Physical-Mechanical Properties for the Production of Ceramic Bricks and Parade Tiles on The Basis of Giltuprok and Industrial Waste

*Mirazimova Gulbahor Oktamovna*

*Department of "Building and Construction" Jizzakh Polytechnic Institute*

**Annotation:** One of the current problems is environmental. In the building materials industry, the production of various building materials through the recycling of secondary mineral resources and wastes provides the economy of the construction industry and is one of the factors of environmental protection. The largest industrial enterprises in the country produce a number of wastes, including phosphogypsum, slag, ash slag, burnt rocks, secondary sulfur raw materials, non-additive active minerals, etc. k s are formed.

I studied the physical and mechanical properties of tile for exterior decoration from ceramic materials based on glass waste, one of the most important urban waste from the above.

**Key words:** Siding, facade, ceramics, technology, decorative materials, glass waste, architecture, construction, durability, frost resistance.

Currently in uzbekistan accumulate a large amount of household waste per year, the city remains hard in the pile<sup>1</sup>. Break free from the old buildings of the city, waste management, from pavement, buses from the unfit from rubber and plastics, paper makulaturasi and anthropogenic waste, glass and other construction waste includes material that is formed from siniqlari. Broken bottles of waste glass, windows and doors, and other building-lish siniqlari in the form of window is formed<sup>2</sup>.

The pile of waste accumulate in different cities different from the rest of them through the complex process faction are complementary in anthropogenic raw materials, alternative fuels, mineral powder and qo'shilmasifat active substances and sh.k. taking the world on<sup>3</sup>.

Ceramics production technology consists of the following stages: extraction of raw material, mechanical processing them, to qolipli items, drying and cooking<sup>4</sup>.

<sup>1</sup> Yerjanovich, Y. B. (2021). Development and Planned Construction of Housing Buildings in Djizzak. *EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION*, 1(2), 109-112.

<sup>2</sup> Холиков, С. Р. (2021). Марказий Осиё архитектура ёдгорликлари гумбазларининг турлари. *INTERNATIONAL JOURNAL OF DISCOURSE ON INNOVATION, INTEGRATION AND EDUCATION*, 2(2), 40-43.

<sup>3</sup> Xurramovich, K. A. (2021). The problem of protection and use of architectural reserves of historical cities of Uzbekistan. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(4), 1220-1223.

<sup>4</sup> Qudratovich, B. B. (2021). Personnel Issues in the Application of Nanotechnology in Construction and Architecture. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(5), 248-250.

Giltuproq pit using excavators in the open method and the railway wagon is extracted through the transmitting using tape or a directory of car transport is sent. I obtained generally unsuitable for obtaining ceramics giltuproq digging pit<sup>5</sup>.

The guard that was unsuitable for the production of brick and tile clay soil samples from yangiabad district village balandchaqir be the first to take the chemical composition owing to its structure without waste increase giltuproqning learned that we will be adding grate for glass industry<sup>6</sup>. The increase of industrial waste that gets us in the present day at a time, growing to be utilized to process them is also increasing<sup>7</sup>. Therefore man is industrial waste processing and preparing samples of glass, I added glass that our firm in order to increase the grate<sup>8</sup>.

Our bottle on the ground who work for it through a sieve 0.2 mm with electronic scales, which are required for our raw materials, we can elab samples the following samples I got pulled in and I poured<sup>9</sup>.

1. I poured my first sample from itself giltuproqning 1400 grams 380 grams with water added additional samples prepared by qorishib giltuproq for it, I thought<sup>10</sup>.

2. Second sample from my bottle a tiny 10% added

Giltuproq 1260 grams

Tiny glass 140 grams

380 grams prepared by adding water thought.

3. My third sample from the tiny bottle of 15% added

Giltuproq 1190 grams

Tiny glass 210 grams

380 grams of water .

4. The fourth sample from my tiny bottle of 20% added

Giltuproq 1120 grams

Tiny glass 280 grams

380 grams water

5. My tiny sample bottle from the fifth to 25 % added

1050 grams giltuproq

Tiny 350 grams of glass

320 grams of water

6. My tiny sample bottle from the sixth to 30 % add

<sup>5</sup> Жонузаков, А. Э., & Холиков, С. Р. (2020). Архитектурный комплекс Хазрати Имам (Хастимом)-пример сохранения и использования культурного наследия в Узбекистане. *Academy*, (11 (62)).

