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The Building Team

As a kitchen and bath designer, you won't be working alone. To begin with, you'll obviously need clients. Beyond that you'll depend on a number of other professionals and installers to realize your design concepts. You should know your own strengths and weaknesses and what specialists to call on for project tasks outside your own expertise. Working smoothly with this team of building specialists will require courtesy, respect, and patience. This chapter gives you an overview of some of the major players on the building team and where they fit in the game.

The teams that design and build commercial or industrial projects have narrower, more clearly defined roles than those involved with residences. Architects and engineers basically design and look in, from time to time, to ensure that the work is being constructed as specified. A general contractor manages the construction, with subcontractors installing various parts.

With residences, many variations are possible. The overall design may not come from an architect or building designer at all but from a magazine or other source, sometimes adapted by a designer for the specific project. The heating system might be designed by the same firm who installs it. The same holds for electrical work. A general contractor, or homebuilder, may coordinate the various subparts, or it may be left to the owner. And the owner often installs some of the work.

How do you fit in? There's no general answer. As a kitchen and bath designer, you play an important part in realizing a residential project. To do this effectively, you need first to know your craft, understand the project, and be able to work smoothly with the other players on the team.

Before you do anything else with a project, you should pin down the organizational model, who does what, and who answers to whom.

Learning Objective 1: Describe the areas of expertise of those who may interact in the design of a residence.

Learning Objective 2: Describe the areas of expertise of those who may install or construct all or portions of a residence.

Learning Objective 3: Differentiate the roles of each member of a building team.

GENERALIST DESIGNERS

The design process starts with a program statement that lists the client's needs and goals. Your task is to translate the program into a concept that ultimately can be built. Building design is a huge field that contains both generalists and specialists. The overall design may be entrusted to an architect or building designer who coordinates the work of the other specialized design professionals. The list of specialists required to fill out the team varies according to the size and type of project and may include engineers, landscape architects, interior designers, and—here's where you fit in—kitchen and bath designers.

Architects

The role of architects has changed dramatically from the days when they were "master builders" who orchestrated the entire production of a building, from design through the driving of the last nail. Today architects mostly design, with limited oversight responsibilities during the construction phase. To be called an architect, one must be licensed by the state, which requires a professional degree, a supervised internship, and successfully passing a professional examination. Even though trained as generalists, architects today are increasingly specializing in a niche, such as hospitals, prisons, schools, or residences. Architects who do residential design may include the detailed design of kitchens and baths in the scope of their services or leave it to specialist designers, once the general concept has been established. In this case, the specialist designer may work through the architect or, more likely, answer directly to the client.

Building Designers

Unlike architects, building designers do not need professional licenses to practice, but they are limited to buildings of a certain type and/or size. Most specialize in residential design. This doesn't mean building designers are untrained, though. Some may have little training in their craft, but others may have substantial formal education and/or practical experience. To qualify as a certified professional building designer by the American Institute of Building Designers (AIBD), one must meet specific educational and professional design experience requirements; submit work samples for extensive peer review; and pass an examination covering such topics as architecture, engineering, building systems and materials, project administration, problem solving, and professional ethics. AIBD also encourages its members to seek qualification from the National Council of Building Designer Certification (NCBDC) and its certification program for professional building. If you are called in to consult on a project for which a building designer has prepared the plans, you may work for either the designer or the client.

Engineers

Like architects, engineers are licensed by the state and obtain their qualifications via a professional degree and professional exam. Most engineers specialize in a particular area, such as mechanical, electrical, structural, and civil engineering. Multistory housing may require the services of any or all of these specialties. The majority of single-family housing gets built without the services of any engineer, except perhaps for a civil engineer to survey the site. In high-end housing, mechanical engineers may be entrusted with the design of the heating, ventilation, and air-conditioning (HVAC) systems. An electrical engineer might design the power and lighting, communications, and other electrical systems. To work effectively with an engineer, you will need a final layout of your portions of the house in hand, along with the particular equipment that will be installed. If a mechanical engineer is charged with designing the HVAC or plumbing system, be prepared to provide the engineer with any plumbing, ducting, and power requirements for the fixtures and equipment you specify. Get these requirements from catalogs and pass them along as soon as possible in the design process. If an architect is in charge of the overall design, you probably will communicate this information through him or her.

