



## METHODS OF CONSTRUCTION AND DESIGN OF MODERN BUILDINGS USING THE HAYTEK METHOD

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**ABSTRACT:** - A variety of high technologies for the organization of accommodation allow you to build a house that combines original decoration and high functionality. Modern cottages in a high-tech style are distinguished by strict and unique geometry, laconic decor and an abundance of sunlight.

Classic high-tech summer house: a combination of solid geometric shapes and large windows with a flat roof. High-tech style house - this opportunity allows you to create a comfortable and economical home.

**KEYWORDS:** Classic, combination, economic, technology, decoration, functional, geometry, cottages, decoration, modern perspective, terrace, second light, shear, vitreous, application.

### INTRODUCTION

A variety of high technologies for the organization of accommodation allow you to build a house that combines original decoration and high functionality. Modern high-tech cottages are characterized by strict

and unique geometry, laconic decoration and plenty of sunlight. Classic high-tech summer house: a combination of solid geometric shapes and large windows with a flat roof. High-tech style home - this option allows you

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to create a comfortable and economical home.

The emphasis of high-tech interiors is the use of modern technologies for a comfortable life. The exterior architecture of such houses consists of regular shapes, mainly cubes. The priority of houses is functionality, so buildings are often asymmetrical and have a large number of protruding elements.

To increase the level of light, the roof can be partially glazed (the reception is called "second light") or equipped as a terrace. Extensive functional elements of the building, such as elevators and stairs, are often located outside the building. In addition, buildings are often created with separate "cubes" that are interconnected.

The materials for building such houses are metal, concrete and glass, forming the "futurism" of the building. Interior and building fashion involves the use of natural materials in the interior decoration of the house, so it is also available in high-tech wooden houses that combine traditional materials and high technology.

Neutral colors and lots of light give comfort to strict geometry.

The windows in such residential buildings are large, while thin frames are used, and frameless windows are also very common. Often a photo of a high-tech house shows full-glass buildings, which gives the buildings "airiness" and increases the level of light.

Architecture is the art of creating a spatial environment for human activity, life and life in general. The word "architect" means the chief builder, that is, the construction planner who determines how the construction will proceed.

There are three aspects of architecture that are closely intertwined. These are:

construction, function and aesthetics. In other words, the architectural work has the following requirements: first, the architectural work must fulfill its function; secondly, the work must be self-sustaining, able to withstand external influences, and thirdly, the appearance of the work must be effective and attractive.

These three aspects were first understood by the ancient architect Vitruvius. According to him, "everything (we are talking about an architectural work - our comment) should be designed for durability, profitability, beauty." Here, "strength" represents the constructive aspect, "benefit" - the function, the aesthetic aspect. The relationship between these three aspects should be such that one does not interfere with the other. For example, its design should not contradict its function or aesthetics, and so on.

Some researchers add a fourth to the three aspects mentioned - economics. Indeed, economic demand is also very important. But other researchers have reasonably objected. According to them, economic demand is based on these three requirements. That is, for an architectural work, such as a building, to perform its function perfectly, there must be no waste of space. Whether the building is designed to be strong, for example, the wall should not be too thick. In order to make a building beautiful, it is necessary to avoid excessive decoration and decoration.

Any important work requires a plan first. The first stage of construction is the plan - the project. In the project, the architect explains his plan to the builder. The project should reflect the plan as fully as possible.

An architectural design usually consists of drawings and text (written comments on the drawings). Drawings are made in scale (scale). Drawings are mostly in the form of sketches, sketches, styles, clippings, plates, and general

views. The trail (projection) in the vertical plane on the outside of the structure is called the "style", the trail in the vertical plane that crosses the structure is called the "shear", and the trail in the horizontal plane that crosses the structure is called the "tarh". The general history shows the trace of the structure in the horizontal plane. It also shows its surroundings. Typically, it gives a thumbnail image more than once in history. No scale in general view images (perspective).

After studying the location for the construction of a small public building in a particular architectural situation, the student determines the idea of the project. The project consists of a clear scale of the main design, style, front style, side style or shear drawings and a simple layout. In this task, the project is created independently (without the help of a teacher). The projected structure should be smaller, clear in appearance and function. The structure should consist of several (2-3) rooms, a purification unit (san. Node). is to test the ability to show the verse in simplified mock-up and drawing forms.

