

Second Edition

KITCHEN & BATH DESIGN PRINCIPLES

Elements • Form • Styles



Nancy L. Wolford, PhD,
Ellen Cheever, CMKBD, ASID, CAPS

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Elements, Form, Styles

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WILEY

NKBA[®]
National Kitchen & Bath Association

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About the National Kitchen & Bath Association

The National Kitchen & Bath Association (NKBA) is the only nonprofit trade association dedicated exclusively to the kitchen and bath industry and is the leading source of information and education for professionals in the field. Fifty years after its inception, the NKBA has a membership of more than 55,000 and is the proud owner of the Kitchen & Bath Industry Show (KBIS).

The NKBA's mission is to enhance member success and excellence, promote professionalism and ethical business practices, and provide leadership and direction for the kitchen and bath industry worldwide.

The NKBA has pioneered innovative industry research, developed effective business management tools, and set groundbreaking design standards for safe, functional, and comfortable kitchens and baths.

Recognized as the kitchen and bath industry's leader in learning and professional development, the NKBA offers professionals of all levels of experience essential reference materials, conferences, virtual learning opportunities, marketing assistance, design competitions, consumer referrals, internships, and opportunities to serve in leadership positions.

The NKBA's internationally recognized certification program provides professionals the opportunity to demonstrate knowledge and excellence as Associate Kitchen & Bath Designer (AKBD), Certified Kitchen Designer (CKD), Certified Bath Designer (CBD), and Certified Master Kitchen & Bath Designer (CMKBD).

For students entering the industry, the NKBA offers Accredited and Supported Programs, which provide NKBA-approved curriculum at more than 60 learning institutions throughout the United States and Canada.

For consumers, the NKBA showcases award-winning designs and provides information on remodeling, green design, safety, and more at NKBA.org. The NKBA Pro Search tool helps consumers locate kitchen and bath professionals in their area.

The NKBA offers membership in 11 different industry segments: dealers, designers, manufacturers and suppliers, multi-branch retailers and home centers, decorative plumbing and hardware, manufacturer's representatives, builders and remodelers, installers, fabricators, cabinet shops, and distributors. For more information, visit NKBA.org.

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Preface

Aesthetics and style in design are as important as functional space planning in kitchens and bathrooms.

Today, the consumer's definition of good design in residential kitchen and bathroom planning places equal importance on function, style, and beauty.

- Consumers expect the kitchen and bathroom to look good as well as be functional. One aspect of the plan is not given up for the other.
- Consumers pride themselves in planning their own kitchen or bathroom; however, they expect the kitchen/bath specialist to help them create a personalized, one-of-a-kind space.
- Consumers who desire luxury products as well as those on a more modest budget are interested in good style and design. Their appreciation of style and design has grown from exposure to well-designed home products, including those created by recognized designers, artists, or home fashion experts in retail stores, on television decorating shows, and on the Internet.

To meet this professional challenge and provide design excellence, both experienced and novice designers need to expand their planning expertise to encompass the elements and principles of design as well as a variety of historical or specific cultural design trends and themes, often requested by today's clients. Doing this requires both academic study and the ability to think beyond the industry standard of covering the walls with well-engineered cabinets and specifying highly functional, well-made manufactured materials, fixtures, and appliances to create an aesthetically pleasing, creative, and personalized kitchen and/or bathroom.

The primary focus of this volume of the NKBA Professional Resource Library is on the planning of the physical appearance of the kitchen and bathroom. Included is a brief history of the design of kitchens and bathrooms (chapter 1) as well as some basics of creating a design, using skill and creativity to personalize designs for clients (chapter 2). It explains and details how to apply the academic elements (chapter 3) and principles (chapter 4) of design and selected historic and cultural style themes to specific kitchen and bathroom situations, enabling the designer to more clearly understand how to apply these tools of design to daily business practice. The historic and cultural style themes are presented as chronologically as possible. Those through and up to the end of the nineteenth century are discussed in chapter 5; those through the late nineteenth, through the twentieth and into the beginning of the twenty-first century in chapter 6, with selected cultural style themes presented in chapter 7. Although references to the design planning process, kitchen and bathroom layouts, types of equipment, and various materials are made, the major thrust of this volume is how the kitchen or bathroom visually presents itself to the customer using and enjoying the space. New and expanded illustrations of the application of each of these concepts to kitchens and bathrooms are included to enhance your knowledge

and skill as a designer and serve as reference points and real-life examples to use when creating designs and working with clients.

