# KEY ELEMENTS OF LANDSCAPE ARCHITECTURE AND LANDSCAPE DESIGN DEVICES

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**Annotation:** This article discusses the basic elements of landscape architecture and landscape design devices, landscape design devices and their architecture is one of the most important areas of landscape architecture related to creating an aesthetic, easy-to-use, scenic and healthy functional environment.

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Typology of landscape design devices. Landscape design devices and their architecture is one of the most important areas of landscape architecture related to creating an aesthetic, easy-to-use, scenic and healthy functional environment. This is exactly the area that needs to be addressed in our rural and urban environments today, especially in parks and alleys.

Landscape architecture and landscape devices. There are intricate connections between the two words, and the history of landscape architecture is rich with landscape devices. While landscape architecture is a general term, landscape devices complement it materially, giving quality and content to all its objects, small architectural forms associated with the landscape, landscaping, plants, terrain, water basins, garden-park furniture, elements related to architectural forms, all of which are devices that shape the landscape.

The devices of landscape architecture are so numerous and diverse that in order to study them, it is necessary to look at the field as a separate subject and take a deep and comprehensive approach to the issue. For the first time in this chapter, a classification system for landscape devices has been developed, which is divided into four major groups:

- 1 to landscape devices connected with the terrain;
- 2 to landscape devices connected with water basins;
- 3 devices of landscape architecture connected with small architectural forms;
- 4 Landscape architecture is divided into plant-related devices.

# Landscape devices related to terrain

Retaining walls. in the past, slopes, foothills, and hillside parks were divided into several flat steps, separated from each other by retaining walls. Such retaining walls usually required strong work to prevent soil compaction and erosion. That is why they are made of natural stones. Reinforced walls are now common in historic parks and modern parks.

Reinforced walls are very useful in creating beautiful and scenic areas in the garden. They can also serve as a beautiful landscape element or component of the landscape or relief. Especially if you have a "mixborder" flowerbed, "hanging gardens" or waterfalls next to them, the retaining walls can be even more beautiful.

If the retaining walls are too long in the garden area or in the terrain, they can be combined with other decorative elements, such as benches, stairs, ramps, porches, waterfalls, shelves, to eliminate their uniformity. Natural stone, concrete, antiseptic-impregnated wood are used as the material for the retaining walls, and metal sheets with a shiny surface are used for high-tech gardens.

The height of the retaining walls can vary. Reinforced walls with a height of 25-30 cm are usually designed without a foundation, and their material is collected from a depth of 15-25 cm into the ground. For high retaining walls, however, it must be a foundation, and it is usually 13 times the height of the wall.

When building retaining walls, do not forget about the drainage layer, and for this purpose a pipe with a diameter of 5-10 cm is laid inside the wall. The surface of retaining walls can be different: broken, angular,

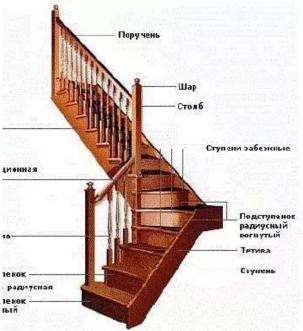
right-angled, protruding, rhombic, or ribbed. The retaining walls should have a slope of 10-15c upwards from the base of the wall.

Retaining walls can be landscaped in three ways: with bottom-up creeping plants, with hanging plants growing from top to bottom, and with special shelving or "cyst" plants planted inside the wall.

## Stairs and ramps

Stairs are devices designed to move up or down, step by step, in a residential or landscape setting on a slope. Stairs consist of vertical and horizontal surfaces, the height of which is usually 15-18 cm, and the width of the horizontal surface (about 60-65 cm). In parks and gardens, the height of the stairs is lower than usual -10-12 cm, width - 40-45 cm. In difficult terrain (slope greater than 10 degrees), ie on a slope of 1 meter, the difference between low and high must be installed stairs of 10 cm or more. If the slope is lower, "ramps" are used to move in such a relief, not stairs. The ramps have no steep surfaces. Their faces are slanted. The width of the ramps can be from 1.2 m to 2.4-3.6 m and wider in gardens and parks, such as stairs. 1.2 m here is the shortest distance required for two people to move freely side by side.