The task requires a simple and concise solution to the composition of the structure.

It is made as a sketch on a piece of paper 55x75 cm, on which the model is made. The model is made of one or more colored paper or cardboard; the scale is based on the shape of a person. Both the layout and the layout should be as simple as possible (without compromising the expression).

The following methods can be used in the drawing: one or more colored paints, black and white ink (dream), hatching, tempera, gouache, gluing (application) of colored paper or cutting the desired area from the images on existing paper glued (collage). The drawing should show the scale, basic dimensions and height. The image of the person is also given in the style drawing. Project entries, including the student's last name, first name, group number, and other entries are written in architectural letters (architectural font).

The projects of high-tech houses are attractive with the high functionality achieved using modern technologies. Engineering communications are carried out using solar panels, biofuels, wind turbines and other energy-saving methods without

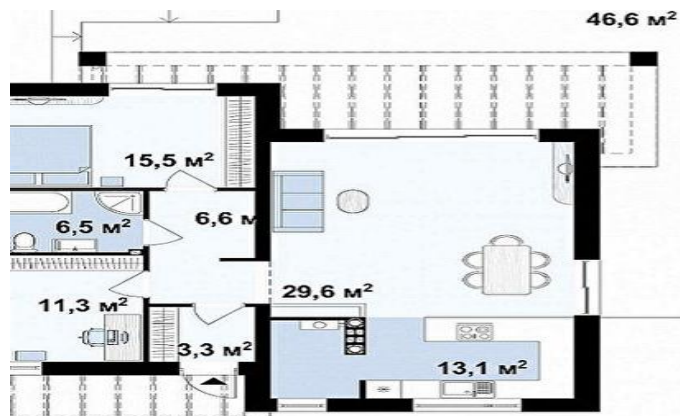




Compromising the convenience of their owners. Most often, engineering systems are carried out on the outer surface of the house, simultaneously focusing on performing a decorative function.



### Modern high-tech projects



Deciding to build a high-tech house, you can go one of two ways - to order the construction on a standard project with ready documents and incorrect calculations, or to develop an individual project that takes into account all the wishes of the future owner. Construction on a standard project will be a little cheaper and work can be started in a short time, but an individual layout can be much more convenient. Which method to choose depends on personal preferences. We will look at the most interesting projects.

### Hi Tech style small one storey house





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For owners of small plots who want to find a comfortable beautiful house in the style of Hi Tech, you can stop at the option of a small one-story building that perfectly fits into the surrounding landscape.

As shown in the photo, the style is pronounced with a cubic shape, a flat roof, large windows, as well as the presence of white, gray cladding colors. In this project, the living room, dining room and kitchen are combined, so the interior is very bright and spacious.

### **Hi Tech style with two storey cottage garage**

In the Hi Tech method, two-story buildings have special advantages. First, they create opportunities for the arrangement of multi-level terraces, garages, etc., in the

implementation of special architectural forms. The usable area of such a house is larger and suitable for a full family. As a rule, on the first floor there are common areas not separated by walls: living room, kitchen, dining room, and on the second floor there are bedrooms, children's rooms. A garage located on the same roof as the house is a modern rational solution typical for high-tech projects. This mode allows you to save local space, providing ease of use. There are significant savings in heating the garage area and laying communications.

The convenience of planning is also due to the fact that the roof of the garage was successfully used to organize the terrace, which opens from the secondary hall.





## REFERENCES

1. E.Roziyev, A.Ashirboyev. Methods of teaching engineering graphics. -T., New Age Generation. 2010.
2. S.K.Bogolyubov, A.I.Voinov. Technical drawing course - T., "Teacher", 1976.
3. Y.N. Baxanov. A set of tasks from technical drawing. - T., "Teacher", 1982.
4. Sh.K.Murodov and others. Drawing geometry. - T., "Economy - Finance", 2008.
5. I.Rahmonov. "Course of descriptive geometry and tests of technical graphics". -T. Teacher Publishing House, 1996.
6. A.Umronxo'jayev. "Fundamentals of technical graphics." -T., Teacher Publishing House, 1996.