



CHAPTER

1

Introduction

You interact with commercial interiors every day, stopping at a fast-food restaurant for a quick lunch or studying for a test at the library. Perhaps you visit a textile showroom to pick up samples for a project or join a friend at an athletic club to work out. Maybe you pick up your child at a day-care center. All these facilities and many others represent the kinds of interior spaces created by the division of the interior design profession commonly called *commercial interior design*.

Designing *commercial interiors* involves designing the interior of any facility that serves business purposes. Facilities that fall under the category of commercial interior design include businesses that invite the public in, such as those mentioned above. Others restrict public access but are business enterprises such as corporate offices or manufacturing facilities. Commercial interiors are also part of publicly owned facilities such as libraries, courthouses, government offices, and airport terminals, to name a few. Table 1-1 provides additional examples.

TABLE 1-1 Common Specialties and Career Options in Commercial Interior Design

<p>Corporate and Executive Offices</p> <ul style="list-style-type: none"> ■ Professional offices ■ Financial institutions ■ Law firms ■ Stockbrokerage and investment brokerage companies ■ Accounting firms ■ Real estate firms ■ Travel agencies ■ Many other types of business offices ■ Restoration and renovation of office spaces <p>Healthcare Facilities</p> <ul style="list-style-type: none"> ■ Hospitals ■ Surgery centers ■ Psychiatric facilities ■ Special care facilities ■ Medical and dental office suites ■ Assisted and senior living facilities ■ Rehabilitation facilities ■ Medical labs ■ Veterinary clinics <p>Hospitality and Entertainment Facilities</p> <ul style="list-style-type: none"> ■ Hotels, motels, and resorts ■ Restaurants ■ Recreational facilities ■ Health clubs and spas ■ Sports complexes ■ Convention centers ■ Amusement parks and other parks ■ Theaters ■ Museums ■ Historic sites (restoration) <p>Retail/Merchandising Facilities</p> <ul style="list-style-type: none"> ■ Department stores ■ Malls and shopping centers ■ Specialized retail stores ■ Showrooms ■ Galleries <p>Institutional Facilities</p> <ul style="list-style-type: none"> ■ Government offices and facilities ■ Schools—all levels ■ Day-care centers ■ Religious facilities ■ Prisons 	<p>Industrial Facilities</p> <ul style="list-style-type: none"> ■ Manufacturing areas ■ Training areas in industrial buildings ■ Research and development laboratories <p>Transportation Facilities/Methods</p> <ul style="list-style-type: none"> ■ Airports ■ Bus and train terminals ■ Tour ships ■ Yachts ■ Custom airplanes—corporate ■ Recreational vehicles <p>Other Career Options</p> <ul style="list-style-type: none"> ■ Residential interior design specialties ■ Retail sales associate ■ Sales representative for manufacturer ■ Interior design manager ■ Project manager ■ Public relations ■ Teaching ■ Facility planner for corporations ■ Computer-aided design (CAD) specialist ■ Renderer and model builder ■ Product designer ■ Specification writer ■ Magazine writer ■ Marketing specialist ■ Museum curator ■ Merchandising and exhibit designer ■ Graphic designer ■ Wayfinding designer ■ Lighting designer ■ Commercial kitchen designer ■ Art consultant ■ LEEDs certified designer ■ Codes specialist ■ Textile designer ■ Color consultant ■ Set design <p>There are many other ways to specialize or work in interior design and the built environment industry. Be careful not to create too narrow a specialty, as there may not be sufficient business to support the firm.</p>
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These interiors can be as exciting as a restaurant in a resort hotel or as elegant as a jewelry store on Rodeo Drive in Beverly Hills (Figure 1-1). A commercial interior can be purely functional, such as the offices of a major corporation or a small-town travel agency. It may need to provide a comfortable background, as in a healthcare facility. It can also be a place to learn.



Figure 1-1 A fine dining restaurant in a resort. The Inn at Palmetto Bluff, Bluffton, South Carolina. (Interior design by Wilson & Associates, Dallas, TX. Photographer Michael Wilson.)

Commercial interior design was once referred to as *contract design*. In fact, many interior designers still use this term, which developed from interior designers' use of a contract to outline services, fees, and responsibilities related to the project. Until approximately 30 years ago, contracts of this type were used primarily by interior designers working on business facilities. Today, most residential interior designers also use contracts, so the designation is less applicable.

This challenging and exciting profession has had a huge impact on the interior design and construction industry in the United States and throughout the world. *Interior Design Magazine's* reports on the industry's 100 largest design firms stated in January 2006 that approximately \$1,610,000,000 was generated by these firms in commercial projects alone in 2005.¹ That's right—1.61 billion dollars. Of course, this represents only a portion of the total commercial interior design industry.

We begin with a brief historical overview of the profession, followed by a discussion of why it is important for the commercial interior designer to understand the business of the client. We then describe what it is like to work in this area of the interior design profession. We conclude with a discussion of important issues concerning the design of commercial interiors—sustainable design, security and safety, licensing, professional competency examination, ethics in the profession, and professional growth. Subsequent chapters provide a detailed look at many functional and design concept issues for the most common categories of commercial facilities.

Table 1-2 presents vocabulary used throughout the chapter.

¹*Interior Design* magazine, January 2006, p. 95.

TABLE 1-2 Chapter Vocabulary

- BUSINESS OF THE BUSINESS: Gaining an understanding of the business goals and purpose of a commercial interior design client before or during execution of the design.
- COMMERCIAL INTERIOR DESIGN: In the interior design profession, the design of any facility that serves business purposes.
- DESIGN-BUILD: One contract is given to a single entity for both the design and construction of the facility (see Box 1-1, p. 10).
- FAST TRACK: Rapid development of projects from conception to completion. Often plans for one part of the project are completed while other parts are under construction.
- FURNITURE, FIXTURES, AND EQUIPMENT (FF&E): All the movable products and other fixtures, finishes, and equipment specified for an interior. Some designers and architects define FF&E as furniture, furnishings, and equipment.
- LEED: Leadership in Energy and Environmental Design. A voluntary certification program of the U.S. Green Building Council (USGBC) that rates buildings that are healthier, profitable, and environmentally responsible.
- "SPEC": Building a building before it has any specific tenants. Developers of commercial property are "speculating" that someone will lease the space before or after construction is completed.
- STAKEHOLDERS: Individuals who have a vested interest in the project, such as members of the design team, the client, the architect, and the vendors.
- SUSTAINABLE DESIGN: Design that is done to meet the present needs of the project while considering the needs of future users. The most widely accepted definition of sustainable design is provided on page 15.

Historical Overview

In this section, we provide a very brief overview of the roots of commercial interior design. Each chapter concerning the design of facilities also includes a brief historical perspective. An in-depth discussion of the history of commercial design is beyond the scope of this book.

One could argue that commercial interior design began when the first trade and food stalls opened somewhere in Mesopotamia or another ancient country. Certainly buildings that housed many commercial transactions or that would be considered commercial facilities today have existed since early human history. For example, business was conducted in the great rooms of the Egyptian pharaohs and the palaces of kings; administrative spaces existed within great cathedrals, and in portions of residences of craftsmen and tradesmen.

The lodging industry dates back many centuries, beginning with simple inns and taverns. Historically, hospitals were first associated with religious groups. During the Crusades of the Middle Ages, the *hospitia*, which provided food, lodging, and medical care to the ill, were located adjacent to monasteries.

In earlier centuries, interior spaces created for the wealthy and powerful were designed by architects. Business places such as inns and shops for the lower classes were most likely "designed" by tradesmen and craftsmen or whoever owned them. Craftsmen and tradesmen influenced early interior design as they created the furniture and architectural treatments of the palaces and other great structures, as well as the dwellings and other facilities for the lower classes.

As commerce grew, buildings specific to business enterprises such as stores, restaurants, inns, and offices were gradually created or became more common. Consider the monasteries (which also served as places of education) of the 12th century, as well as the mosques and temples of the Middle East and the Orient; the amphitheaters of ancient Greece and Rome; and the Globe Theatre in London built in the 16th century. From the 17th century on, the design of commercial building interiors became increasingly important.² For example, offices began to move from the home to a separate location in a business area in the 17th century, numerous bank buildings were constructed in the 18th century, and hotels began taking on their grand size and opulence in the 19th century (Figure 1-2).

²Tate and Smith, 1986, p. 227.



Figure 1-2 The 19th-century Hotel Kenyon is typical of the period, although not opulent. (Photograph used by permission, Utah State Historical Society. All rights reserved.)

Furniture items and business machines such as typewriters and telephones, as well as other specialized items, were also being designed in the 19th century. Other examples of the emergence of commercial interiors will be presented in other chapters.

The profession of interior decoration—later interior design—is said by many historians to have its roots in the late 19th century. When it began, interior decoration was more closely aligned to the work of various society decorators engaged in residential projects. Elsie de Wolfe (1865–1950) is commonly considered the first professional independent interior decorator. A recent publication on de Wolfe called her “the mother of modern interior decoration.”³ De Wolfe supervised the work required for the interiors she was hired to design. She also was among the first designers, if not the first, to charge for her services.⁴ In addition, she was one of the earliest women to be involved in commercial interior design. She designed spaces for the Colony Club in New York City in the early 1900s⁵ (Figure 1-3).

Although most of the early commercial interior work was done by architects and their staff members, decorators and designers focusing on commercial interiors emerged in the early 20th century. One woman designer most commonly associated with the beginning of commercial interior design was Dorothy Draper (1889–1969).⁶ She started a firm in New York City and, starting in the 1920s, was responsible for the design of hotels, apartment houses, restaurants, and offices. Her namesake firm still exists.