For the design student and designers preparing for the AKBD Exam, this volume addresses the following selected competencies in the NKBA Body of Knowledge:

Body of Knowledge Competency: Design

5. Design Principles: Demonstrates knowledge of color theories and how color relates to space (chapter 3).
6. Design Principles: Demonstrates design solutions using the elements and principles of design to satisfy aesthetic criteria (chapters 3 and 4).
7. Kitchen Planning & Bath Planning: Demonstrates knowledge of kitchen and bath historical styles and shows awareness of current design trends (chapters 1, 5, 6, and 7).
8. Kitchen Planning & Bath Planning: Evaluates client needs and incorporates them in the design solution (chapters 2, 5, 6, and 7).

This volume also addresses the following selected CIDA Professional Standards 2014:

II. Interior Design: Critical Thinking, Professional Values, and Processes

Standard 2: Global Perspective for Design—Have a global view and weigh design decisions within the parameters of . . . cultural context) (chapter 7).

Standard 4: Design Process—Apply all aspects of the design process to creative problem solving . . . and generate creative solutions that optimize the human experience within the interior environment) (chapter 2).

III. Interior Design: Core Design and Technical Knowledge

Standard 8: History—Apply knowledge of interiors, architecture, decorative arts, and art within a historical and cultural context) (chapters 1, 5, and 6).

Standard 9: Space and Form—Apply elements and principles of two- and three-dimensional design (chapters 3 and 4).

Standard 10: Color—Apply color principles and theories (chapters 3 and 4).

There is an abundance of information included in this volume, meant to serve as a reference when working with clients. My hope is that it will increase and enhance your knowledge and skill as a designer. Enjoy design and creating those perfect kitchen and bathroom spaces for your clients, whatever the style or theme.

It was an honor to be asked to revise this volume, a culmination of more than 40 years of college teaching: interior design theory and history along with space planning and other interior design courses. These basic design concepts (elements and principles of design) are the backbone and building blocks of any designed space, including kitchens and bathrooms. The trend to restore, re-create, or create the feeling of a historical space to complement exterior architectural and interior style has increased in recent years, so much so that it became an integral part of my teaching in the history of interiors and space planning classes. Students have enjoyed the challenge of applying this historical and theme aspect to their design projects and have been inspirations. My thanks to them.

Many contributors made this book possible. Special thanks go to Johanna Baars, Publications Specialist at NKBA; Paul Drougas, Editor, and Michael New, Editorial Assistant at John Wiley & Sons; Ellen Cheever, CMKBD, ASID, author of the first edition; the designers whose projects illustrate the design elements, principles, themes, and styles; and the peer reviewers who provided useful comments and suggestions. Finally, special thanks to my husband and family for their encouragement, support, and patience throughout this process.

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A Brief History of Kitchen and Bathroom Design



It is important for the kitchen and bath designer to understand the historical background of the design of the residential kitchen and bathroom in the United States and how it evolved. These spaces are often taken for granted as being primarily functional, necessary, and convenient rooms that have always been indoors, as they have been in most Western homes for a century or more. Fewer and fewer customers or designers can remember having or using primitive outdoor spaces for these functions, except when hiking or camping or in extremely remote areas. Therefore, giving thought to the actual design of these spaces is a relatively new concept, yet it is an opportunity for the expertise of the kitchen and bath designer.

Learning Objective 1: Describe the development and evolution of the design of the residential kitchen.

Learning Objective 2: Describe the development and evolution of the design of the residential bathroom.