Interior Designers

The design team of high-end residential projects may include an interior designer, who specializes in organizing the interior and specifying furnishings and color schemes. If an interior designer is involved with the project, you will need to clarify the various design responsibilities early on. Confusion and bruised egos will surely result if all the players don't know how they fit into the team and how project communication will work.

Other Designers

Various other designers may design particular systems in a residence, including the heating, cooling, lighting, security, automation, solar systems, fire suppression, landscaping, water purification, flooring, and other systems. The professionals who design these systems gain their expertise in various ways, which may include a college major or experience in their field. They may or may not hold professional licenses or certification by a professional association. For example, a lighting designer may be a licensed electrical engineer, an electrician, or a person who has developed skills in that area from working for a company that manufactures or sells lighting.

BUILDERS AND INSTALLERS

Once the planning work is complete, another team enters the project: builders and installers. A residential project may require the services of a very few or several specialists, according to the complexity of the project.

General Contractors

All building projects need someone to coordinate the various actors involved in the construction. Whoever takes on this important charge must schedule the construction, recruit the subcontractors (subs), usually pay them, and oversee the construction. The task is daunting, rather like herding cats. Owners who act as their own general contractors often encounter rough waters—work that doesn't happen when it is supposed to, unforeseen costs, and numerous other frustrations. Hiring a general contractor helps avoid these kinds of headaches. Even with a pro managing the show, owners still can reserve portions of the work to do themselves, such as installing drywall or painting.

Plumbers

If you think of plumbers as the experts on systems that move water in and out of kitchens and baths, it's obvious how crucial these installers are to the project team. Plumbers need to know their way around the myriad of pipes, fittings, and fixtures while keeping up to date with the latest code provisions. It's in your interest to get to know a few competent plumbers in your area so you can pick their brains when you confront plumbing-related questions in your design work. And, naturally, the plumber on your project will need to know the layout and plumbing requirements of the kitchen and bath fixtures.

Electricians

Electricians are also indispensable to kitchen and bath projects. Their work begins where yours leaves off. If your design shows the proposed locations of power outlets and lighting fixtures, the electrician has to make sure all of these devices work as intended. Like plumbers, electricians must follow the latest provisions of a reference code, most likely the National Electrical Code (NEC). Electricians usually determine the circuiting arrangements in residential work. For this, they'll need to know the voltage requirements of large appliances and which lighting fixtures are low voltage, along with any other electrical requirements.

Home Technology Specialists

Home electrical systems used to consist of a high-voltage power system and a low-voltage telephone system. The power system brought power to the house via a service panel with circuits for power and lighting. A wiring network distributed the electricity to the various points of use. Telephone wiring amounted to a box on the outside wall, connected to one or more phones inside by low-voltage wiring. No more. The "smart house" came on the scene in the 1980s with low-voltage systems to control appliances and lighting automatically. The technology was slow to catch on but has progressed steadily. Many of today's new homes contain some provisions for home automation, ranging from data wiring in the walls to complete home automation systems with programmable options capable of controlling a multitude of electronic devices. Not surprisingly, these systems are complicated enough to require specialist designers and installers—either electrical engineers specialized in home automation or the vendors themselves. Because these systems affect the whole house, it is in your interest to be aware of them and know how and where they fit into your kitchen and bath design.

SUMMARY

As a kitchen and bath designer, you play an important part in realizing a residential project. To do this effectively, you need to know your craft, understand the client's objectives, and know who will make up the project team. The team may range in size and include any of these specialists:

- Architects or building designers, for overall project design
- Engineers, for design of specific portions of the project
- Builders or general contractors, for management of the overall project
- Plumbers, electricians, and other subcontractors for installation of the various systems that will go into the project

To work smoothly within the planning and building process, you should understand how the project has been organized, who will be on the building team, and what each member's role will be. Understanding and executing your role on the building team in a competent manner with due consideration of the ideas and contribution of other members can result in a successful project and solid referral base for years to come.

CHAPTER REVIEW

1. What is a program statement? (See "Generalist Designers" page 2)
2. What type of engineer would most likely be involved with a single-family house? (See "Engineers" page 2)
3. Are building designers required to be licensed in order to practice their trade? (See "Building Designers" page 2)
4. What is a general contractor responsible for? (See "General Contractors" page 3)