In the 20th century, reinforced concrete, modular construction technologies, and numerous other advances in the building industry changed the appearance of commercial facilities. The early commercial buildings of architects such as Frank Lloyd Wright, Bauhaus architects such as Walter Gropius, and International Style architects such as Le Corbusier, to name just a few, advanced commercial architecture and interior design with contemporary aesthetics. Technology also changed the interior finishing of structures. New products such as bent tubular steel for furniture designed by Mies van der Rohe and Marcel Breuer, molded plywood used by Alvar Aalto and Charles Eames, and the fiberglass designs of Eero Saarinen also

³Sparke and Owens, 2005, p. 9.

⁴Campbell and Seebohm, 1992, p. 70

⁵Campbell and Seebohm, 1992, p. 17.

⁶Tate and Smith, 1986, p. 322.

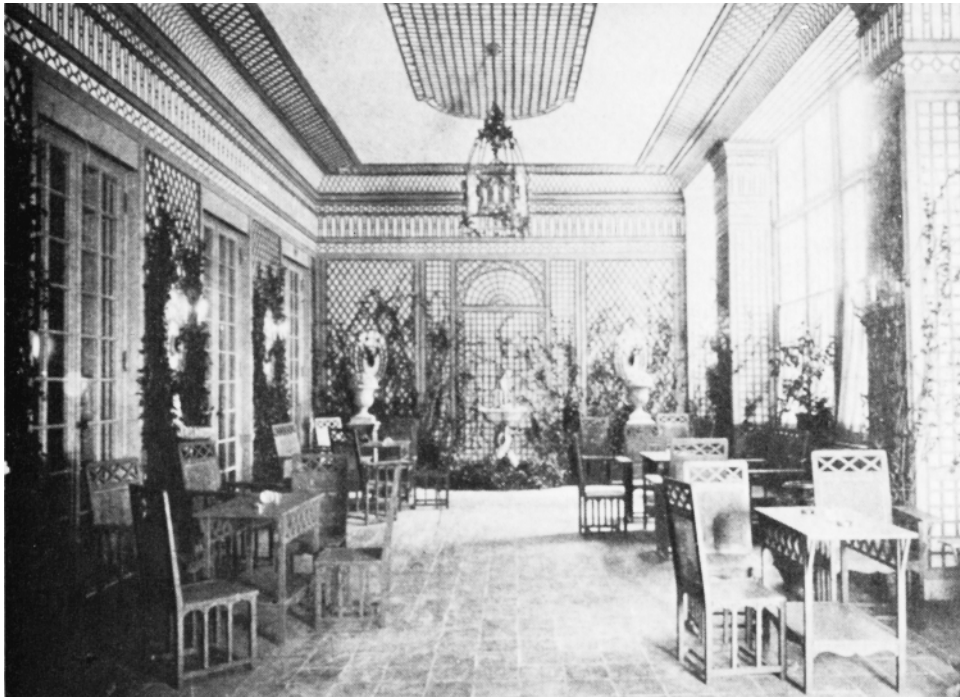


Figure 1-3 The Trellis Room at the Colony Club, New York City, designed by Elsie de Wolfe. (Photograph from Elsie de Wolfe, *The House in Good Taste*, New York: The Century Co., 1913.)

changed the interior design of commercial facilities. These are only a few of the achievements and advances in furniture design and interior design made in the early 20th century.

The sweeping open spaces of the Johnson Wax Building in Racine, Wisconsin, designed by Frank Lloyd Wright, were precursors of the open plan designs that emerged in office spaces. Open planning or open landscape, began in 1958 in Germany.⁷ That planning concept gradually gained acceptance and caused major rethinking of office planning. New furniture items focusing on the use of panels and individualized components were introduced in the late 1960s, changing office planning and design dramatically (Figure 1-4). Additional discussion of these changes can be found in Chapters 2 and 3.

Commercial interiors changed for many reasons in the second half of the 20th century. Technological changes in construction and mechanical systems, code requirements for safety, and electronic business equipment of every kind have impacted the way business is conducted throughout the world. Consumers of business and institutional services expect and demand better environments as part of the experience of visiting stores, hotels, restaurants, doctors' offices, and schools—everywhere they go to shop or conduct business. Interior design and architecture must keep up with these changes and demands. This is one of the key reasons that an interior designer must be educated in a wide range of subjects and understand the business operations of clients.

The interior design profession also grew in stature in the 20th century with the development of professional associations, professional education, and competency testing. The decorators' clubs that existed in major cities in the 1920s and 1930s were the precursors of the two largest interior design professional associations in the United States. The American Society of Interior Designers (ASID) has over 38,000 members involved in residential and commercial interior design, with chapters located in 48 states and/or cities. The International Interior Design Association (IIDA) has over 10,000 members also involved in residential and commercial interior design, with 30 chapters in the United States and internationally. In Canada, the national association is the Interior Designers of Canada (IDC). It provides a unified voice for the seven provincial associations in Canada to promote educa-

⁷Pile, 1978, p. 18.



Figure 1-4 Action Office workstation from the 1960s with the use of panels and individualized components. (Photograph courtesy of Herman Miller, Inc., Zeeland, MI.)

tion and practice in the profession. Members of the IDC must be professional members of their provincial association. There are many smaller specialized professional associations as well. Contact information on several professional associations is presented in the Appendix.

In professional education and testing, the most significant advances occurred in the second half of the 20th century. Many schools have had interior design programs with varying content and quality since the early 20th century. In 1963 the Interior Design Educators Council (IDEC) was organized to advance education in interior design and meet the needs of faculty members in interior design programs. The growth of the profession encouraged many other programs, and in 1970 the Foundation for Interior Design Education Research (FIDER) was incorporated to serve as the primary academic accrediting agency for interior design education. In 2005, the Foundation changed the name of the organization to the Council for Interior Design Accreditation. The National Council for Interior Design Qualification (NCIDQ) was incorporated in 1974 to meet the need for an independent organization to test for competency in the profession.⁸ Table 1-3 lists other milestones in the development of professional associations. Contact information and Web site addresses of the organizations mentioned in the preceding discussion are listed in the Appendix.

This overview of the history of commercial interiors is by necessity very brief. The reader who would like more information about the history of commercial interior design can consult one of the references at the end of the chapter.

Understanding the Client's Business

The design of a commercial interior begins with an understanding of the *business of the business*, which refers to understanding the goals and purposes of a business. In fact, it is important to understand the business specialty even before seeking projects in that specialty. When the interior designer and team understand the client's business in general and the client's goals for the project from a business point of view as well as from a design standpoint, solutions are more functional for the client and lead to more creative design concepts.

For example, space planning and product specifications are different for a pediatrician's suite than for the offices of a cardiologist. Planning decisions are different for a

⁸The NCIDQ examination is also used as the competency examination in all the provinces of Canada.

TABLE 1-3 Key Milestones for Interior Design Associations

1931	American Institute of Interior Decorators (AIID). The first national professional association for interior decorators.
1936	The American Institute of Interior Decorators changed its name to the American Institute of Decorators (AID).
1957	National Society for Interior Designers (NSID) became the second national professional interior design association.
1961	American Institute of Decorators changed its name to the American Institute of Interior Designers (AID).
1963	Interior Design Educators Council (IDEC) organized to advance the needs of interior design educators.
1969	Institute of Business Designers (IBD) formed primarily for commercial interior designers.
1970	Foundation for Interior Design Education Research (FIDER) organized to advance the academic accreditation of interior design curriculums.
1974	National Council for Interior Design Qualification (NCIDQ) incorporated. It is primarily responsible for development and administration of a qualification examination in interior design.
1975	AID and NSID merged to form the American Society of Interior Designers (ASID).
1982	Alabama became the first state to pass title registration legislation for interior design practice.
1993	United States Green Building Council (USGBC) founded. Promotes research and design of environmentally responsible buildings and interiors.
1994	International Interior Design Association (IIDA) formed by the merger of IBD, the International Society of Interior Designers, and the Institute of Store Planners.

Source: Excerpted from Christine Piotrowski, *Professional Practice for Interior Designers*, Wiley, 2002, p. 13. (Reprinted with permission of John Wiley & Sons, Inc.)

small gift shop in a strip shopping center than for one in a resort hotel. Understanding this from the onset is critical for the design firm.

An obvious advantage of understanding the client's business is that the interior design will be more functional. Businesses seek interior design firms that are not "learning on the job" with the client's project. Of course, creative solutions that are aesthetically pleasing are important to many clients. However, a creative and attractive office that does not work or is not safe is not helpful to the client. Creativity alone does not mean success in commercial interior design.

One issue that influences the interior design of a commercial space is the type of facility: is it a doctor's office suite with exam rooms or a hospital acute care unit? Is it a coffee shop or a high-end, full-service restaurant? Is the project an elementary school or the business college at a university? Is it a bed and breakfast or a convention hotel? Each type of facility has many different requirements. Space planning, furniture specification, materials that can be used, codes that must be adhered to, and the functions and goals of the business are just some of the many factors that influence the interior design based on the type of facility (Figure 1-5).

Location is another issue. Is the project in a small town or an urban area? Will the accounting office be located in a strip shopping center or an office building? Is the restaurant in a stand-alone building or incorporated into a hotel? The impact of the location of the business will relate to the client base the business wants to attract. The dollars spent on the interior may very well be different based on the project's location. Customer expectations will be greater when the business is located in a high-end area.

Another issue is the expected customers of the business. Different design decisions will be made if a restaurant's customers are neighborhood residents, tourists, or business executives. Obvious differences in design and amenities will be made for a hotel along an interstate highway than for a resort hotel in the mountains. Retail stores catering to Gen-



Figure 1-5 Radiology department reception area. Scottsdale Healthcare–Shea, Scottsdale, Arizona. (Interior design by Greta Guelich, ASID, Perceptions Interior Design Group, LLC, Scottsdale, AZ; architecture and engineering by Martin P. Flood, AIA, Architecture + Engineering Solutions, LLC, Phoenix, AZ. Photographer: Mark Boiscliar.)

eration Y will have different detailing and color choices from stores located in retirement communities.

