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FEATURES OF PHYTOWALLS IN THE INTERIOR

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ABSTRACT

The use of plants in the formation of interiors of various premises is currently due to a natural need people to be closer to nature due to large-scale urbanization cities. This article discusses a purposeful scientific justified introduction of plants into interior design using the example of phytowalls with taking into account the biological compatibility of plants. Considered the positive aspects of the introduction of such walls in the interior.

KEYWORDS

Interior, phytowall, phytomodule, phytoenvironment, phytocomposition, plants, combination of plants, «living wall», flowers.

INTRODUCTION

In the formation of the phytoenvironment of interiors, natural plants. Phytocompositions have a positive effect on environment and a certain decorative effect. If to speak about phytowalls, they are just designed for landscaping interiors. This is usually vertical design with dimensions from 50, 60 cm to several

tens of meters. In addition, compositions can be the main focus in the interior with its compositional solution in general or visual background for a decorative structure, small architectural forms, or an organic addition to the architectural and spatial solution interior, etc.

MAIN PART

Phytowall looks aesthetically pleasing, attracting attention. She is fills the interior space with rich color, brightness and pleasant green scent. In addition, the use of a phytowall solves a number of tasks and has many advantages, not only in relation to aesthetics, but also practical application [1]:

- Plants absorb all types of pollution, so phytomodules are an excellent natural conditioner;
- The ability to install in any room - suitable phytowall and for a compact room, and for a room with a large quadrature;
- Complete safety and high level of environmental cleanliness - plants are not only harmless to the human body, but also contribute to the natural healing of the body;
- Natural regulation of humidity in the room, thanks to which the most suitable microclimate for a person is established and reduced costs for the installation of special technical equipment air conditioning;
- Wide design possibilities - you can place a phytowall in any convenient location, regardless of the size of the free space and its configuration, since it practically does not take up usable area;
- According to scientific research, the presence of a phytowall in a room increases efficiency and promotes concentration;
- The ability to originally delimit the space in the room and at the same time, hide all unsightly elements - wires of engineering systems and technical partitions, without which it is impossible to do without losing ease of use of the premises.

There are several varieties of plant walls, the defining feature of which are:

- The size;
- Location;
- A combination of plants;
- The form.

For the arrangement of vertical gardening systems are used various options for phytowalls:

- Phyto-module is a composition of living plants that has compact size. If necessary, such a phytowall can be move in different interiors because it is fixed with the possibility of easy dismantling. The structure is usually made from thin-walled profile with external galvanization, which does not allow it to rust;
- Phyto-module - an easy option for space zoning, it is without problems are sorted out and collected;
- Phytopicture - the walls of the body of small phytowalls are quite wide, therefore they resemble an ordinary picture frame. Phytopaintings perfect for accent decoration of any room destination. It is better to place them in the most visible place so that they looked as beautiful as possible in daylight and evening lighting;
- Phyton inscriptions - are a kind of paintings in the form letters. Usually made from green moss that has passed a special processing;
- Phyto-cabinet - consists of several separate blocks, which placed in the desired cell in the furniture itself. At the bottom of the cabinet is provided plastic tray to collect moisture;
- Stepped phyto-modules or boxes. Such devices are attached to wall or hung on hooks;
- Phytowall is a large-scale composition consisting of many compartments. Live plants or moss are planted in them. Ambient the interior should look concise and restrained, in relation to phytowall;
- Mobile phytowall. A versatile option that is quite can be used as a separating screen or even a full-

fledged door when zoning a room. Considering the features operation, the duration of their use is much shorter than vertical phytowall, but at the same time, such a green hedge allows revive any room;

- Ceiling «living wall». Such compositions decorate everything ceiling space or separate areas if design and furnishing premises contribute to this.

To a greater extent, the duration of the suitability of the «green» wall in The quality of the decoration is determined by two factors:

- Possible age of the vegetation used;
- The degree of wear resistance of the base material - if plastic is taken, then it is practically unlimited.

Most indoor plants are suitable for the manufacture of phytowalls plants, although there are some features of their use:

- It is necessary to select the most unpretentious species that are not
- Too much light and water required;
- On one phytowall it is better to use either green or flowering plants, otherwise the harmony of the appearance of the decor will be broken;
- For arranging phytowalls, it is worth picking up only those plants that do not cause allergic reactions;
- It is desirable that they do not have a smell, because gradually it will begin annoy people who are near the phytowall.
- Plants with a long duration are considered ideal life, which will increase the service life of the phytowall itself.