Stairs can be made of different materials: stone, brick, concrete or wood. Most importantly, their surface should be smooth and not slippery. Stairs can be single or multi-lane. The multi-stage stairs have platforms (horizontal scenes) between the marches.





Stairs have a decorative value in addition to a practical function. Decorative staircases are especially typical of the Italian gardens of the European Renaissance. In order to enhance the decorative properties of the stairs, railings or balustrades are installed along their edges, and lianas are planted next to them, which cling to these balustrades and create beautiful landscapes. The appearance of the stairs is more effective when containers with plants are placed on the horizontal platforms of the multi-step stairs.

#### Alleys, parks and sidewalks

It is advisable to build pavements and sidewalks from soft and stone pavements or a mixture of them. Clinker, parferite, rough granite and marble coatings are long-lasting, economical and the most convenient natural materials. Although they are expensive, they should be used more in areas for long-term use and high loads, as well as on sidewalks, and should not be replaced by short-term and environmentally friendly concrete slabs, paving stones, and especially asphalt pavements.

One of the most important structural elements of gardens and parks is the main walkways and their pavements. They connect different parts and stairs of the park-park and serve for the free movement of people. Corridors differ from each other depending on the width, type of covering and lining, the material used and

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the technology of the lining. The width of the main corridors leading to the buildings is 1.2-1.5 m, and the width of the secondary corridors is 1 m. Depending on the type of flooring can be slab, stone, block, concrete, grass.

## **Stone compositions**

Rocks and boulders are used where rocks in this condition are not found naturally. In such cases, the choice of the required stones should be commensurate with the terrain of the projected site, taking into account the characteristics of wind processes in the area. The practical and aesthetic value of stone compositions is known if they are used in accordance with the general principles of design and natural forms. If the stone composition is being created in the project area and there are original rocks in the area, then the condition of these rocks should be carefully studied before the project and used to create a link. The main criterion of the stone composition is that it is in harmony with the surrounding natural landscape.

For added clarity, more than one interconnected rock composition can be used to create a clear "thematic line". For example: the stones can be placed in one place in the form of a monolithic ridge, in another variant in the form of a compact group, and in the third in the form of a pictorial group scattered on all sides. If the projected area has a unique nature and its landscape contrasts with the surrounding landscape nature, then it should be limited to (architectural structures, retaining walls, trees, etc.). One of the main requirements for the use of stone materials is its strength and durability.

#### Landscape devices related to water bodies

Water is the richest and most diverse natural material that allows you to create effective garden compositions. The charm of water can be explained by their unique decorative properties and their ability to have a great emotional impact on humanity. Any water device can be compared to an image palette with different colors. These qualities are associated with the natural properties of water: its fluidity and colorlessness, its ability to take on any shape and color, its ability to reflect images of surrounding objects, and its sound. When using water as an element in the artistic compositions of landscape architecture, it is necessary to try to show all its natural properties in full and with the highest aesthetic taste.

The natural properties of water, such as coolness, fluidity, variability, reflection ability, scattering, and sound, can be used to create a variety of landscape elements. Landscaping of parks and gardens uses the form of springs, streams, waterfalls, pools, fountains, waterfalls, rivers, lakes and pools.

Fountains are streams of water that flow upwards under artificial pressure and the structures that create them. Initially, the fountain was also used as a source of drinking water, and later it was used to decorate city squares, palaces and gardens, to cool the air, to create a healthy microclimate. The fountain was designed by architects to show the artistic and aesthetic aspects of the water and the health aspects of the air. In addition to trees and statues, fountains played an important role in determining the center of architectural ensembles during the Hellenistic period. Decorated with sculptures. The fountains are reflected in the palace complex of Madinat az Zahra in Egypt, as well as in the fountains of the palace of al-Khumra, made of copper and gold.

The construction of fountains in Central Asia was widespread in the XIV-XV centuries. Written information about the fountains in the gardens of Amir Temur has been preserved. The water in these fountains comes from special devices (ceramic pipes) and flows into the pools and flows out through ditches. The area around the pool is decorated with marble stones of different colors, the image of colorful flowers. The banks of the ditches that run into the pools are also covered with marble. Miniatures of manuscripts (for example, Nizami's "Khamsa", Bobur's "Boburnoma", etc.) contain examples of fountains.

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