The type of work conducted in a business also varies with the nature of the business. The work done in a coffee shop that only sells coffee products and bakery goods is very different from that of a full-service, high-end restaurant. The display fixtures and ambiance of a jewelry store are significantly different from those of a sporting goods store. Acceptable accommodations for a traveler at a motel along the highway are entirely different from those of the individual who has traveled across the country to attend a professional conference.

Your client is another influencing factor. He or she may be the owner of an accounting office or the neighborhood restaurant or bed and breakfast, or developer, creating office space for anyone or any type of office function. Then again, the owner might be the board of directors and the facility manager for a major corporation's new headquarters or the local jurisdictional governing body, retaining an interior designer for the design of a new county courthouse. Maybe your client is a charitable foundation adding a new wing to a museum. Each client has different goals for the business, and the interior designer is challenged to satisfy all their unique demands.

Obviously, understanding the business of the business and its characteristics is important to understanding how to go about designing the interior. The more you know about the hospitality industry, for example, the more effective your solutions will be for a lodging or food service facility. Gaining experience and knowledge about retailing will be an advantage for you in designing any kind of retail space. In fact, the more you know about any of the specialty areas of commercial interior design, the greater your success in working with those clients.

Subsequent chapters provide an overview of the business of many kinds of commercial interior design specialties. They will help you begin to appreciate the critical issues that a business client will expect you to understand as you become engaged in the proj-

ect. These chapters will also provide references for many of the design issues related to planning and designing commercial interiors, as well as indicating areas for additional research.

Working in Commercial Interior Design

The design of commercial interiors is complex and challenging. It requires attention to detail, comfort with working effectively as part of a team, and the ability to work with numerous *stakeholders*—individuals who have a vested interest in the project, such as members of the design team, the client, the architect, and vendors. Often the interior designer works with employees of the business rather than the owner. However, design decisions must also please the owner. Regulations must be met that can influence certain decisions and choices about the interior design. The architect, interior designer, contractor, and other stakeholders involved in the design, construction, and installation of products must be sure that the design decisions meet the aesthetic goals of the client and adhere to building, life safety, and accessibility standards and codes that apply to the particular type of facility.

Commercial interior design projects must follow all phases of the design process closely. Missing steps or halfheartedly doing any of the tasks in programming, schematic design, or design development; incomplete preparation of construction documentation; or faulty contract administration can be disastrous. Thus, interior designers working in one of the commercial specialties must be very detail oriented to ensure that all tasks are performed completely and correctly. Margins for error are often nonexistent, as many projects are

BOX 1-1

WHAT IS DESIGN-BUILD?

Most projects in commercial interior design are created in a sequence in which the project is designed by the architect, interior designer, and others. The design is then put out to bid to obtain pricing for the construction and FF&E from other companies, and then it is built. Some projects are built on a fast-track schedule. In a simple example, the layout drawings and specifications for furnishings are completed for a hospital while the hospital is under construction.

In recent years, a new method of constructing commercial buildings and their interiors called *design-build* has emerged and become more popular. In design-build, one contract is given to a single entity for both the design and construction of the building. The single-source contract company has both design and construction staff. It may also be a company with one service offering, such as architecture, that forms a joint venture with firms offering other services.

The Design-Build Institute of America (DBIA), founded in 1993, “predicts that by the year 2010, half of all non-residential construction in America will be by the design-build method.”* Design-build means greater inte-

gration of services right from the beginning. Clients see options for the design. After they choose the design, a fixed price can be established at the beginning, reducing the added cost of change orders. Design-build also means greater savings for the client since construction costs and design can be more tightly controlled as the design is developed. Fast-track construction is also more effective since the construction and design are going on in a more coordinated fashion, with responsibility under one roof.

From a business standpoint, design-build is more risky since the design-build firm must assume liability and responsibilities that would otherwise be passed on to separate companies. For example, many architectural and interior design firms that employ an architect may not be able to do design-build projects because they do not have a contractor’s license.

Although the risks of design-build are greater from a business standpoint, so are the potential revenue benefits. Clients also like the idea of having only one company responsible since it makes communication easier.

*Beard et al., 2001, p. 24.

BOX 1-2**THE DESIGN PROCESS****Programming**

Activities involving researching the client's needs, site restrictions, code regulations, environmental issues, security issues, and economic impacts, among others. This activity often culminates in written design concepts or program statements, reports, and generalized sketched graphic drawings.

Schematic Design

Programming information is synthesized and then converted to preliminary floor plans, elevations, and other orthographic and sketched drawings that seek to explore and explain the design concepts. Codes, building systems, sustainability issues, security issues, mechanical systems, and movable furniture and furnishings are explored and tentatively specified and budgeted.

Design Development

Upon the client's approval of the schematic design plans, the necessary orthographic drawings, furniture layouts, systems plans, and other finalized drawings to assure compliance with applicable building, life safety, and accessibility codes and regulations are developed. FF&E specifications are finalized and budgets are completed. These documents apply applicable/desired sustainability criteria.

Contract Documents

With the client's approval of the design development drawings and documents, interior construction draw-

ings and specifications for all interior non-load-bearing partitions are prepared that are in compliance with applicable building, life safety, and accessibility codes and regulations. Mechanical, electrical, lighting, and security systems are planned in accordance with the designer's legal capacity or coordinated with consultants. If required by the design contract, bid documents and equipment installation drawings are prepared; coordination with potential vendor requirements is assured where special installation may be needed. FF&E specifications are also completed.

Contract Administration

Depending on the jurisdiction, the interior designer can act as an agent for the client in issuing bid documents, qualifying bidders, and administering the bid process. In some areas, the interior designer may be required to hold a contractor's license to supervise installation or provide on-site supervision or coordination of work by vendors. In any case, the interior designer will consult with contractors and vendors and assure that FF&E installation is completed in accordance with plans, specifications, and requirements. Ongoing project management and administration is provided to ensure satisfactory completion of the project through client move-in and postoccupancy assessment.

fast-tracked, where design plans for one phase of the project are created as construction is proceeding on another phase to ensure early occupancy. It is far easier to take care of the details as they arise than to solve problems later on.

Programming is of particular importance and the information obtained at the beginning of the project must be carefully gathered. Information about the client's space and aesthetic preferences is only the beginning. Of course, it is important to understand what codes or other standards may apply to the project. Regardless of the type of facility, the client's business goals and plans are very important in the successful functional design of the interior. Knowing where the business wants to go is as important to the designer as where it is on the day that programming information is obtained. Many large interior design firms offer assistance with strategic planning for businesses that do not already engage in this type of planning. An overview of the stages in the design process is presented in Box 1-2.

Teamwork is also a vital part of commercial projects. Since the projects can be very large, it is difficult for one or two people to handle all the work. Project managers and senior design staff will be in charge of several interior designers and support personnel.

Entry-level and junior members of the staff are often delegated smaller, targeted tasks. However, all the tasks needed to complete these projects are important. Willingness to be part of the team, effectively doing one's job, and offering to be involved are not only important in completing the project but bode well for advancement in the firm.

A critical skill for commercial interior designers is effective communication. Whether one is referring to verbal, written, or design graphics, communicating the designer's concepts and justifications for design ideas is critical. General correspondence and notes that must be forwarded to the client and peers, as well as accurate specifications of the products, are a few examples of written communications that must be accomplished in a professional manner. Interior designers must make numerous verbal presentations to clients, team members, clients, supervisors, and others. Making such presentations effectively and professionally is a crucial skill for interior designers to master. Of course, graphic communications have become easier with the computer. As long as the correct information is inputted, the drawings will be accurate. Skill in computer-aided drafting (CAD) is mandatory in commercial interior design. Accuracy is important to meet codes and regulations.

The interior designer must satisfy several users of the interiors. First is the owner of the property itself. This might be a developer building an office building on *spec* with no particular tenant in mind. The owner of the property might be a corporation building a new corporate headquarters or branch facility or a hotel chain building or remodeling a property. For publicly owned buildings like government offices and schools, the first user to be satisfied is the jurisdictional governmental agency that will actually own the property (Figure 1-6).

A second group of users of a commercial facility is the employees working for the tenants or businesses. Study after study has shown that productivity in offices is related to the design of the office itself. Research shows that if the facility has been designed with a pleasing and safe atmosphere as well as a functional environment, the employees will work more effectively. An exciting interior for a restaurant that brings in large crowds willing to spend on food and drink will bring better-quality wait staff to serve the customers. Unfortunately, the employees don't usually get to "vote" on the design decisions, but they may vote unofficially through their willingness to stay with the company and serve its clients effectively.



Figure 1-6 Government facilities as represented by this county courthouse courtroom interior. (Photograph courtesy of 3D/International.)

A third user is the customer who comes to the facility. In some instances, the ambiance of a restaurant or the beauty of the setting of a resort influences whether a customer returns. In other circumstances, ambiance plays a minimal role in this decision. The relationship of a doctor to a patient is more important than the doctor's exquisitely designed office. If your local city government offices had marble on the walls and floors and gold faucets in the restrooms, as a citizen, you might think that your tax dollars had been overspent. Designing for these various users is challenging, to say the least.

Adherence to building, life safety, and accessibility codes is another critical part of the work of commercial interior designers. The health, life safety, and welfare of the client and the various users of the facility affects many design decisions, including space planning, architectural materials, lighting, furniture and fabric specification, and even the color palette in some situations. There can be no margin for error or fudging of the codes in a commercial project. The user of the facility trusts that the design and specification of the facility are safe in all the ways the jurisdiction requires.

Finally, as mentioned before, the interior designer should know something about the client's business before seeking a commercial interiors project. Understanding the business of the business is crucial to solving the problems and achieving the functional and aesthetic goals of the client. No designer can solve the client's problems without understanding the problems as thoroughly as possible.

