

Improvement of Joints of Elements of Wooden Structures, Strength-Deformation State and Strength

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Received 12-06-2022	Abstract: This research work shows the elements of building structures made of wooden materials and the connection of elements of wooden building structures processed by them and the properties of materials according to modern methods of physical and mechanical control, the state of hardening-deformability, strengthening of elements, standardization.	Keywords: Construction, element, combination, strength, longitudinal and transverse stability, deformation, geometric parameters, serration, connection strength, resource, environmentally friendly building material, reinforcement, improvement
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INTRODUCTION

In the world today, innovative technologies for the production of wood and other natural, ecologically safe constructions occupy an important place in construction. The creation, improvement and practical research of compounds of effective elements for wooden constructions and their use in various sectors of the economy occupy an important place. It allows to improve the connections of the elements of wooden constructions, to increase the strength of the connections.

Particular attention is being paid to creating new types of combinations of elements of wooden constructions, ensuring energy and resource-saving, putting into practice the combinations of elements of wooden constructions resistant to stress-deformation, and improving their properties such as tolerance to operational conditions and technological properties. At the world level, a lot of attention is being paid to the strength-deformability state of the joints of the elements of wooden constructions and their good processing. It is one of the important tasks to ensure that the joints of the elements of wooden constructions achieve high strength and stability of the joints in the state of stress-deformability. Certain scientific and practical results are being achieved in our republic on the development of the construction materials industry, the economy of natural raw materials, and the increase in the production volumes of resource- and energy-saving new construction materials, products and structures that allow the use of local raw materials in production. Special attention is paid to

improving the combination of elements of wooden constructions, including using local raw materials.

DEVELOPMENT OF METHODS FOR IMPROVEMENT OF COMBINATIONS OF ELEMENTS OF WOODEN CONSTRUCTIONS, STRESS-DEFORMABILITY STATE AND STRENGTH

The creation, improvement and practical research of compounds of effective elements for wooden constructions and their use in various sectors of the economy occupy an important place. It allows to improve the connections of the elements of wooden constructions, to increase the strength of the connections.

Particular attention is being paid to creating new types of combinations of elements of wooden constructions, ensuring energy and resource-saving, putting into practice the combinations of elements of wooden constructions resistant to stress-deformation, and improving their properties such as tolerance to operational conditions and technological properties. At the world level, a lot of attention is being paid to the strength-deformability state of the joints of the elements of wooden constructions and their good processing. It is one of the important tasks to ensure that the joints of the elements of wooden constructions achieve high strength and stability of the joints in the state of stress-deformability. Certain scientific and practical results are being achieved in our republic on the development of the construction materials industry, the economy of natural raw materials, and the increase in the

production volumes of resource- and energy-saving new construction materials, products and structures that allow the use of local raw materials in production. Special attention is paid to improving the combination of elements of wooden constructions, including using local raw materials.

In the developed countries of the world, including Russia, Germany, Finland, Kazakhstan, Kyrgyzstan and other countries, a lot of attention is being paid to improving the combinations of elements of wooden constructions with high technological properties, creating new types of their combinations. Certain scientific and practical results are being achieved on the development of the wooden constructions industry, the increase in the volume of production of ecologically clean new building materials, products and structures.

In our Republic of Uzbekistan, large-scale measures have been taken to develop the building materials industry, to economize natural raw materials, and to increase the volume of production of resource- and energy-saving new construction materials, products and structures that allow the use of local raw materials in production.

CONCLUSION

- Research on improving the combination of elements of wooden constructions in the field of construction;
- Research of technological, physical and mechanical properties of processed wooden building elements;
- Improvement of joints of wooden building structural elements, determination of strength-deformation state and stability and research of optimal joint meshes;
- To determine the technical and economic effectiveness of the improvement and implementation of the connections of various wooden construction elements using optimal joint meshes.

REFERENCES

1. Ruziev, Q.I., & Alimov, M.A. (1993). *Wooden and plastic devices of buildings*. T., Teacher.
2. Kazakbaeva, K.K. (2005). *Study guide on the subject of "Ecologically pure building constructions"*. T., "Teacher".
3. Arleninov, D.K. (2002). *"Construction of wood and plastic"* M. Izd-vo "ASV".
4. Slitskoukhov, A.B. (1986). *Construction of wood and plastic*. Carlse na G.G., M.