A BRIEF HISTORY OF THE KITCHEN

For many centuries of recorded history, the kitchen was outside or in a separate building apart from the primary home to protect the family's dwelling from fires. The kitchen eventually became attached to the dwelling but was considered by most to be strictly a separate functional work space rather than one that required designing, aesthetic considerations, or integration into the rest of the house. This was especially true for the wealthy, who often had staff handling the meal preparation and cleanup. Aesthetics, close or convenient location to eating/dining space, or ease of function were not considered, nor were they thought to be important. In Colonial America in the seventeenth and eighteenth centuries and into the nineteenth century, the kitchen became more integrated into the home, more a center of family life with the open flame from the fireplace used to warm the home and family as well as prepare the food. The kitchen of the Rundlet-May House (1807) in Portsmouth, New Hampshire, features an enclosed fireplace—an early forerunner of the modern kitchen stove (see Figure 1.1.)

The idea of a well-planned, well-designed kitchen was first talked about in the 1920s when Hoosier cabinets were introduced by the Hoosier Company. Later, Cornell University and the US Department of Agriculture Research Station in Beltsville, Maryland, began research on



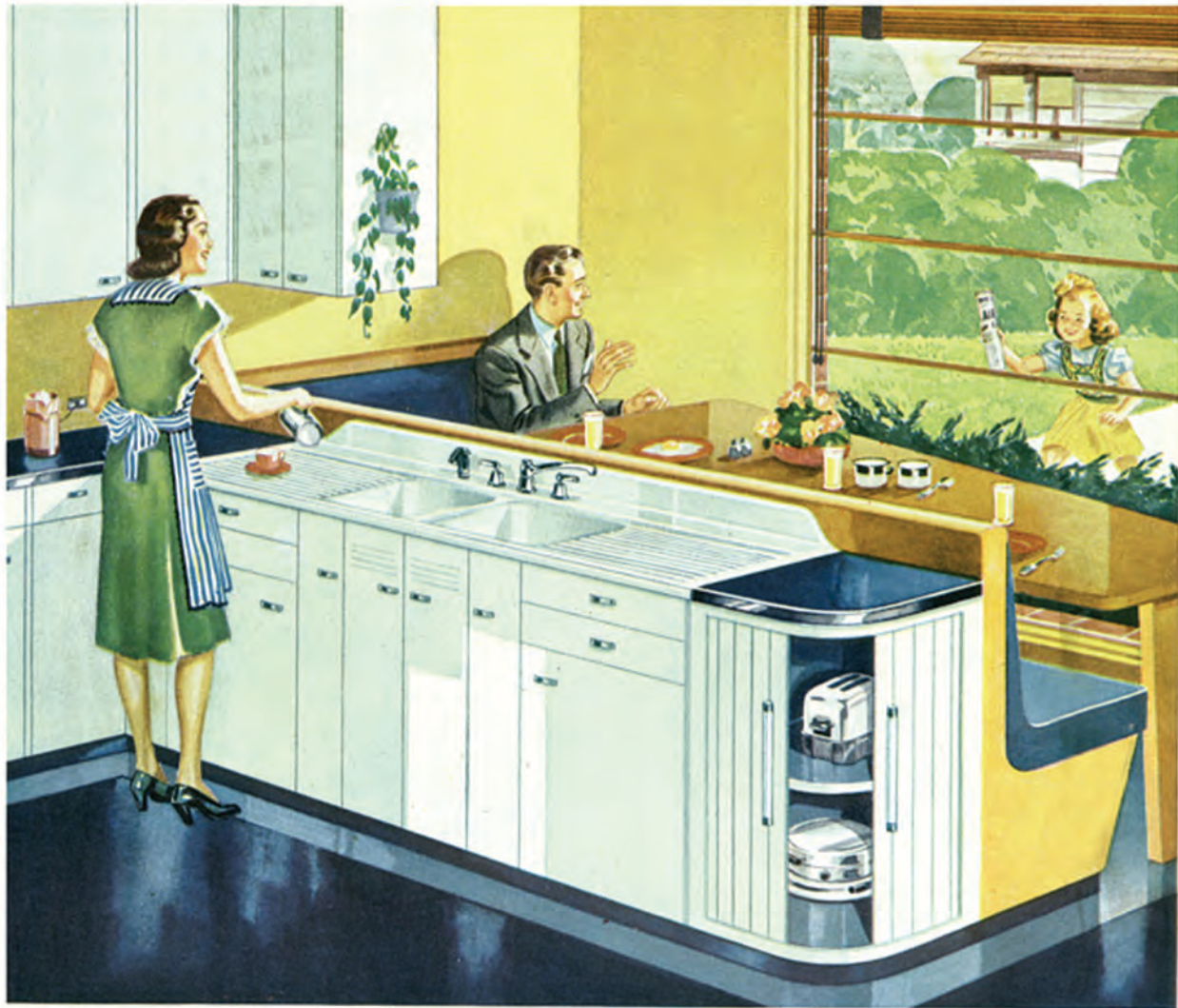
FIGURE 1.1 Historical kitchen

Courtesy of the Society of Preservation of New England Antiquities
 Photo by David Bohl

functional kitchen planning. This research continued after World War II by the Small Homes Council of the University of Illinois at Urbana-Champaign. However, the room still remained primarily a workroom, where function (food preparation, storage, and cleanup), mass production of cabinetry, and ease of cleaning, rather than aesthetics or other uses, were the primary considerations (see Figure 1.2).

Immediately following World War II, several leading midwestern and eastern US cabinet companies introduced color and more wood for cabinetry, which gradually was becoming built in, as well as decorative hardware and a variety of accent cabinet pieces. Built-in appliances and fixtures were introduced in the late 1950s and 1960s, in a myriad of styles and colors. These avant-garde kitchens were widely shown in high-fashion magazines, such as *Town & Country* and *Vogue*, as well as the many home design shelter publications that were popular and widely read by consumers (see Figure 1.3).