Where the Jobs Are

Commercial interior design is a very challenging way to work in the design profession. It is exciting to be part of a team that is responsible for the interior design of any kind of commercial facility. Being involved in the project from its inception and seeing it come together as it is constructed and the various components are installed can be thrilling. Like any career it is also hard work, sometimes involving long hours, certainly working effectively with team members, and perhaps dealing with irate clients. However, few interior designers who have worked in commercial interior design for many years would do anything else.

There are important issues to consider when working in commercial interior design whether you are a student considering entering this part of the profession or a professional considering moving from residential to commercial interior design. This section will cover some key concepts about working in the field.

All but the smallest commercial interior design projects require a team of designers and related professionals. An independent interior designer can design the interior of a medical office suite or a bed and breakfast, a small retail store or other smaller-scale projects. Large projects like building a resort hotel, remodeling a high school, or designing a new county government building require teamwork. In some respects, every project, regardless of its size, is accomplished by the efforts of a team.

Led by a project manager and a senior project designer, the project team may include interior designers at many skill and experience levels. The team may involve architects, lighting designers, engineers, and consultants—perhaps a commercial kitchen designer for a restaurant, for example. Entry-level and mid-level interior designers will assist more senior members of the team in drafting, product and materials research, codes research, and other tasks.

Let us not forget the client and his or her team of decision makers. The project manager and team members must be able to work with the client to reach decisions about many issues as the project moves through its design phases. The project may have several layers of client decision makers. For example, for a hotel, the facility manager, housekeeping manager, security office, banquet manager, food and beverage group, hotel general manager, and the owners or developers will all have a say in the design decisions.

The interior designer and client are only part of the design team. A general contractor and many subcontractors will be hired to do the actual construction work. Vendors who will supply the *furniture, fixtures, and equipment (FF&E)*⁹ and materials are selected

⁹FF&E can also be defined as furniture, furnishings, and equipment; a designation based on a specific contract document widely used by architects. The authors will use *furniture, fixtures, and equipment* in this text.

through competitive bidding. The design project manager must be prepared to work with these various stakeholders to ensure that the project is completed as designed and specified, on time and on budget.

Exactly what your role will be in the team will depend on what kind of firm you decide to work for. Whether you choose to work for a small interior design firm or seek employment in a large multifaceted firm or an office furnishings dealership is up to you. Each has positives and negatives. A small firm gives entry-level and less experienced interior designers an opportunity to become involved in projects sooner. Perhaps inventorying existing furniture to be used in the remodeling of a law office doesn't seem like design, but it is a way for the entry-level interior designer to gain an understanding of the design considerations for that professional office and become closely involved in the reality of office furniture and equipment.

Small firms rarely have the opportunity to work on glamorous projects like casinos, large resort hotels, flashy new restaurants, or corporate headquarters. The experience gained in the small firm, however, provides the entry-level interior designer with valuable training and skills that can be taken to the firm that gets the glamorous projects—assuming that is a goal.

Another consideration in working for a small firm is that it is healthy and strong as long as the owner keeps up the efforts to market the firm's services and obtain new clients. Small firm owners are constantly changing hats from project manager to marketing director, general manager, and interior designer. If new projects stop coming because the owner is busy with design work, then the less experienced professional staff may need to look for other jobs. Constant marketing for new work is a reality of any firm. Even a large firm can lose its focus or be caught in an economic downturn.

If you wish to work for a larger firm, you will definitely need to work well with others and willingly take orders and directions from more senior interior designers. You may also find yourself spending time doing what may seem to be drudge work—taking care of the library, endlessly drafting small project details, and keeping files organized. This is part of the apprenticeship common in larger firms.

Working for a larger firm may bring prestige and more opportunity for internal mentoring. Project managers in larger firms are expected to do more supervision and training of newer staff than the owner of a small firm. This is a great opportunity to learn skills and techniques in such areas as how to deal with clients and other stakeholders, shortcuts in developing schematic and construction drawings, and many other aspects of the profession (Figure 1-7). Larger firms may also be more responsive to your involvement in a professional association and professional educational updating.

For most entry-level designers, the greatest disadvantage of working for a large firm is that they will not be given their own clients for some time. The firm must know what you can do and feel confident about your capabilities in working with clients before you are allowed to manage your own projects. Unless you have worked somewhere else, it may take you two or three years to move up to project responsibility in a large multifaceted interior design or architecture firm.

A third place to work in commercial interior design is an office furnishings dealership. Companies that specialize in offices and feature systems furniture are great places to begin and maintain a career in commercial interior design. The interior designers in such companies focus on large corporate and many kinds of professional offices. The learning and training received here prepare many interior designers to move to an interior design firm that might specialize in hospitality, healthcare, or government facilities.

The opportunities mentioned in this chapter only scratch the surface. There are all types of firms combined with design specialties that create many opportunities for those interested in commercial interior design. Sometimes it is not as glamorous as the work done by colleagues doing private residences. Sometimes the publicity is less frequent. But there is great satisfaction in being a part of the profession making an impact on how consumers of every kind and economic level keep the wheels of industry rolling along!

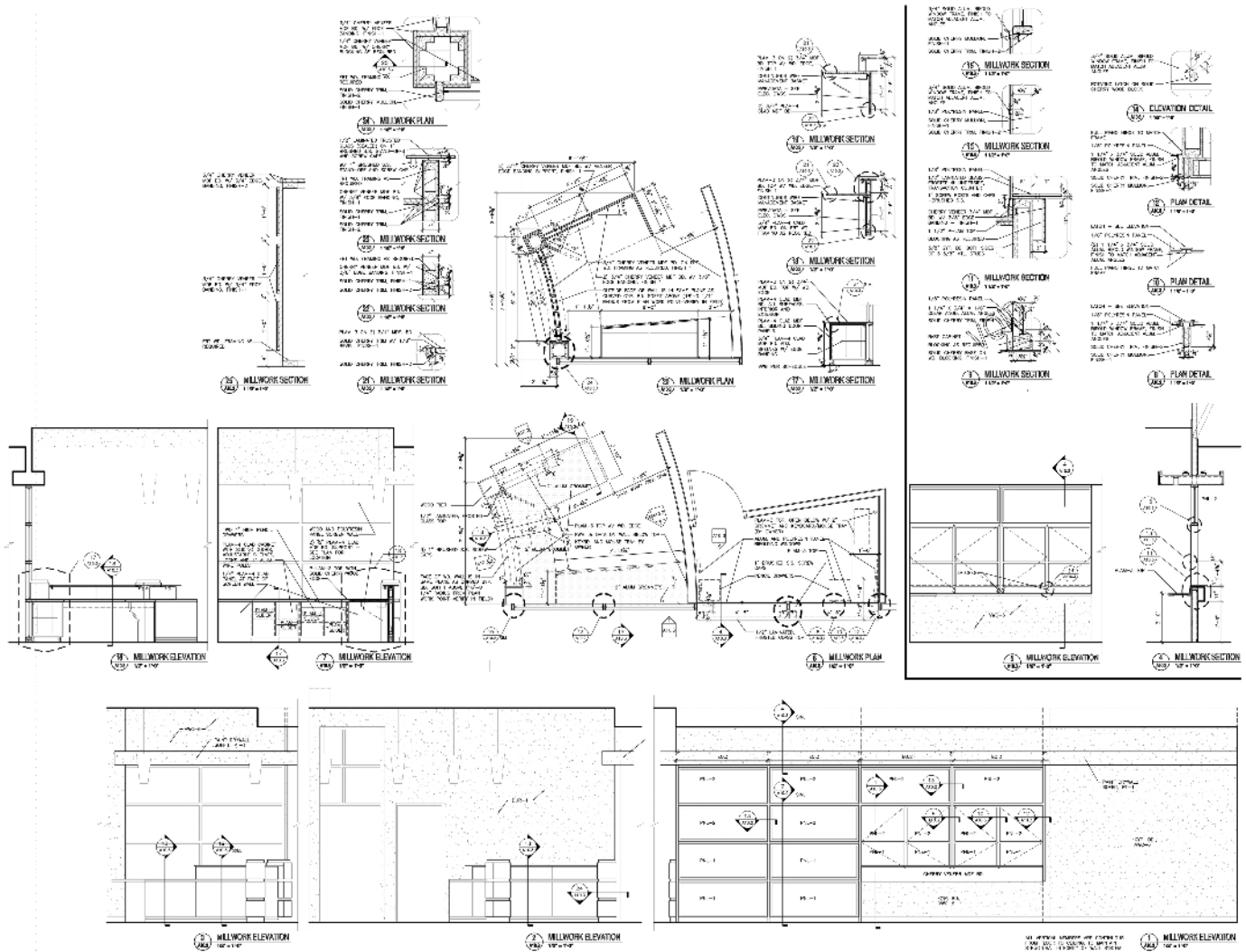


Figure 1-7 These millwork drawings are an example of one of the design documents commonly created by interior designers. (Drawing courtesy of Bialosky + Partners Architectures.)

Critical Issues

This last section looks at several issues that are important, even arguably critical, to what is occurring in the commercial interior design profession in the 21st century. The authors acknowledge that each of the following sections on sustainable design, security and safety, accessibility licensing, professional examination, ethics, and professional development could take up a separate chapter. However, they offer a context to issues that the student or professional seeking employment in commercial interior design should have. Books and articles in the end-of-chapter References section point the reader to further information on these topics.

