

ИНФОРМАЦИОННЫЕ ТЕХНОЛОГИИ

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ANALYSIS ON THE ELECTRICAL DESIGN OF RESIDENTIAL BUILDINGS

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With the rapid development of the current society, people's requirements for the construction industry are getting higher and higher, and the demand for building electrical design is also gradually increasing. In the past Architectural electrical design is limited to power supply and lighting, but with the progress of science and technology and the improvement of people's economic level, the current electrical design includes strong and weak electricity. High voltage is Power supply, lighting, lightning protection, etc. Weak current involves telephone, TV, network and so on. The current building electrical design guarantees safety as the first priority and the quality of user use Strictly control, pay attention to the details, to give users a better feeling of use. This paper is aimed at the building electrical design of residential areas to make the following analysis and discussion.

The introduction. At present, China's construction industry is booming, the key component of China's construction industry is the construction of residential communities, in order to meet the needs of integrated construction, the construction industry needs to carry out scientific and technological design of the internal structure of residential communities.

The electrical system is an important and core position in the building. From the design of the electrical system, the design scheme should be improved, and the installation and construction stage of the electrical system should be guided to ensure that the building can achieve the relevant effects according to the previous estimates.

Designers should take the geological and geomorphic factors of the residential area into consideration to make the design plan of the electrical system more feasible and ensure the quality and safety of the use of the electrical system.

Know the electrical requirements of residential district users. At present, residential electrical design must meet the requirements of economy and practicality. In the stage of drawing up electrical design plan, it is necessary to carry out the research work, grasp the requirements of users in electrical aspects, make comprehensive analysis, and take the improvement of user experience into consideration so as to meet the requirements of users.

Electrical designers in residential areas not only need to master electrical, architecture and other contents, but also can start from the type of building to choose appropriate electrical facilities, improve the technical content of electrical design in residential areas, so as to make residents have a better living experience.

Because the electrical systems of residential communities and commercial buildings are different, such as parameters, circuit loads, etc., the actual situation of residential communities should be taken into account in the design, so that the design can give residents a better use experience.

Electrical design concept of residential buildings. Nowadays, the trend of architectural design is energy conservation, environmental protection and practicality. Therefore, it is natural for electrical design to put users' electricity demand in the first place to ensure users' production and life.

In order to improve the user experience, it is necessary for designers to adjust the layout of electric power from the building use requirements, pay attention to the transmission speed of electric energy, and improve the convenience of the residential neighborhood.

In addition, in the energy saving design stage, the needs of individual housing and special skills should be taken into account.

Now the environmental protection of residential building design is the main theme.

Energy-saving and environment-friendly residential buildings are welcomed by users, so designers must consider energy-saving and environment-friendly factors when designing.

The construction plan should be guided by the idea of environmental protection, the user needs and the actual situation of the building site should be taken into consideration, the appropriate technology should be selected, and then the scientific and appropriate design plan should be made, so as to reduce the project cost and realize the construction

Environmental protection. Residential construction design phase, need from the real situation of project, choose suitable environmental protection and energy saving design plan, selection of economic and energy saving are implementable solutions, reduce energy consumption, improve energy utilization, also because this goal, need to strengthen energy conservation, understand the performance of the building, to show the characteristics of the architectural practicality.

Status and deficiencies of electrical design of residential buildings. Residential building electrical design analyzes the status and deficiencies to develop work level and optimization, implementation should pay attention to the various work of shortage, such as the shortage of the electrical design and electricity and so on to deal with, so we need to the present situation to analyze, this is the key to raise work level and quality.

When designers design residential electrical, most of the use of modular distribution box PZ30, but in fact should be used modular distribution box PZ20.

The PZ30 is suitable for use in industrial places, and the most suitable modular distribution box for such places as homes is the PZ20.

In addition, some designers themselves are not very professional, the wire diameter arranged inside the wall is small, can not meet the use of family high-power electrical appliances, leading to these large equipment can not work normally, when the situation is serious, may also cause a fire.

Many home electrical installation is not standard, electrical design is not careful, operation is not standard and other reasons may also cause dangerous accidents.

The electrical building of the residential district is related to the personal safety of each family member. Although many people pay special attention to it, in real life, they do not pay attention to the correct use of electrical appliances and the aging problem of electrical appliances.

Some old family indoor electrical facilities, for example, often can't normal use, but they don't reflect the problems of its own to property, but a self-assertion, in new line cinema for circuit directly, they don't know is their operation does not accord with national standard of electricity, it is very easy to cause a variety of dangerous accidents.

For example, some families use compact fluorescent lamps to replace incandescent lamps, just in the position of the lamp holder, although there is no big problem, usually, however, if in some special times, bayonet lamp holder in the replacement of light source is likely to let people get electric shock, do not look down upon this small problem, serious even threatening people's lives.

Still have the family to the electrical safety in the bathroom also not quite put in the heart, do not know however in certain time also can cause the electric shock accident.

Conclusion. The household electricity load increases rapidly, and it is difficult to estimate the residential load in the future, so it is impossible to achieve perfect electrical design of residential district.

We have to learn new skills and use our experience to make sure our customers use their electricity safely.

For example, we can pass the application of high and new technology means, strengthen the construction and development of the residential district automatic control system, through the automatic control system to complete the residential district

Power transformation and distribution, public lighting, green irrigation and so on, so as to a certain area of the relevant equipment for unified management, control, and at any time to monitor it, the first time to find problems alarm and so on.

This technology can provide people with a more convenient and safe living environment, but also simplify the work of managers.

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