In the 1970s, a new design concept was introduced in several well-respected shelter magazines—the great room. Walls were removed between the kitchen and adjacent living spaces, bringing the kitchen out of the strictly separate functional/work-oriented category, to become an integral part of the family public/social space. It also helped to make homes appear to be larger as some walls were removed. The concept of the great room brought mass appeal to the idea of a decorated kitchen—one that was attractive to look at as well as functional to work and entertain in and continues to be popular (see Figure 1.4).



"WHERE OUR WORK IS, THERE LET OUR JOY BE"

A KITCHEN that is pleasant and easy to work in spreads harmony throughout the home. There, where so many important household tasks are performed, first rate plumbing is an essential key to cleanliness, health and convenience. *Kohler quality costs no more and gives the protection of excellence in every detail.*

The Wilshire sink, illustrated above, with its two compartments, double drainboard and handy ledge, typifies the practical design and distinguished appearance of all Kohler fixtures and fittings. The rigid, durable cast iron construction is overlaid with a pure white, lustrous surface, easy to clean, and

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FIGURE 1.2 1940s kitchen
Courtesy of Kohler Company



FIGURE 1.3 1960s kitchen
 Courtesy of Sub Zero

The concept of an aesthetically pleasing kitchen (whether a separate space or part of the great room concept) grew in importance throughout the 1970s, 1980s, and into the 1990s as the English bespoke idea of an unfitted kitchen was coupled with consumer interest in highly stylized, traditionally influenced environments attempting to re-create the warmth of a sundrenched villa in Tuscany, a colonial cottage in New England, or the midcentury modern look. Architectural details from these historic or period settings became more and more popular for consumers planning kitchens that were becoming the center of activity in their homes. A traditional kitchen with Old World design details is still popular today (see Figure 1.5).

The concept of a kitchen outdoors returned in the early 2000s, although it is quite different from the simple fire pits or crude adobe ovens of earlier times. This concept created a new wealth of design opportunities for the kitchen designer. The outdoor kitchens range from simple built-in barbecues to elaborate structures that are as extensive, complete, and well thought-out and designed as typical indoor kitchens (see Figure 1.6).