Sustainable Design

A very important issue facing commercial interior designers in the 21st century is sustainable, environmentally safe design, also commonly called green design. According to the World Commission on Environment and Development, *sustainable design* seeks to “meet the needs of the present without compromising the ability of future generations to

TABLE 1-4 Common Green Terms

- **Cradle-to-cradle:** products that can be reused or recycled, or that will decompose when sent to a landfill.
- **Cradle-to-grave:** products that have not been reused or recycled, or that will be otherwise discarded before their useful life is complete.
- **Energy efficient:** products that use less energy and perform as well as products that are not energy efficient.
- **Graywater:** water from sinks, showers, and laundry that is collected and lightly treated for reuse for watering lawns and other places where potable water is not required.
- **Life cycle assessment (LCA):** analysis of materials, products, and buildings to evaluate their environmental and health impacts over their life.
- **Life cycle costing (LCC):** a method of combining the initial cost of products with the cost of their maintenance, periodic replacement, and residual value.
- **Potable:** water that can be used for drinking and cooking.
- **Renewable energy:** energy sources that are not depleted when used, such as solar energy.
- **Volatile organic compounds (VOCs):** toxic fumes emitted from carpeting, paints, the glues to make the composite woods in furniture, and other common materials or products.

meet their needs.”¹⁰ It involves finding a balance between meeting users’ immediate needs in constructing a building and finishing its interior while creating as little harm as possible to the environment for future generations. Being sure that the veneer you choose for a desk or cabinet comes from a certifiably sustainable source is a way of utilizing green design. Sustainable design means finding methods and processes of design that consume fewer nonrenewable resources and are more energy efficient. The designer chooses to use materials and products for the interior that are also less damaging to the environment in both their manufacture and their use as finished products. Table 1-4 provides some additional terms interior designers should be familiar with in relation to sustainable design.

Constructing buildings and completing their interiors consumes vast quantities of materials—only some of which are renewable. According to the U.S. Department of Energy in 2003, all buildings in the United States (residential and commercial) consume 40 percent of raw materials and generate more than one-third of municipal solid waste.¹¹ Other sources report that construction waste accounts for 40 percent of what goes into landfills. In addition, the Environmental Protection Agency (EPA) reports that indoor air quality is on average 2 to 10 times more polluted than outside air. *Volatile organic compounds* (VOCs) are toxic fumes emitted from carpeting, paints, the glues used to make the composite woods in furniture, and many other common materials and products used in commercial and residential interiors. Some are carcinogens; all can cause irritation and allergic reactions in many people. The sealed environment of many office buildings and other types of commercial spaces with poor ventilation means that indoor air can be very harmful due to the products that are specified.

Too often architects, interior designers, clients, and users of buildings and interiors continue to deplete our natural resources in every way imaginable. We continue to add nonrecyclable waste to landfills whenever we demolish and throw away building materials. We specify products that off-gas toxic pollutants, overspecify the lighting in interiors, and design with materials like exotic woods that are not known to come from certified forests. Why? Because too many persons believe that it is easier and cheaper to continue to use nongreen products and construction methods. Comments such as “It costs more to renovate a building than to tear it down and rebuild a new structure” and “Materials from sustainable sources are more generally expensive than those from nonsustainable sources” are used by detractors to downplay sustainable design.

¹⁰World Commission on Environment and Development, 1987, p. 43.

¹¹USGBC, 2003, p. 3.

Increased demand on resources by the economies of emerging countries and wasteful practices make sustainability and thinking green critical issues for those in the built environment industry and for consumers. As responsible professionals, we need to think beyond recycling plastics and paper in the office.

Sustainable building design became a prominent part of the architecture and interior design professions in the 1970s. The oil embargo of 1973 forced everyone in the built environment industry and consumers to consider energy usage and efficiency in the design of their projects. Designers began examining solar energy potential in earnest as one way to cut down on our dependency on fossil fuels. In 1977 a cabinet-level Department of Energy was created to deal with energy conservation and usage in the United States. The 1970s also saw the beginning of recycling efforts as a way to deal with overfilled landfills. Earth Day programs help to bring additional attention to the need for sustainable design and energy and resource conservation in many ways.

Environmental concerns continued to impact the attention of those in the built environment industry. In the 1980s, it became more widely known and reported that our buildings were making us sick, so more attention was paid to the interior environment and the products used there. The 1980s and 1990s saw continued and growing research and conferences on environmental issues. The United Nations World Commission on Environment and Development defined sustainable development and provided a major boost to the growing concern for sustainable buildings and green design.

Sustainable building and design have continued to grow through the efforts and support of the architecture and interior design professional associations and the government, along with business and industry. One of the most successful nonprofit organizations is the U.S. Green Building Council (USGBC). Founded in 1993, this organization brings together professionals in architecture and construction, real estate developers, interior designers, product manufacturers, government agencies, and others in or interested in the design-build industry. Today the USGBC works to “promote buildings that are environmentally responsible, profitable and healthy places to live and work.”¹²

A very important part of the work of the USGBC is the *LEED*[®] *Certification* program. LEED—Leadership in Energy and Environmental Design—is a voluntary green rating system that helps define buildings that are healthy, profitable, and environmentally responsible. LEED Certification validates a building owner’s efforts to create a green building. LEED Certification can be obtained for New Construction, Existing Buildings, and Commercial Interiors. LEED Certification will also include certification of Homes, Neighborhood Developments, and Core and Shell projects. Essentially all the types of commercial interiors that are discussed in this book fall under the LEED for Commercial Interiors (LEED-CI) Rating System. Table 1-5 provides a summary of this rating system.

From a business standpoint, the designer may wish to point out the following points from the USGBC to a client related to pursuing LEED-CI ratings:

- “Reduces operating and maintenance costs
- Improves property value
- Enhances occupant health and productivity
- May reduce liabilities related to air quality and other indoor environmental issues”¹³

When a project is reviewed for LEED Certification, it must meet all prerequisites and is awarded points based on five categories of achievement: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality, with additional points awarded for Innovation and Design Process. Let us look at these categories as they relate to a generic commercial structure, with emphasis on the interior.

The categories of Sustainable Sites, Water Efficiency, and Energy and Atmosphere are not areas of responsibility for most interior design firms. But a few words related to these areas are warranted. The category of Sustainable Sites looks at where the building is built. For example, points are awarded if tenants select a building located in developed areas with existing infrastructure, such as an urban area, rather than farmland or undisturbed

¹²USGBC Mission Statement from web page, May 2005.

¹³USGBC, 2004, LEED-CI brochure.

TABLE 1-5 LEED-CI Green Building Rating System

<p>Sustainable Sites</p> <p>Goals</p> <ul style="list-style-type: none"> ■ Develop only appropriate sites ■ Reuse existing buildings and/or sites ■ Protect natural and agricultural areas ■ Support alternative transportation ■ Protect and/or restore natural sites 	<p>Materials & Resources</p> <p>Goals</p> <ul style="list-style-type: none"> ■ Use materials with less environmental impact ■ Reduce and manage waste ■ Reduce the amount of materials needed
<p>Water Efficiency</p> <p>Goals</p> <ul style="list-style-type: none"> ■ Reduce the quantity of water needed for the building ■ Reduce municipal water supply and treatment burden 	<p>Indoor Environmental Quality</p> <p>Goals</p> <ul style="list-style-type: none"> ■ Establish good indoor air quality ■ Eliminate, reduce, and manage the sources of indoor pollutants ■ Ensure thermal comfort and system controllability ■ Provide for occupant connection to the outdoor environment
<p>Energy & Atmosphere</p> <p>Goals</p> <ul style="list-style-type: none"> ■ Establish energy efficiency and system performance ■ Optimize energy efficiency ■ Encourage renewable and alternative energy sources ■ Support ozone protection protocols 	<p>Innovation & Design Process</p> <p>Goals</p> <ul style="list-style-type: none"> ■ Recognize projects for innovative building strategies and sustainable building knowledge <p>Note that there are additional subcriteria to the above.</p>

Source: LEED-CI (brochure), 2004. © U.S. Green Building Council.

greenfields. Points are also awarded if the building site provides priority parking for car pools or van pools, alternate fuel vehicles, or underground parking rather than on-grade parking lots. In the category of Water Efficiency, points are awarded for highly efficient fixtures and equipment such as low-flow faucets and toilets. And in the category of Energy and Atmosphere, the building owner or tenant must meet specific and stringent code requirements related to refrigerants for HVAC systems. These are only a few examples of the ways tenants can be awarded points toward LEED-CI Certification levels.

Of more concern to the interior designer is the rating category Materials and Resources. It is important to use materials that are salvaged, refurbished, or reused. Examples include wood for flooring that might come from a demolished building or using existing furniture moved from a previous location. The project receives points when the design maintains interior nonstructural components such as walls, flooring, and ceiling systems that help to conserve resources and reduce waste. Projects also receive points for diverting construction waste from landfills using strategies such as recycling. As much as possible, interior designers should specify carpets, wall finish materials, and ceiling treatments that are made from low-toxicity or nontoxic materials. The specification of materials that contain recycled content, such as carpet made from recycled plastic bottles, is another way to receive LEED points. Specifying products made from rapidly renewable material such as wool carpet will also earn LEED points. All these things and many others are examples of what can be done in the specification of interior products to help keep a space green.

Indoor Environmental Quality is another important category that is reviewed for LEED Certification. The interior designer can have a significant impact on the space and ensure a healthy, productive environment for the tenant. As much as possible, the designer should specify carpets, wall finish materials, and ceiling treatments that are made from low-emitting materials. Low-VOC paints compliant with LEED standards should be used for painted surfaces. In addition, the interior designer should look for low-toxicity fabrics and foams for upholstered goods.

If smoking is not prohibited (such as in a restaurant), the smoking area must be designed in such a way that the smoke is vented out of the building, not circulated into non-smoking areas. Rooms within a building designated as smoking areas should be enclosed with impermeable full-height walls and doors, not just with a partition that is open at the top (as is the case in many restaurants and bars), and operated at negative pressure compared to surrounding areas.

Here are a few more important ways for the project to earn LEED points. The interior designer can make sure that sealants and adhesives for the installation of carpeting and wall treatments do not exceed VOC limits. The designer can also avoid specification of furniture items that have used formaldehyde in adhesives. Providing occupants with control over lighting, temperature, and ventilation contributes to LEED points. To varying degrees, this can be done with raised floor systems. Designers who maximize occupants' access to daylight will achieve more points for the project.

The last category is Innovation and Design Process. A project obtains a point for utilizing the services of a LEED Accredited Professional. Projects are also awarded points if the project implements a new technology or strategy that is not covered in the rating system.

