Structure design of residential building units based on Auto-CAD

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Abstract. This paper mainly introduces the methods and techniques of using Auto-CAD to draw the structure design of the house. The main contents include: the preparation of interior design and mapping knowledge, Auto-CAD basic knowledge; according to the different needs of the design of the structure.

Introduction

Dwelling structure mainly refers to the conditions of modern buildings, creates a reasonable and perfect building interior environment, and meets the growing needs of the material and spiritual life[1-3]. Nowadays, more and more attention has been paid to the dwelling structure, because it has a strong social foundation and fully reflects the needs of the times[4-5].

Unit architecture design based on the Auto-CAD

Functional analysis

This paper mainly uses Auto-CAD software in today's popular home decoration industry. A set of 100 square meters of the model room for example. Explain in detail the different functions of the room design elements and characteristics. The main contents of this paper include: describe the knowledge model structure, drawing room distribution, layout, as well as the living room interior decoration; filling materials and the effect of filling after the show.

Overall architecture

According to the requirements of the room to make the size of the map, this paper mainly introduces the production process of graphic design. The first aim is good lighting, large size structure to accommodate large families, high utilization rate of space to 100 square meters of dwelling design.

100 square meters of the detailed design

1) Draw the first and the second bedrooms. As shown in Figure 1.

Fig. 1 bedroom

2) Partition pattern drawing toilet, kitchen, warehouse.

(1) Draw length 540, width 270 of the quadrilateral as the kitchen. As shown in Figure 3 and Figure 2 to Figure 3.

Fig.2 kitchen

Fig.3 toilet

- (2) Draw length 330, width 240 of the quadrilateral as the toilet. As shown in Figure 4 to Figure 7.
- 3) Partition pattern drawing living room as shown in Figure 4.

Fig. 4 living room

- 4) Modify the internal wall, mainly the location and size of doors and windows. Install the door as shown in Figure 5.

Fig. 5 doors and windows

5) Draw balcony window as shown in Figure 6.

Fig. 6 doors and windows

6) Draw basic furniture.

Fig.7 doors and windows

Conclusions

This paper uses Auto-CAD to draw size structure design. Main contents include: preparation knowledge of structural design drawings, Auto-CAD basic knowledge, structure design Auto-CAD function command, quick drawing tools, the main draw legend in design, room size orientation, location, the number of units carry out the structural design.

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