



Eco-Design in the Interior and Its Advantages

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ABSTRACT

The article provides a brief description of the eco-style used in modern interiors. The main features and materials of eco-style are described. The principle of selection of plants suitable for interior landscaping, as well as the used phytolamps for organizing additional lighting of plants, is presented.

Keywords:

eco-style, eco-design, natural style, interior garden, interior gardening, vertical gardening, flerovium.

Introduction

Eco style in the interior is becoming more and more popular, especially among residents of megacities, since being among natural materials quickly relieves stress, calms and promotes the speedy recovery of strength after a working day. Eco style today is not only a healthy eco-friendly interior, it is an interior that, from an aesthetic point of view, looks stylish, beautiful and expensive [1,2].

Main part

Ecological design - is an attempt to recreate the natural environment in human habitats. The meaning of eco-design lies in the name itself. The interior, made in this vein, optimally harmonizes with the environment. It is in an "environmentally friendly" room that a person can feel all the benefits of natural materials and really take a break from the stuffy city. Eco-style or naturel is expressed only due to its idea, natural beginning, the naturalness of materials, colors, and correctness of forms. Eco-style basic materials: wood, stone, clay,

glass, fabrics made from natural materials. Basic colors: beige, brown, white (in contrast with black or dark wood), delicate pastel colors. Natural natural colors and shades are used, there is no place for "chemical" bright colors [3,4]. The most commonly used colors are: pale green, pale blue, colors of grass, water, stone, wood, and soil. In such an interior, closeness to nature should be felt. The shape and colouring of interior items are similar to the shape and colouring of wildlife items. When creating the interior, clear geometric lines are used, there is no pretentious decor, unnecessary details. Live plants, and ornamental trees are used.

When creating an interior in an eco-style, it is necessary to be guided by the main principle - the use of only natural materials. The use of plastic, artificial fabrics, etc. is unacceptable. Materials must be environmentally friendly and harmless to humans. The use of plants in the interior is an important part of eco-style. There are many landscaping options available. One of them is the use of mini-greenhouses of

florariums (terrariums). A florarium or plant terrarium is a small indoor greenhouse, a transparent container made of glass or plastic, inside which plants grow. The content of the florarium depends on the preferred theme.



Figure 1. An example of a florarium.

The special atmosphere of the florarium allows you to create different climatic zones and natural landscapes: very often they resort to the option of decorating the tropics, the desert landscape of a mountain landscape or a dense forest - with a competent approach of a florist, there are practically no boundaries of fantasy. Depending on the chosen theme, a composition of plants should be selected [5,6]. Plants in containers are almost completely covered with glass or other transparent material, air access is limited or actually blocked. As a result of this, plants do not suffer from drafts, the air inside is more humid than indoors. Therefore, in the florarium, it is possible to grow more delicate types of plants that would be impossible to go out in a dry room. If the florarium is placed away from a light source, then ferns and other plants with green leaves can be grown in it. If the florarium is located close to the window, then it is possible to plant orchids, bromeliads, exotic decorative leaves and decorative flowering plants in it. You should choose slow-growing compact species. Another way of landscaping is the use of vines. In this case, a wall or partition between functional areas in the same room is greened. An example of a plant that can be used in the interior for

vertical gardening is the large-tongued ragwort (*Senecio macroglossus*). This is an ivy-like perennial vine from the group of succulents. In general, the large-tongued ragwort is unpretentious and does not require any special care, potentially it can grow up to 3 m in length. An effective way of landscaping a public interior is the use of cereal grasses (Fig. 2).



Figure 2. Flower garden project using cereal herbs

In this case, you need to choose such types of cereals that endure the conditions of the premises and a fairly high temperature in winter.

There is a shortage of sunlight in the interior, so it is very important to organize additional lighting for plants. In this case, 2 types of lamps are used: fluorescent and LED. The optimal economical and traditional option for lighting indoor plants is tubular fluorescent lamps of daylight type T8 full spectrum ($T=5300-6500^{\circ}\text{K}$). They are characterized by low heat transfer and have a selective spectrum of light radiation. Such a phytolamp works mainly in the blue and red range, as can be seen from its characteristic glow. LED light sources are divided into three groups:

- bicolor;
- with multispectrum;
- full spectrum.

Bicolor (bicolor spectrum) or two-color lamps are based on blue (440-450 nm) and red (640-660 nm) LEDs. Their light is considered the most optimal for organizing the illumination of any plants during the growing season, this is

the main spectrum for giving the plant the energy necessary for photosynthesis, which leads to an accelerated growth of green mass.

Multicolor spectrum LED lamps have a wider application by extending the red range to infrared and yellow light. These lamps combine red, blue, warm white and far red light. They are in demand for highlighting adult plants, stimulating flowering and fruit ripening. In interior conditions, it is better to use an LED multispectral lamp for plants with a dense crown.

On a phytolamp with a full spectrum of radiation (full spectrum) you can make a backlight for flowers in the interior, regardless of the type and location. Such lamps are considered to be a universal source of artificial light, which emits light in a wide range with maxima in the red and blue zones. A full-spectrum light gives plants the greatest amount of artificial light, similar to sunlight. In conclusion, we can say that the use of eco-style helps a person create more environmentally friendly living conditions in an apartment, house or public premises. Such an interior helps to relax from the conditions of the urban environment. An ecologically clean space is created around a person using natural materials and plants that improve the microclimate in the room.

References:

1. Abdurakhmanov A., Murzova R., Rozhanovskaya M. Landscaping cities with lianas. - Tashkent, Publishing house "Uzbekistan", 1968.-76 p.
2. Belyaeva E. Fashion trends in landscaping / E. Belyaeva / - - candidate of agricultural sciences. - Moscow, Landscape design. - 2004. - No. 4. - p.21
3. Bragina V.I. Vertical gardening of buildings and structures / V.I. Bragina, Z.P. Belova, V.M. Sidorenko. - Kyiv: Budivel'nik, 1980. - 171s.
4. Brooks D. Brief Encyclopedia of Garden Design. - M.: BMM, 2006. - 184 p.
5. Hession D.G. All about indoor plants. - M.: Kladez-Buks, 2007, 256 p.