Obviously, when the interior designer is involved from the beginning of the project, incorporating LEED guidelines is easier. The designer understands the goals of the project and makes specification and space-planning decisions that are in line with certification guidelines. Ideally, the architect and interior designer are LEED Accredited Professionals. Interior designers who wish to know more about the qualifications and process for becoming LEED accredited should contact the USGBC at the Web site address at the end of the chapter.

Another factor in designing and selling green buildings to clients is economics. Most complaints from clients who do not want to go green focus on this issue. They have heard about the extra expense of using low-VOC paint or building a section of the restaurant for smoking with a separate ventilation system and move away from green design. However, recent projects have proven that green design and sustainable building do not have to be more expensive. While some projects have a slight increase in up-front costs, green buildings provide significant cost savings in the long term due to increased energy and water efficiency and improved employee performance. Efficient and thoughtful design from the very beginning of a project can guide the design team to many cost-effective decisions that add to LEED Certification.

One economic technique that can be incorporated into planning for a green or sustainable project is *life cycle assessment* (LCA), which analyzes materials, finished products, and buildings to evaluate their environmental and health impacts over their life. This environmental assessment can begin at the time raw materials for a specific product are obtained and continue through its manufacture into a final product, its installation in a building, and its eventual disposal. For a client who is committed to having a truly green facility, LCA of the products and materials is critical. LCA measures overall "environmental performance of a product over its full life cycle, often referred to as 'cradle-to-grave' or 'cradle-to-cradle analysis.'"¹⁴

Products that can be reused or recycled or that will decompose when sent to a landfill are considered *cradle-to-cradle* products. An example would be solid wood flooring that can be reused in another project, packaging used to ship recycled goods, and any kind of material that is completely biodegradable. A product that is used and is not reused, recycled, or otherwise discarded before its useful life is complete is considered a *cradle-to-grave* product in green design terms. Carpeting that is removed because of an aesthetic change to the interior and is taken to the landfill is a common example. Another example is the shipping cardboard that goes to a landfill rather than a recycling plant. Clearly, cradle-to-cradle products are considered greener than cradle-to-grave products.

Another economic technique that is used in relation to sustainable design is *life cycle costing* (LCC), which combines the actual cost of the product with the cost of its maintenance,

¹⁴Kibert, 2005, p. 285.

periodic replacement, and residual value. Everything, of course, has an initial cost. If carpet tiles are specified rather than broadloom carpet, for example, damaged tiles can easily be replaced. By contrast, if broadloom carpet is damaged, the entire room might have to be recarpeted. Of course, the economic benefits of LCC will affect long-term owners of the building rather than tenants.

According to green design experts, a project that has utilized sustainable design methodologies and products can also be more valuable to an owner. Maintenance costs will be lower; safer indoor air quality will result in fewer employee absences; and the natural quality of many products used in a green building is often more pleasing and attractive, creating an environment that both employees and guests will appreciate.

Energy conservation impacts the work of the interior designer, regardless of the type of commercial space that is being designed. According to the Department of Energy, buildings consume 68 percent of all electricity.¹⁵ One of the largest energy users in commercial spaces is lighting. Many states have mandated low-watt lamps and lighting specification with maximum watts per square foot to help reduce electrical energy use. A few considerations in lighting design that can be applied to many types of commercial spaces are offered here. Other lighting design techniques are provided in each chapter's sections on Planning and Interior Design Elements and Design Applications.

Low-watt, high-output fluorescent lamps used in place of incandescent lamps also produce energy savings. A larger portion of the energy used by incandescent lamps is released as heat, adding to the burden of the HVAC system. Designs that utilize as much daylighting as possible reduce the amount of energy consumed by artificial lighting. Of course, in some areas, extensive use of windows for daylighting can cause energy loss due to heat gain through the windows. In those cases, the design team should specify low-E, high-performance window glazing. In many commercial projects, sensors that turn lights on and off when someone enters or exits a space such as a conference room or classroom can help reduce energy consumption. Designs that combine ambient and task lighting can also enhance energy efficiency, regardless of the use of most spaces. "By providing a variety of independent task lights in interiors, the designer can achieve the most important goal: good illumination where it is needed and no waste of energy where it is unnecessary."¹⁶

The interior designer can also increase energy efficiency by specifying energy-efficient equipment. Appliances like refrigerators and stoves in employee cafeterias and electronic equipment like computers and printers that have received the Energy Star designation save energy. Low-flow faucets in showers and toilet rooms in hotels save energy by reducing the hot water used.

These are just a few ways that the interior designer can help to bring energy efficiency to commercial interiors. As part of the design team, the interior designer should encourage the architect and client to utilize as many energy-efficient and sustainable design products and construction methods as possible.

As the reader can see, sustainable design can be incorporated into all types of commercial projects using thoughtful space planning and careful specification of products. Consider these examples: the odor of new carpet does not exist in the new medical office suite; wood table tops in a restaurant substitute for the off-gassing of plastic laminates and composite wood tops; offices move full-height walls to the center of the space, allowing daylight to penetrate into the office footprint¹⁷; and low-water-usage water closets are specified in sports arenas.

This brief overview of sustainable design has been provided to raise awareness of the importance of green design in commercial interiors. There are several works in the References that you may wish to read to gain further information on this important planning and designing practice for the 21st century. The works listed in the References are only a few of the materials available on sustainable design.

¹⁵USGBC, 2003, p. 3.

¹⁶Pilatowicz, 1995, p. 58.

¹⁷The *footprint* is the perimeter of the building or project space plus any core partitions.

Security and Safety

Owners, developers, and tenants of every type of commercial facility are concerned about the security and safety of their employees, clients, and visitors. The tragic events of September 11, 2001, heightened the importance and awareness of making buildings safe. Stories about workplace shootings, harm to customers and employees in retail settings, school violence, and theft of personal information are regularly reported. Customers and employees expect to be safe in public and business environments. Clients are asking design teams to plan for better security and safety in all types of commercial facilities.

Common security and safety issues include protection of employees and customers, life safety, burglary, employee pilferage, vandalism, theft of company records, and protection of company property such as intellectual property. The threats can come from many sources, and the issues vary with the type of business. In a retail store, theft of merchandise is a big security issue. In hospitals and medical office suites, theft of controlled substances creates design challenges. In offices, unauthorized visitors can cause a variety of security problems. Guests at hotels want to feel safe in their rooms and while walking the grounds. Individuals want to feel safe exiting auditoriums and theaters. Many professional offices have huge amounts of personal customer information stored on computers, the theft of which can cause enormous harm for the business and customers. Government buildings face threats of terrorism.

The easiest way for interior designers to meet their responsibilities related to security and safety in the commercial projects they design is to adhere strictly to applicable building and life safety codes. Model building codes, notably the International Building Code (IBC) in the United States and the National Building Code (NBC) in Canada¹⁸ standardize construction standards and provide limited mechanical systems, accessibility, and interior finishing standards. In addition to the building codes are the Life Safety Code published by the National Fire Protection Association (NFPA), which provides standards for fire and life safety but not building construction. Separate mechanical codes such as the National Electrical Code and the National Plumbing Code provide regulations for these systems. The local jurisdiction may have additional regulations. For example, some jurisdictions have stronger design standards for earthquake protection in all types of facilities. Food service facilities and hospitals, to name just two, have various health department regulations that can impact the interior design of a facility.

However, there is no model code for security planning and design. Issues of security can be found in building codes and local jurisdictional codes. Yet, most security plans and solutions are derived from discussions with the business owner, security experts, and vendors who supply products like card-access entry locks, security cameras, and blastproof glass.

When it comes to safety issues for the protection of those whom S. C. Reznikoff calls the “captive consumer”¹⁹—workers and users of a commercial facility—planning and specification decisions based on strict adherence to building and life safety and fire safety codes are critical. Arrangement of exits, sizes of exit access corridors, planning for places of refuge, specifying architectural materials with low smoke propagation or flame resistance, and many other life safety issues are mandatory design fundamentals.

Interior designers must become aware of security options for their clients’ facilities. “Good security involves physical as well as electronic barriers. The physical layout and construction of a space can have a profound effect on fundamental security as well as on how easy or difficult it is to plan and install monitoring and access devices.”²⁰ Many businesses want a security system that protects but is not visible but transparent. Visible layers of security can create unnecessary anxiety in employees, customers, or other users of the facilities. Security can be transparent by providing clear sight lines to entrances from reception counters or other areas in lobbies and waiting rooms. Bullet-resistant glass in windows in some types of medical facilities and financial institutions is another way to add

¹⁸British Columbia has its own model code.

¹⁹Reznikoff, 1989, p. 14.

²⁰Ballast, 2002, p. 312.

subtle but effective security in design. When the project is more complex, requiring an extensive security program, the interior designer will work with the architect and a security consulting firm along with the client to make security plans.

Security issues need to be addressed in programming so that the interior designer knows what level of security is needed for the facility and can make necessary adjustments in space planning and specifications to address security needs. Many projects will need solutions such as card access to hotel rooms, electronic security devices at entrances to retail stores, and buzzer access from a doctor's waiting room to the exam rooms, to mention a few. Security cameras are used to monitor not only the entrances of many buildings, but also stores, banks, schools, and many other facilities that may be considered high risk.

Lighting is a major way to increase occupants' feelings of security and safety. Appropriate lighting design eliminates dark or hazardous areas in interiors. Good lighting means that occupants feel safe since they can see where they are and where they are going—as well as who might also be in the area.

A thorough discussion of security design concepts is beyond the scope of this book. This information is provided to make the student aware that security issues can impact the interior design of many commercial facilities. Remember that each type of commercial facility has distinctive safety and security issues. Interior designers must become knowledgeable about how to best provide safety and security for their clients and the clients' customers. These systems are no longer a choice. They have become, unfortunately in our free society, mandatory.

