Activity 2.3.3 Designing for the Client

Introduction

An architect or engineer does not design anything without the thoughtful input of owners and clients. In this activity you will use a process that an architect or civil engineer might employ when designing a project for a client. You will use sketches to quickly plan and discuss basic ideas about the design of a Habitat for Humanity house. During an interview you will gather information about the wishes of the client. You will incorporate and consider this information when you design the structure. The bubble diagrams and sketches that you create will be the beginning of your project documentation.

Equipment

- Engineering notebook
- Calculator
- Client Survey
- New Construction Guidelines - Habitat for Humanity
- Residential Code Requirements
- Elements of a Good Floor Plan notes

Procedure

You will design a house for a client. Your instructor will assign a partner to you. This may be a parent, teacher, or a classmate. It is important to remember that you are designing this house for the client, not for yourself. Make your design decisions with your client in mind. Many of your decisions will need to be verified with the client along the way. This will ensure that the final product meets the needs of the client. It is also important to note that you will be expected to follow local building codes and Habitat for Humanity specifications. In addition you will be expected to select and incorporate at least two different aspects of green building into your design. Your instructor may have specific LEED criteria for you to observe.

1. Study the New Construction Guidelines-Habitat for Humanity.

Follow the Habitat for Humanity specifications unless you are otherwise instructed or local building codes are more stringent. These specifications usually satisfy and often exceed local building codes. Some specific requirements to take note of include the number of bedrooms, square footage limits, and hall sizes.

2. Interview the Client

Schedule an interview with your assigned client at a time when you can gather information in a relaxed setting. Use the Client Survey form to gather as much information as you can about their needs and desires for this home. Feel free to sketch and diagram together to convey ideas between the two of you. Record all of these ideas in your engineering notebook. Be sure to have the client sign the Client Survey.

3. Begin Bubble Diagrams and Sketches

Using the information on the Client Survey, create at least two different bubble diagrams and floor plan sketches that satisfy your client's needs and desires. Refer to your notes on the Elements of a Good Floor Plan. It is important to remember that the design process is continuous. Your first ideas are not always your best ideas.

4. Incorporate Building Code Requirements

View the Introduction to Building Codes presentation and review the Residential Code Requirements handout. Revise your floor plan sketches as necessary to comply with the Residential Code Requirements. Be sure to include necessary dimensions, door and window location and sizes, and notes to show compliance with the code.

5. Incorporate Universal Design

Watch the Universal Design presentation and revise your floor plan sketches to include universal design features. Be sure to show all important dimensions (including bathroom dimensions and layout) and include notes to address the important Universal Design issues. In addition, revise any feature or component selections that you made in the previous activity to reflect Universal Design criteria. For example, re-examine the appliances you selected – if they are not easy to use for everyone, find new images and revise your selections.

6. Meet with Client for Design Review

Present the sketches and diagrams to the client. Communicate your thought process as you walk the client through each floor plan. Record any changes that the client wishes to make and give your own advice as well. Come to an agreement on the final floor plan layout. Request that your client sign the final bubble diagram/floor plan layout. Document your discussion and the decisions that were made during the meeting. Have the client sign the meeting notes.

Conclusion

1. What was the most difficult thing about designing for a client?

The most difficult thing about designing for a client is figuring out what they wanted and taking it into consideration while incorprating Habitat for Humanity construction guidelines and building code requirements.

2. How did your design change due to code requirements?

The design code forced us to reconsider the technical side of the project that we would explore later on in the project

3. How did your design change as a result of incorporating Universal Design features?

The universal Design features we used were size of house, type of consturction,and accesiblity.

4. How can you incorporate green and sustainable design techniques in your Affordable Home design?

We will take in account sustainable methods, materials and mechanical componenets that architects use when designing buildings.