<sup>6</sup> Alisherbek, N. (2021). About Jizzakh Cultural Heritage Sites. *EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION*, 1(2), 90-91

<sup>7</sup> Inomovich, A. N. (2021). CHARACTERISTICS OF HISTORICAL SAMARKAND CITY CENTERS. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(5), 155-158.

<sup>8</sup> Жонузаков, Абдувахоб Эсиргапович, and Гулбахор Уктамовна Миразимова. "Городские парки и некоторые вопросы ландшафтно-экологического аспекта." *Academy* 11 (62) (2020).

<sup>9</sup> Холиков, С. Р. (2021). Историческое развитие архитектурного комплекса Хазрати Имам (ХАСТИМОМ). *INTERNATIONAL JOURNAL OF DISCOURSE ON INNOVATION, INTEGRATION AND EDUCATION*, 2(1), 104-107.

<sup>10</sup> Ravshanovich, X. S. (2021). Types of domes of architectural monuments of Uzbekistan. *International Journal of Culture and Modernity*, 1, 5-8.

Giltuproq 980 grams

The tiny 420 gram of glass

320 grams of water ready thought.

Two days after drying a drying furnace is charged from the mold prepared samples I put my<sup>11</sup>. In the drying oven at 100 °c, dried at the temperature I got<sup>12</sup>. My next job conditions when taking samples dried for cooking oven cooking labaratoiya live without my sight to 1000 °c temperature I put it on to cook in<sup>13</sup>. My samples for the determination of mechanical properties of the sample who cook and hydraulic press before using my bow to detect owing to the contraction did they determine met and I got the following results<sup>14</sup>.

1. The sample of the firm to be bent 225 kg  
1400 kg of the firm to be tightened
2. The sample of the firm to be bent 375 kg  
1375 kg of the firm to be tightened
3. The sample of the firm to be bent 450 kg  
1500 kg of the firm to be tightened
4. The sample of the firm to be bent 450 kg  
Of the firm to be tightened up to 2500 kg
5. The sample of the firm to be bent over 500 kg  
Of the firm to be tightened 3500 kg
6. The sample of the firm to be bent 700 kg

Chemical composition of raw materials used for the experience

The type of raw material	total	Zion <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	CaO	MgO	SO <sub>3</sub>	Na <sub>2</sub> O	K <sub>2</sub> O	Na <sub>2</sub> O+ K <sub>2</sub> O
	Composition %										
Giltuproq	100	59,98	13,92	0,37	6,09	7,51	7,32	0,29	1,53	2,94	-
tiny glass	100	72,38	0,3	-	0,12	9,96	0,11	0,2	-	-	16,93

4000 kg in the firm of the firm, which is to be tightened mustaxkmligini lost their limits<sup>15</sup>. Taking the above yield a growth chart in the form of concentrated firm natijarimni did<sup>16</sup>. Additional 30% qoshib I got the highest result in the sample<sup>17</sup>.

<sup>11</sup> Alisherbek, N. (2021). Development of Urban Development in the Territory of Uzbekistan. *CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES*, 2(10), 24-26

<sup>12</sup> Ravshanovich, K. S., Xurramovich, K. A., & Inomovich, A. N. (2021). THE PROBLEM OF PROTECTION AND USE OF ARCHITECTURAL RESERVES OF HISTORICAL CITIES OF UZBEKISTAN. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(5), 152-154.

<sup>13</sup> Inomovich, A. N. (2021). Principles of Reconstruction and Formation of Residential Buildings Typical of Historical City Centers. *EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION*, 1(2), 29-40.

<sup>14</sup> Esirgapovich, J. A. (2021). CITY PARKS AND SOME ISSUES OF LANDSCAPE AND ENVIRONMENTAL ASPECT. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(5), 145-147.

<sup>15</sup> Yerjanovich, Y. B., & Mamadiyoroglu, A. A. (2021). Principles of Using Ornamental Plants in the Interior. *EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION*, 1(2), 79-81.

<sup>16</sup> Мирзимова, Г. У. (2021). Подбор состава и изучение физико-механических свойств сырья для производства керамического кирпича и плитки на основе промышленных отходов. *Academy*, (4 (67)), 12-14.

<sup>17</sup> Нарзиев, А. К. У. (2020). РАЗВИТИЕ ГРАДОСТРОИТЕЛЬСТВА УЗБЕКИСТАНА. *Academy*, (11 (62)).

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