Accessibility

By now the reader is no doubt familiar with the Americans with Disabilities Act (ADA) and the guidelines that were established in the 1990s to make public buildings more easily accessible for individuals with many disabilities. As of this writing, revised guidelines are being reviewed by various agencies and enforcement is expected to begin—well, whenever numerous government agencies have completed their review and the new guidelines find their way into state and local codes. These guidelines have been modernized to reflect changes in technology, building codes, and users' needs.

As the baby boom generation ages, becoming 60 years old as of 2006, the need to continue to keep buildings accessible for all people has become critical. Interior designers and others in the design-build industry should not consider the design guidelines as impediments to good and creative design. The guidelines should always be viewed as a means to ensure that everyone can enjoy using those creatively designed buildings and interiors.

The new guidelines are expected to simplify many of the compliance requirements. This simplification will help designers do a better job of making commercial public buildings more accessible. It will also help determine whether spaces are not accessible when they should be. Spaces that were very restrictive in their design or lacked easy-to-apply standards will now be simpler to design.

In the meantime, this book provides numerous comments in sections of the chapters concerning accessibility guidelines in public commercial interiors. Although references and comments are primarily based on the ADA guidelines, the term *accessibility* has been used rather than *ADA* in most cases, since a jurisdiction may have design guidelines in place of or in addition to those of the ADA.

Every time you as a healthy individual use the ramp instead of the stairs, sneak into the larger accessible toilet stall, or use the “star” to recognize the lobby button on an elevator, think of the person with a disability who cries for joy when these simple accommodations are available. Then be sure that you have checked and rechecked your floor plans and specifications to ensure complete compliance in providing accessible and simple accommodations for your commercial interiors projects.

Licensing and Registration

The licensing of interior design professionals remains an important though sometimes contentious issue. Interior designers have sought to be licensed since the 1950s. The first state

TABLE 1-6 Interior Design Licensing Terminology

- **Building permitting privileges:** A jurisdiction's granting a design professional the right to submit his or her construction drawings to a building code official to obtain a building permit for the project.
- **Grandfather clause:** A provision in the legislation that allows individuals working in the profession or using a protected title (*interior designer*, for example) prior to enactment of the legislation to meet standards that are now higher than those they previously required. For example, a jurisdiction may require the person to pass the NCIDQ examination. The grandfather clause may allow those who have been practicing but have never taken this exam to continue to use the title *interior designer* without taking the exam.
- **Sunset:** Legislation written to include automatic termination of the program or law unless it is reauthorized by the jurisdiction's legislature.
- **Title act:** Legislation that limits the use of a specific title, such as *interior designer*, *certified interior designer*, or *registered interior designer*, to those who meet the requirements established by the jurisdiction. Title acts do not require the designer to become licensed to practice interior design and do not prohibit nonregistered individuals from providing interior design services.
- **Practice act:** Acts that limit who may engage in or practice a profession; legislation that strictly limits who may provide interior design services in any manner as those services are defined by the jurisdiction.

to pass legislation to license or register interior design professionals was Alabama in 1982. As of 2006, more than half of the states have some form of licensing, certification, or registration legislation that defines who may practice interior design or use the title *interior designer*. Other states continue to seek regulation of the work of the interior design profession. Table 1-6 provides terminology related to licensing or registration of interior design professionals.

Why is this important? The profession has become increasingly complicated, and responsibility for what is done to a commercial or residential interior to meet standards of safety is more complex than it was even 30 years ago. Interior designers are held responsible for providing safe environments for their clients and the users of commercial (and residential) interiors. Technology in the construction of interiors continues to evolve and become more complex. Building and life safety codes demand critical decisions concerning space planning and product specification to ensure the safety and health of occupants of commercial interiors. Sustainable design knowledge and criteria are necessary to reduce the harm to our environment and to avoid harming continuous users of commercial spaces. Security issues will continue to impact the interior design of all types of commercial facilities. These are critical issues for any interior designer who requires greater accountability.

Licensing or registration ensures consumers that the interior designers they hire for their commercial projects have the education, experience, and competence to provide interior design services. Jurisdictions that have legislation concerning the practice of interior design require intensive educational preparation related to the knowledge base and skill sets required during the phases of a design project. They also require passage of a competency examination whose minimum requirements to sit for the examination focus on education in interior design and work experience.

Licensing or registration legislation in a jurisdiction may also require the designer to keep up-to-date in the profession by mandating a specific number of hours and types of continuing education seminars, workshops, or classes. Continuing education offerings are commonly developed based on a specific number of clock hours, not semester-long classes, as in a formal academic setting. In many jurisdictions, the majority of the hours of continuing education must focus on topics concerning the health, life safety, and welfare of the consumer.

Professional Competency Examination

Competency examination of interior designers has been discussed by professional associations and educators since at least the 1950s. An examination was developed in the 1960s

by the professional association that later became ASID. Today, the examination that is required in all jurisdictions that have any type of legislation is the National Council for Interior Design Qualification (NCIDQ) examination. Passing the NCIDQ exam is also a requirement of ASID, IIDA, IDC, IDEC, and Canadian provincial associations for members to be recognized at the highest professional level of their association.

All professions require an examination to test minimum competency related to any type of licensure or registration. In fact, an examination of competency is a criterion of any profession. Interior designers should place the goal of passing the NCIDQ exam at the top of their list, whether or not their jurisdiction requires it or whether or not they wish to be professional members of an association. Passage of the NCIDQ examination shows clients that the interior designer has the education, experience, knowledge, and skills sets required by the profession today. It is a personal achievement that interior designers should willingly pursue.

The NCIDQ examination tests the general knowledge and skills of the minimally competent interior designer who has achieved educational preparation and work experience over approximately six years.²¹ The six-part examination, given over two days, tests through multiple-choice questions and various design practicum tasks the full range of knowledge and skills that a minimally competent interior designer should have.

Passing the NCIDQ examination provides the interior designer a certificate indicating successful completion of the examination. NCIDQ is not a member organization like ASID or IDC, and “NCIDQ” cannot be used as an appellation. The NCIDQ certificate is a practice credential indicating an individual’s demonstrated competence in the knowledge and skills required of today’s professional interior designer.

Information about the exam and the other services that the NCIDQ offers is available on their Web site or by calling their office. The Web site for NCIDQ is listed at the end of this chapter.

Ethical Behavior

Ethical behavior and ethical standards have been common themes in the news media in recent years. Corporate executives, government employees, and the media have come under scrutiny regarding how they do their jobs, what they say, or how they interact with their constituencies. Perhaps you might feel that ethics does not apply to the work of an interior designer. However, you would be mistaken.

Ethical standards and a code of ethics are part of one’s application to a professional association. *Ethical behavior* in interior design means conducting oneself in a manner that is considered right by and for those practicing the interior design profession. Ethical standards have been established by the professional associations and serve as a guide to those who choose to affiliate with an association. Ethical standards might also be in some way a part of licensing/registration qualifications.

How an interior designer interacts with clients, vendors, contractors, and other designers is affected by adherence to ethical standards. For example, if a client comes to you with a set of drawings for a gift shop and then asks you to redesign the shop and sell the products to the client, interior design ethical standards require you to ask questions and conduct yourself in certain ways. Is the client still under contract to the other design firm? That is the important question in this example. Suppose that you have agreed to design and procure products for a medical office suite for a specific contracted price. However, when you come back with your drawings and specifications, your price is now far above that original budget and your design has ignored goals stated by the client. In this case, you have not met the ethical obligation to work in the best interest of the client.

If you join a professional association, you will be expected to conduct yourself and your business in accordance with the ethical standards of the association.²² Conversely, the fact that an interior designer is not a member of an association does not give him or

²¹The current specific hours of education and work experience requirements can be obtained from NCIDQ.

²²A code of ethics can be obtained from any of the professional associations by contacting their headquarters or chapter offices.

her free rein to behave unethically. Unethical behavior and business conduct of one designer can tarnish the reputation of everyone in the profession. Clients become leery of working with interior designers.

Ethical behavior is not hard, it is not overly time-consuming, and it is not inconvenient. Conducting oneself in an ethical manner is simply one more standard for judging oneself as a professional and allowing the consumer to see the value the interior designer places on his or her obligations to clients and the profession. We expect the professionals in law, accountancy, medicine, and real estate, for example, to behave ethically when we deal with them as clients and patients. They too should expect ethical behavior from the interior designers they hire to design their offices, medical suites, hotel rooms, stores, and myriad other commercial spaces. Ethical behavior is a responsibility of all interior designers as just one more way to improve the professional image and standing of interior design.

Professional Growth

Obtaining an education in interior design, taking the professional competency examination, and completing other requirements toward licensure or registration are all important milestones in the professional growth of a commercial interior designer. Many designers also become members of a professional association such as ASID, IIDA, or IDC.

Professional associations provide many benefits to members that enhance professional growth. Networking opportunities at local chapter meetings help to broaden an interior designer's contacts in the industry. Attendance at national meetings moves that networking opportunity to a national and even an international level. However, the old saying that you get back what you put in is important.

Certainly join a professional association for its newsletters, member meetings, benefits such as insurance programs, and many other reasons. But also join to become active by volunteering for a committee. Here the young interior designer in particular gains greater insights into group dynamics and leadership characteristics. Interior designers at any level gain valuable experience and have fun while helping to organize chapter events and programs. Later on, election to a chapter's board or office enlarges a designer's skills and knowledge through the training that is offered for board members. Officers expand their network of contacts and friends through training conducted for chapter officers by association national offices. Active participation in an association is a great way to gain confidence in speaking and writing—important communication skills for any interior designer.

Another way to gain professional growth is through continuing education. Education does not stop when one receives a diploma at the end of an interior design program. Professionals should seek additional information at seminars, workshops, and training programs that offer *continuing education unit (CEU)* credit. In fact, many jurisdictions with licensing or registration legislation require CEU credits to maintain the license or registration. Professional associations may also require, but in any case highly recommend continuing education for their members.