Placement of plants in interiors as elements of a general artistic composition must obey its main condition - scale.

Most often, the following options are used for landscaping walls in a room:

- For the main background - some types of ivy, ferns, tradescantia, zebrins, dracaena, peperomia, callisia, spathiphyllums, creepers (aristolochia and scindapsus), chlorophyma. Choosing flowers, you need choose colors that are harmoniously combined with each other in advance compositions. Red and white flowers look very impressive on green background (for example, spathiphyllum and anthurium, flowers that have a similar form and appearance);
- To add brightness and interspersed with floral elements - pilea, vriesia, arrowroot, phytonia, orchids, succulents.

If orchids are chosen for the phytowall, they need form a separate irrigation and lighting system.

The number of plants must be selected according to the given composition. (it is possible to arrange forty plants per 1m² or up to a hundred in one small composition).

Moss is used to create phytowalls. He is unpretentious, loves the shade, does not require fertilization. In addition, moss, like a carpet, improves wall soundproofing. Most often used for vertical gardening reindeer moss, which is subjected to special processing pre moss preserved by wetting with special solutions, dyed to give brightness, apply protective compounds that prevent decay, growth mold.

On the phytowall, you can plant ordinary lawn grass, cereals, wheat germ, herbs (eg, mint; sage; cilantro; parsley; caraway; basil; lemon balm).

Various built-in systems designed for plant care, greatly facilitate the process of maintaining their livelihoods, and exactly:

- Nutrition is under complete control: in the root zone of plants only substances that are introduced into the water and in the right proportions enter;
- Planting uniformity: plants receive the same amount water, matter and light. Favorable appearance;
- Saving water and nutrients: the plant absorbs all incoming water and nutrients access to roots: roots can tell a lot about the health of a plant [2].
- Rational use of space: plants can receive everything you need in a limited area.
- No need to mess with the ground.

In order for the «living wall» to last as long as possible, it is necessary to ensure proper care for plants. For this, the following must be observed regulations [3]:

- Periodically add water to the plants (if not installed automatic irrigation system);
- If the composition provides for mechanical irrigation, then the first time it is necessary to pay attention to the irrigation schedule - the water must be always in abundance, but too abundant watering is unacceptable - this can provoke rotting of plants;
- In order for the green composition to look aesthetically pleasing, it is necessary remove dead and dry leaves in a timely manner;
- If necessary, you need to make additional top dressing - a mixture of mineral fertilizers;
- It is necessary to cut regularly the shoots, which are strongly have grown and drown out neighboring plants;
- Care must be taken not to clog the pump and the openings on top tube for irrigation.

Even more attractive will look phytowall, which is equipped with backlight. For this purpose, you can use

both regular and colored light bulbs that create interesting visual effects, as well as additional decorative elements, you can use interesting details, such as the [4]:

- Glass baguettes;
- Shells;
- Small multi-colored gravel;
- Small waterfalls;
- Mirrors;
- Shelves-stands on which you can place a lot attractive little things.

The main condition remains that it is necessary to think over each detail when arranging phytowalls and phytocompositions so that all elements combined with each other. Otherwise, you can break the harmony integrity, and in reality the phytowall will become too pretentious and clumsy. This can backfire and look like attractive.

CONCLUSION

Thus, summing up, we can say that an important condition the existence of a phytowall is the absence of the danger of wetting itself bases - walls in the interior. On the inside of the module is laid special waterproofing layer (except for continuous metal or plastic frame). Where possible light sources should be located as close to the plants as possible. Needed right pick up the neighborhood of plants on the phytowall. Plants must be:

- Attractive;
- Be combined with each other in form, color, method and timing of development;
- Not too pretentious in care - ideally those that may well do with little or no soil.

REFERENCES

1. N.V. Drobchenko. The history of the formation and development of landscape architecture in Uzbekistan. Abstract, Tashkent, 2004.
2. N.V. Drobchenko, M.K. Kurbanova. Aktualnost i preimutshstva fitosten v interere / / actual problems of the introduction of Science and innovation achievements into practice in the formation of the digital economy. XVII Republican scientific-practical conference, Part 1, 2020, Samarkand.
3. <https://kraska.guru/design/interery/fitostena>.
4. <https://recn.ru/fitostena-osobennosti-obustrojstva>



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