

Research on the Characteristics of Indoor Small Waterscape

Qinhua Sun

School of Environmental Engineering, Xuzhou Institute of Technology, Xuzhou 221111, China

sunqinhua1984@163.com

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Abstract. In recent years, with the improvement of people's living conditions, indoor living environment are increasingly high requirements. In order to improve the quality of environment to meet the taste of living space and living space of their spiritual needs, small waterscape indoor emerge as the times require. This article summarizes the problems of style of small waterscape configuration and the daily maintenance etc. on the basis of analysis of indoor waterscape construction.

1. Introduction

Indoor small waterscape which is a small landscape in the indoor, is combining with small plants, rocks, water device and microarchitectural pieces or other materials, According to the size and the different theme, indoor waterscape can be roughly divided into three categories^[1]. The first is a large scale, such as large hotels, clubs, restaurants, office lobbies and so on, using rockery and plants to create a complete miniature garden. Second is a moderate scale, consisting of plant communities and landscape stone spring stack combination, which is widely used^[2]. The third is a smaller scale, such as family, small office, Coffee hall, bar and so on, which is composed of a small indoor water landscape by planting window landscape.

2. The design of small indoor waterscape patterns

2.1 Still Water

Still water gives a person the sense with peace and quiet, filled with water after will highlight the water is clean and clear. At the same time it can reflect the surrounding scenery by calm water, and then it expanded the space and make the space increased levels.

2.2 Running Water

Running water has more vitality and beauty, especially combine with modern lighting, music, sculpture can make indoor environment to add color and intoxicating atmosphere. The circulation of indoor drains, jet Chuila fountains and waterfalls and so on, it can play the role of interior landscaping, but also plays the role of separating the interior space.

3. The form design of small indoor Waterscape

3.1 The Curtain Falls

Types of the waterfall. According to the form of the waterfall drop is divided into slide type, ladder type, curtain, ribbon etc, and imitate the natural landscape, use of natural stone or stone stone waterfall set the background, such as stone, stone, stone bearing waterfall diversion, taking into account the ornamental effect, should not be used to smooth finish of white granite as water wall^[3]. In order to ensure that falls along the wall, mountain smooth slide, cope with the water inlet rock do edge processing, or do slope with metope.

Height of the waterfall. Because of different water will produce different visual, auditory effect, Therefore, control of water mouth water flow and water height becomes a key parameter design, the residential area of artificial waterfall should be below 1m.

Drop size of the waterfall. The courtyard drop refers to the European garden in common was the ladder type drop waterfall, the step height and width ratio should be between 1:1-3:2, Tread width should be between 0.3-1.0.

3.2 Leisure swimming pool

The purpose of the swimming pool was built for leisure needs not just to build a water. The construction of a swimming pool of the original intention was for the leisure need not just building a waterscape. The blue geometric patterns and visual effects of the fish swimming pool swimming pool is very suitable for the construction of the rules of the yard, and the beach swimming pool with charcoal gray or brown decorative and natural style courtyard very harmonious.

3.3 The fountain

The fountain is a kind of water or other after a certain pressure through the nozzle spraying assembly has a specific shape, the water is generally water. The fountain can wet the surrounding air, reduce dust, and reduce the temperature. The fountain of the tiny water droplets collide with air molecules, can produce a lot of negative oxygen ions, so the fountain is beneficial to improve the appearance and enhance human health garden.

3.4 Wall spring and spring drop

The wall springs and the drop spring is mainly divided into three types, namely the wall type, rock type and plant type. Fish, baby, dragon, animal or human face spit water sculpture was installed in the courtyard of local wall, water pipe installation in their mouth, as trickle spit water, became a wall fountain. Or put the adjustive to small, make the water drips off and on, because dripping indoors, ding-ding drumming sound effect, dripping springs. Also can stick on the wall in a natural rock, made the natural Rock Springs, and plant resistance to Yin wet between stone herbaceous plants, such as saxifrage, stone calamus and some ferns and so on. The wall can also be affixed to the natural rocks, made of Natural Rock Springs shaped, and in stone planting shade wet herbaceous plants, such as Saxifraga, calamus and some ferns.

3.5 Aquarium

The aquarium is also known as the aquarium or aquarium, is a container for special breeding of aquatic animals and plants. The aquarium environment is generally divided into freshwater and brackish water, tropical or low temperature, these are decided which animal feeding conditions. The aquarium is one of the highlights of interior decoration, resettlement should be taken into consideration when the more conspicuous or conspicuous position, size and style according to the position of aquarium. Do not put in direct sunlight to choose local aquarium position, because the position of larger temperature difference between day and night, is not conducive to the growth and easy to breed fish, algae. In addition, plant growth have phototropism, in direct sunlight may cause water tendency while growing, and in the shade effect of ornamental effect.