Continuing education seminars provide up-to-date information on a wide variety of topics in the profession. These seminars and workshops are short, most taking one day or less. Some are even available online or by correspondence so that the busy professional can obtain continuing education even with a busy work schedule.

Successful professionals find numerous ways to continue to grow and add value to the work they produce. That added value will come back to the interior designer in a variety of positive ways!

Summary

Working in commercial interior design—regardless of the specialty—is exciting. The opportunity to design highly creative interiors may not come often to everyone; however, the possibility is always on the horizon. The opportunity to help client firms become more

effective businesses is also satisfying. Think of how wonderful it would feel to be involved in the design of corporate offices for a major corporation in Manhattan or a new pediatrics wing for a hospital. One day, maybe you will be the project manager for a new mega resort/casino or a bed and breakfast that continually wins hospitality industry awards. Of course, your design for a small accounting office or a neighborhood restaurant is also important. The opportunities in commercial interior design are endless.

This chapter has provided a snapshot of what it is like to work in commercial interior design. A brief historical overview revealed the roots of this branch of the profession. The chapter then discussed the importance of understanding a client's business, which is critical to the successful interior designer in a commercial specialty. The work environments of commercial interior design and the challenges of the field were also considered. The chapter concluded with a brief examination of some issues critical to the profession in the 21st century.

Chapters 2 through 10 provide information on important functional and design criteria for key types of commercial interior design specialties. Each chapter will help you understand the nature of the business of the business, as well as provide a foundation for design decisions.

REFERENCES

- Abercrombie, Stanley. December 1999. "Design Revolution: 100 Years That Changed Our World." *Interior Design Magazine*, pp. 140–199.
- Allen, Edward and Joseph Iano. 2004. *Fundamentals of Building Construction*, 4th ed. Hoboken, NJ: Wiley.
- American Society of Interior Designers (ASID). 2003. "Green Design." *ASID ICON*. May. Several articles in this issue.
- Applebaum, David and Sarah Verone Lawton, eds. 1990. *Ethics and the Professions*. Englewood Cliffs, NJ: Prentice-Hall.
- Ballast, David Kent. 2002. *Interior Construction and Detailing*, 2nd ed. Belmont, CA: Professional Publications.
- Baraban, Regina and Joseph F. Durocher. 2001. *Successful Restaurant Design*, 2nd ed. New York: Wiley.
- Beard, Jeffrey L., Michael C. Loulakis, and Edward C. Wundram. 2001. *Design-build: Planning through Development*. New York: McGraw-Hill.
- Berger, C. Jaye. 1994. *Interior Design Law & Business Practices*. New York: Wiley.
- Blakemore, Robbie G. 1997. *History of Interior Design & Furniture: From Ancient Egypt to Nineteenth-Century Europe*. New York: Wiley.
- Campbell, Nina and Caroline Seeböhm. 1992. *Elsie de Wolfe: A Decorative Life*. New York: Clarkson N. Potter.
- Cassidy, Robert. 2003. "White Paper on Sustainability." *Building Design & Construction Magazine*. November. Supplement.
- Clay, Rebecca A. 2003. "Softening the Fear Factor." *ASID ICON*. August, pp. 10–12.
- . Spring 2005. "Integrating Security & Design." *ASID ICON*, 36–41.
- Coleman, Cindy and Frankel + Coleman, eds. 2000. *Design Ecology. The Project: Assessing the Future of Green Design*. A brochure published by the International Interior Design Association, Chicago.
- Demkin, Joseph A., ed., and the American Institute of Architects. 2003. *Security Planning and Design: A Guide for Architects and Building Design Professionals*. New York: Wiley.
- Earth Pledge. 2000. *Sustainable Architecture White Papers*. New York: Earth Pledge (various authors, no individual editor listed).
- Farren, Carol E. 1999. *Planning and Managing Interior Projects*, 2nd ed. Kingston, MA: R. S. Means.
- Flynn, Kevin. "LEED and the Design Professional." *Implications*. InformeDesign. Vol. 02, Issue 09.
- Gueft, Olga. 1980. "The Past as Prologue: The First 50 Years. 1931–1981: An Overview." *American Society of Interior Designers Annual Report 1980*. New York: ASID.
- Gura, Judith B. Fall 1999. "Timeline to the Millennium." *Echoes Magazine* (special edition).
- Herman Miller, Inc. 1996. "Herman Miller Is Built on Its People, Values, Research, and Designs." News Release. December 15. Zeeland, MI: Herman Miller, Inc.
- . 2001. "Companies Go Green." Brochure. Zeeland, MI: Herman Miller, Inc.
- Interior Design. 2006. "The Top 100 Giants." January, pp. 95+.
- Jones, Carol. 1999. "Defining a Profession: Some Things Never Change." *Interiors & Sources Magazine*. September.
- Kibert, Charles J. 2005. *Sustainable Construction*. Hoboken, NJ: Wiley.
- Klein, Judy Graf. 1982. *The Office Book*. New York: Facts on File.
- Long, Deborah H. 2000. *Ethics and the Design Professions*. Monograph. Washington, DC: NCIDQ.
- Malkin, Jain. 2002. *Medical and Dental Space Planning*, 3rd ed. New York: Wiley.

- McDonough, William and Michael Braungart. 2003. "Redefining Green." *Perspective*. Spring, pp. 20–25.
- . 2005. "Making Sustainability Work." *EnvironDesign Journal*. Spring, pp. 34–38.
- Mendler, Sandra F. and William Odell. 2000. *The HOK Guidebook to Sustainable Design*. New York: Wiley.
- Nadel, Barbara A. 2004. *Building Security: Handbook for Architectural Planning and Design*. New York: McGraw-Hill.
- National Park Service. 1994. "Guiding Principles of Sustainable Design." Available at www.nps.gov/dsc/dsgncnstr/gpsd/ch1.html
- Null, Roberta with Kenneth F. Cherry. 1998. *Universal Design*. Belmont, CA: Professional Publications.
- Pilatowicz, Grazyna. 1995. *Econ-Interiors*. New York: Wiley.
- Pile, John. 1978. *Open Office Planning*. New York: Watson-Guptill.
- . 2003. *Interior Design*, 3rd ed. Upper Saddle River, NJ: Pearson/Prentice-Hall.
- . 2005. *A History of Interior Design*. New York: Wiley.
- Piotrowski, Christine. 2002. *Professional Practice for Interior Designers*, 3rd ed. New York: Wiley.
- . 2003. *Becoming an Interior Designer*. New York: Wiley.
- Ranallo, Anne Brooks. 2005. "Cradle to Cradle." *Perspective*. Spring, pp. 17–22.
- Reznikoff, S.C. 1989. *Specifications for Commercial Interiors*. New York: Watson-Guptill.
- Rutes, Walter A., Richard H. Penner, and Lawrence Adams. 2001. *Hotel Design, Planning, and Development*. New York: W.W. Norton.
- Scott, Susan. 2002. *Fierce Conversations*. New York: Berkley Books.
- Sewell, Bill. 2006. *Building Security Technology*. New York: McGraw-Hill.
- Solomon, Nancy B. June 2005. "How Is LEED Faring After Five Years in Use?" *Architectural Record*, pp. 135–142.
- Sparke, Penny and Mitchell Owens. 2005. *Elsie de Wolfe: The Birth of Modern Interior Decoration*. New York: Acanthus Press.
- Stitt, Fred A., ed. 1999. *Ecological Design Handbook*. New York: McGraw-Hill.
- Tate, Allen and C. Ray Smith. 1986. *Interior Design in the 20th Century*. New York: Harper & Row.
- Thompson, Jo Anne Asher, ed. 1992. *ASID Professional Practice Manual*. New York: Watson-Guptill.
- U.S. Green Building Council. February, 2003. *Building Momentum: National Trends and Prospects for High Performance Green Buildings*. Washington, DC: U.S. Green Building Council.
- . 2004. "LEED-CI." Brochure. Washington, DC: U.S. Green Building Council.
- U.S. Green Building Council. No date. "Making the Business Case for High Performance Green Buildings." Brochure. Washington, DC: U.S. Green Building Council.
- Watson, Stephanie. "Learning from Nature." *Implications*. *InformeDesign*. Vol. 02, Issue 04.
- Whiton, Sherrill and Stanley Abercrombie. 2002. *Interior Design & Decoration*, 5th ed. Upper Saddle River, NJ: Prentice-Hall.
- Williams, Shaila. 2006. "The New Rules." *Perspective*. Winter, pp. 42–46.
- World Commission on Environment and Development. 1987. *The Brundtland Report: Our Common Future*. Oxford: Oxford University Press.

WEB SITES

- American Society of Interior Designers (ASID) www.asid.org
- Careers in interior design site www.careersininteriordesign.com
- Council for Interior Design Accreditation (formerly the Foundation for Interior Design Education Research). www.accredit-id.org.
- Design-Build Institute of America (DBIA) www.dbia.org
- Interior Design Educators Council (IDEC) www.idec.org
- Interior Designers of Canada (IDC) www.interiordesign-canada.org
- International Interior Design Association (IIDA) www.iida.org
- National Council for Interior Design Qualification (NCIDQ) www.ncidq.org
- U.S. Green Building Council (USGBC) www.usgbc.org
- Architectural Record* www.architecturalrecord.com
- Building Design & Construction* magazine www.bdcmag.com
- Canadian Interiors* www.canadianinteriors.com
- Contract* magazine www.contractmagazine.com
- Design-Build Dateline* magazine www.dbia.org
- Eco-Structure* magazine www.eco-structure.com
- EnvironDesign*[®] Journal (a supplement to *Interiors & Sources* magazine)
- InformeDesign* newsletter www.informedesign.umn.edu
- Interior Design* magazine www.interiordesign.net
- Interiors & Sources* magazine www.isdesignet.com
- Journal of Interior Design* www.idec.org

