Application of Glass Material in Indoor Office Space

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Abstract: As people's needs for an office space change, one by one "cubicle" is gradually changing to open office space. In the process of this transformation, people has also began to apply various materials to environmental art design. The combination of the properties and characteristics of glass materials and office space, breaking the traditional work environment to increase the level of space, the use of The reflective and transparent features of the glass to create a picture of light and shadow, to create a modern character of the office space, and strive to provide office staff with safe and a comfortable working environment, thus increasing employee productivity and sense of belonging to the company.

Keywords: Glass material; Office space; Spatial level

1. Introduction

In an era of rapid development, rapid change and urgent need for innovation, various and gorgeous glass materials have been applied to indoor office space by designers, striving to combine glass materials with contemporary aesthetics, combining the functionality and artistry of glass materials with the design of office space, improving the spatial layout, enhancing the level of space and enriching the artistic appeal of space. This paper studies the application of glass materials in office space, how to optimize and give consideration to aesthetic feeling and function, and provides a reference for designers to create a more comfortable and pleasant office space.

2. Problems in Office Space

Modern office spaces often occupy the city's central business district, which also leads to the land price of office space is very expensive, and due to the large number of office spaces created by the high demand for productivity also makes the work environment crowded and overly uniform, it is difficult for people to get spiritual relaxation in this too concentrated work environment, and it is also difficult for companies to mobilize the work enthusiasm of office personnel. .Besides, most of the office space has a rigid office form, and the definition and division of space area are relatively single, which makes it impossible for people to relieve their tired office state [1].

3. Application of Glass in Office Space

3.1. Presentation of functional beauty-enhancing brightness segmenting space

Glass artist Colin Reid once said that modern glass art is avant-garde and fashionable art subject that combines advanced technology, typical materials, excellent equipment, avant-garde modeling, and advanced consciousness. First, with the progress of the times, the technology of glass materials has become more mature. Its main component is mineral silicon. Because of its relatively low cost, its price is relatively low. At the same time, it also has the strong performance characteristics of waterproof, fireproof, and easy cleaning. This feature promotes the application of glass materials in space design. Second, another reason why artistic glass is favored by designers is its excellent projectivity and reflectivity. The so-called projectivity refers to the light transmission and transparency of glass material itself, while reflectivity refers to the reflection effect of glass material on indoor space light source and external natural light. These two points are also the most important manifestations of glass materials, which can not only make the external natural light source softly reflect the interior of the indoor space, but also blend with the light of the indoor space to show better artistic effect. Third, the choice of glass material is based on the strong plasticity of glass material, its color is unpredictable, especially under the influence of light, it gives people a wonderful and elusive aesthetic taste, which will enrich the visual perception experience and spiritual feeling of office workers to a certain extent. The above characteristics of glass provide a good prerequisite for its application in environmental art design. Its permeability is not available in traditional stone and wood. Its transparent vision brings convenience to the efficient and fast office work of staff. At the same time, the crystal-clear glass has an extremely strong reflection function. Through reasonable design and utilization, it can bring more bright and comfortable light for office personnel

during the day, and combine artificial lighting at night to make the light source of the whole office space more fully soft [2].

More innovative partitions are used in the design of open office areas, and glass is the best choice, using glass as the Design space partitions that allow the glass material to blend with the ambiance of the interior office space, providing an unprecedented office experience for the office worker. Therefore, we will use the glass wall as the identification of the division area, giving more possibilities to space and breaking the inherent concept of space planning. In such an open environment, it is convenient for people to better communicate and communicate at work, and it is also beneficial to relax people's mood and will not make people have a sense of oppression of closed space.

3.2. Application of sound insulation function

The sound insulation requirement of office space is to limit the sound in the conference room to prevent the sound from spreading. Laminated glass with a doublelayer or multi-layer composite structure can weaken and attenuate the sound transmission. Besides, to ensure sufficient light and comfortable communication feelings, the design of meeting rooms and negotiation rooms in the office space is combined with the decorative features of glass (e.g. frosted glass) to build glass walls, which can not only effectively isolate the line of sight, break the oppressive feeling of traditional walls, but also meet the privacy requirements of the meeting and achieve transparent lighting and brightness [3].

3.3. Shaping formal beauty-beautifying space environment

The glass material can absorb and reflect the light source, which can bring a more comfortable light source to the

office area and also increase the dreamy artistic beauty. Exhausted office conditions can be effectively combined with aesthetic needs through the use of art glass to relieve pressure for office staff. The color of the glass is unpredictable and highly plastic. Especially under the irradiation of light, it can bring people a wonderful aesthetic taste and enrich the visual perception and spiritual experience of office workers to a certain extent. The pursuit of unique artistic expression and design effects, so that art glass has the function of use and bring people rich artistic infectivity [4].

4. Conclusion

The traditional office space only meets the basic office needs, while ignoring the comfort needs of the staff. This paper mainly discusses how to fuse glass materials with office space and combine different characteristics of glass materials to create a space atmosphere suitable for the functions of office space, which provides some reference for exploring and exploring the application of glass materials in office space.

References

- Guan Shengxi. Study on the expression form of art glass in environmental art design.Shenyang Jianzhu University. 2018, 3(6), 36-38
- [2] Yuan Huimin. Application of modern glass art in public space design. Shanghai Arts &Crafts. 2018, 4(02), 90-91.
- [3] Zi Wang Xiang, Zhen Zhen. Design and construction of humanized office space with temperature. Popular Literature and Art. 2020, 4(05), 87-88
- [4] Zhang Lulu. Research on joint office environment design under sharing mode-take wework Shanghai Weihai road China flagship store as an example. Journal of Tongling University. 2017, 16(05), 91-94.