4. Plant configuration of small indoor Waterscape

In addition to desktop fountain and independent small ornaments, the selection of plant species is very important. The leaves of plants and flowers in addition to the unique ornamental, but also to be able to soften the landscape structure, to create a special atmosphere ^[4]. We should consider the adaptation of plants of light, temperature, and humidity at the beginning of the selection of plants, to ensure that the selection of objects with similar habits.

4.1 The water plant art composition

Color composition. Light green transparent water, is to reconcile the impression of all kinds of garden landscape color, edge water is blue and fields are green, green leaves, the water blue sky, white clouds, not only to the brilliant flowering shrubs and grasses, flowers, and also has the role of the foil for autumn.

Line composition. Straight through the water plant with a variety of tree and plant lines, can enrich the line. Our garden planted with willow water since ancient times advocated, caused by article soft breeze water, spring scenery on the lake. The water planting way, on to the surface of the branches, or flat, or oblique, or show the hog, can form a beautiful lines on the surface are.

4.2 Plant habit

Suitable for indoor pool plants have stone calamus, umbrella sedge, crassipes, water aggregates grass, horse urine flowers, water lily, water lettuce, calla lily, etc. Suitable for moderate heating room plants: cactus, citrus, big flower clivia, spleenwort, bracketplant, change it, orchids, golden ball, hibiscus, evergreen, morning glory, bamboo of curvature of the spinal column, geranium, rhynia, big leaf PND tail-on fern, stonecrop, melon, bird of paradise, and so on. For a warm room plants: maidenhair, fire paradise magpie flowers, trees, dragon pearl, mimosa, waringin, pointed and Manila, butterfly orchid, mother-in-law, lantern, and other wood. suitable for the plant without heating room: camellia, trumpet creeper, bellflower, sowbread, anise gold plate, ivy, jasmine, lily, fuchsia, hydrangea, nepenthes, etc.

5. Daily maintenance of small indoor Waterscape

5.1 Anti-leakage

The interior of the water because can't penetrate the natural floor, such as the occurrence of leakage may bring a series of losses, sometimes causing serious consequences. Therefore, good anti leakage measures is very important. If there is a complex network of water near the underground structure, then we must do a good job in the design of artificial waterproof layer, in order to reduce the adverse effects caused by water leakage of underground structure ^[5]. There are two main ways: one is to prevent leakage of anti-leakage film, the other is a leak proof coating, when used according to the specific circumstances of choice.

5.2 Protect the water clean

Causes of indoor landscape water is easy to deteriorate mainly in the following:

Pollution. Around the indoor landscape water often grow plants, often some ornamental fish breeding water, animal, plants in various nitrogen, phosphorus, carbon, potassium and other nutrients and leaves "green waste" to a large collection of landscape water, such water pollution makes the further deterioration of water quality. The decay of the aquatic animal protein decomposition and make the water stank, in a vicious spiral state ^[6].

The design is not reasonable. We all know that the water does not rot, but because the design is not scientific, the dead often appear artificial waters, and the dead in water due to the lack of flow tends to deteriorate. All kinds of pollutants will be deposited in the corner, and slowly the pollution in the water, the dead become an artificial water pollution source.

The invasion of blue-green algae. Blue green algae is the main reason of landscape water deterioration. Because the spores can spread through the air, breed very fast. But when the propagation of consuming a large amount of dissolved oxygen seriously affect other aquatic plants. Now the treatment methods are commonly used for water diversion, water; filtration; chemical addition; ecological restoration technology.

5.3 To prevent drowning and falls

In order to prevent the visitors drop, falls, and drowning, indoor water should not be too deep, the general water drop measures should be taken to prevent, such as railings, handrails etc.

5.4 The safety of revetment rocks

The rocks of the security is the first point in the rockery. Rockery stones, rocks, solitary caves due to load, to do reliable basis. The stone revetment in order to save investment, under water, mud under 10~20cm with rubble masonry.

5.5 Anti-shock

The indoor water landscape is inseparable from waterscape lighting, lighting facilities and common and give visitors bring security risks. Fiber optic lighting modern technology of photoelectric separation. Optical fiber lighting as a collection of embellishment, not only colorful novel safe and reliable.

5.6 Plant diseases and insect pests

There are several common problems, scale insects, aphids, whitefly, powdery mildew downy mildew etc. As soon as possible to plant diseases and insect pests greatly improve the survival

probability. If you want to use chemicals to use strictly according to the manufacturer's instructions. If not on the label that can be used indoors, the mobile outdoor processing plant it is dry and then move back to the room. Do not spray beside the pool or other water features.

6. Conclusion

With the continuous development of interior design, indoor small water landscape design also constantly innovation. As with all sorts of art, indoor water landscape design is inexhaustible, whether it is vivid and simple quiet, as long as the combined with interior space, and then will increase the indoor environment of the artistic effect. Each of the builders want to build what kind of water landscape, to make a reasonable choice according to their own preferences and the overall style of the room, in order to achieve pleasing effect. Waterscape is beautiful, but also need a reasonable design and complete daily management. The problem of indoor small features is analyzed in detail in this paper that has certain directive significance to the small indoor water landscape designer.

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