The interest in such aesthetically pleasing spaces continues today. As a kitchen specialist, one may be asked to plan a room that has a European-influenced sleek, uncluttered, and sophisticated style; a mid-twentieth-century modern renovation, or one that is harmonious and calming, inspired by a Far Eastern interior. The designer's ability to appropriately use the elements and principles of good design as well as understand historic and cultural themes will add great value to functional space planning solutions. Contemporary kitchens today combine convenience, function, and beauty. In the example shown in Figure 1.7, plain, simple



FIGURE 1.4 Great room/kitchen design concept introduced in the 1970s
Design by Carol Swanson-Petterson, CKD; KB Cabinets, Millbrae, CA

cabinets are highlighted with sleek cabinet pulls. Relatively smooth and varied wood-grained countertops and stainless-steel appliances are contrasted with the rough-textured wall treatment.

A BRIEF HISTORY OF THE BATHROOM

For most of recorded history, the bathroom, as it is known today, did not exist. The out-house or any convenient outdoor space was the toilet norm, as were outdoor washing facilities, often a stream or other body of water. However, indoor bath spaces strictly for bathing in some sort of tub or with a pitcher and bowl for washing have been around since ancient Greek and Roman times. It took centuries for these activities to come together in a single space. Although luxury homes featured indoor bathrooms with plumbed fixtures in the late 1800s, it was not until the 1920s that most building codes began mandating indoor plumbing for all new residential construction. These new codes paid little attention to the way the bathroom looked or how much space was required, because the space was perceived primarily as utilitarian. At first for typical bathrooms, few choices existed for fixture styles, colors, or fitting finishes. The primary concerns of



FIGURE 1.5 Traditional 1990s kitchen

Design by Bryan Reiss, CMKBD and Scott Stultz, codesigners Peter Deane and Kelly Stewart, CMKBD

early bathroom planners were providing safe indoor water supply intake and removal and accommodating three basic, usually white, fixtures in the smallest space possible. They also converted a dressing room, nursery, or other small room that had sufficient space for fixtures (see Figure 1.8).

Although many builders, designers, and architects overlooked the potential beauty of the bathroom, American filmmakers and emerging design trendsetters realized how attractive a bathroom could be. Sets in the emerging Hollywood film industry during the 1920s and 1930s suggested the potential beauty and luxury of the bathroom. Major manufacturers expanded their product lines and introduced color in their fixtures. An early Kohler advertisement celebrates this use of color in the bathroom (see Figure 1.9).

In 1929, the New York Metropolitan Museum of Art featured an exhibit devoted to the artistic and aesthetic qualities of a residential household, including the bathroom, using black fixtures to contrast with the light tile (see Figure 1.10).

During and immediately after World War II, the use of American-made fixtures was emphasized, and pastel colors were introduced. The advertisement in Figure 1.11 from the *Saturday Evening Post* in 1948 illustrates this use of color.

In the 1950s, 1960s, and 1970s, along with an explosion of the use of color for bathroom fixtures, greater use of color for floor and surrounding wall materials also occurred. The



FIGURE 1.6 Outdoor kitchen

Courtesy of Lynx Grills, Inc.

customer (and designer) had many choices, beyond white or the pastels of the era through the 1940s. These colors changed from decade to decade, as the three advertisements in Figures 1.12, 1.13, and 1.14 illustrate with different versions of green.

The fantasies of trendsetters and the explosion in the use of color all those years ago are the reality for well-planned bathrooms today. No longer is the bathroom a room reserved for simple personal hygiene. Today, people spend more time in the space. Some gather in a family group to enjoy the therapeutic pleasure of a hydromassage bath, sauna, soaking tub, or steam shower; others use the bathroom as a secluded spot, a place to relax and unwind, away from hectic family and job responsibilities.

As a bathroom specialist, you may be asked to plan a room that is part of a major luxury master bedroom suite or one that is a separate, compartmentalized, multifunctional room. Your client may request a dramatic powder room reserved primarily for guests, a shower space squeezed off the utility room, or an outdoor cabana by the swimming pool.

In all of these situations, the ability to use the elements and principles of good design adds great aesthetic value to the functional space planning solution for today's client (see Figure 1.15).