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PATIOS**

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A DIY Guide to Building Patios, Walkways & Outdoor Steps



The Complete Guide to
PATIOS

Updated 3rd Edition

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Layout: Laurie Young

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The Complete Guide to Patios

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For safety, use caution, care, and good judgment when following the procedures described in this book. The publisher and Black & Decker cannot assume responsibility for any damage to property or injury to persons as a result of misuse of the information provided.

The techniques shown in this book are general techniques for various applications. In some instances, additional techniques not shown in this book may be required. Always follow manufacturers' instructions included with products, since deviating from the directions may void warranties. The projects in this book vary widely as to skill levels required: some may not be appropriate for all do-it-yourselfers, and some may require professional help.

Consult your local building department for information on building permits, codes, and other laws as they apply to your project.

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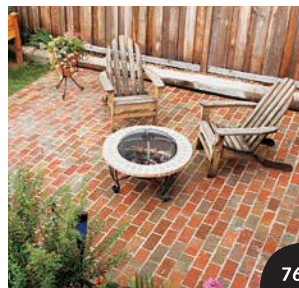
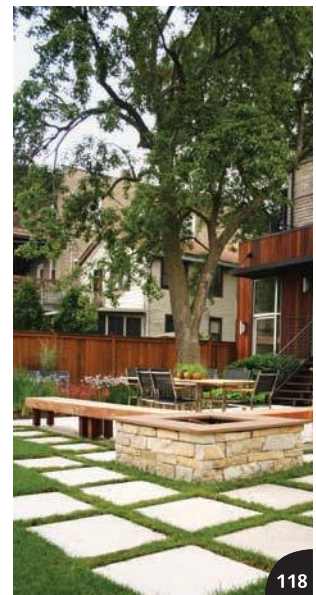
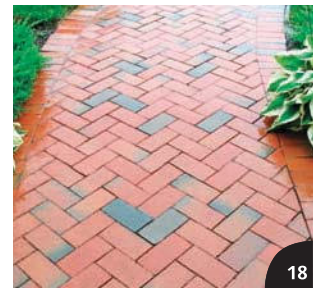
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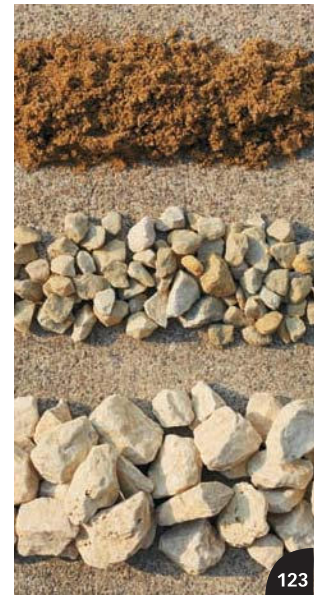
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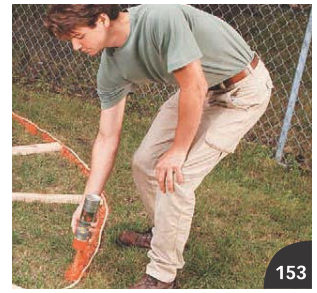
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Introduction

Outdoor living just seems to get more popular every year. Enjoying the sunlight, feeling a cool breeze, relaxing with a cold beverage, or hanging around the barbecue with our friends and family are just a few of the reasons we are constantly drawn outdoors. But being outdoors does not mean that we have to make any sacrifices to comfort and convenience. An outdoor living environment can offer practically all of the amenities you'll find indoors, and more. And in many homes today, the patio is the hub of our backyard lifestyles.

The patio is fundamentally a defined surface that supports foot traffic and furniture and keeps weeds and mud away. It can be made of many different materials, which is one of the reasons a patio is a more versatile outdoor living option than a wood deck (nothing against decks, of course).

Perhaps the greatest thing about patios, though, is that they are fairly easy to design and install yourself. You don't need a lot of expensive tools and the techniques are far less complicated than wood joinery. Typically, however, a good amount of labor is involved, so if you have difficulty digging or moving slightly heavy objects around, you'll want some assistance. But at the same time, there are many patio building products available today that are easy to handle and are quite forgiving.

Black & Decker The Complete Guide to Patios is mostly about designing and building the most popular kinds of residential patios. But in it you'll also find some related information on other horizontal structures for the yard, including walkways and landscape steps. If a patio is a stage from which you can enjoy the outdoors, walkways and paths are the ties that bring it all together, linking the house, patio, garden, lawn, driveway, and any other points in between. Pathways unify various landscape elements, they define spaces, direct traffic, and make it easy to travel from one place to the next.

In this book you'll also find many inspiring and helpful photos of completed projects, some very practical guidance for designing and choosing materials, and helpful step-by-step projects for improving the patio space by creating wall or roof structures that shield you from rain, hot sunlight, wind, insects, and even cold weather.

In just the past few years, enhanced interest in environmentally friendly building practices has led to a host of new patio materials. Some are made from recycled plastic, rubber, or glass. Others are "green" because they are designed to be lightweight so they combat freight costs and, by extension, save fuel and reduce pollution. Still another way in which a patio can be earth-friendly is by incorporating a permeable sub-base—that is, one that allows rainwater to soak through and stay in your yard instead of washing off the surface and into the gutters and wastewater system. Products and techniques that highlight each of these reasons to be earth-friendly with your patio are highlighted in an all-new, special section called "Earth-friendly Patios" that you'll find starting on page 116.

Chances are pretty good that at some point you've enjoyed spending time on a patio. Perhaps your home has a patio already. Once you've gone through the steps of designing and creating just the patio to meet your needs, you will truly understand how much enjoyment these humble structures have to give.





Basics for Building Patios, Walkway & Steps

To install a new patio or walkway, first get started by working through the basic steps of planning your project. The section in this chapter on design themes can help you think conceptually about the character and emotional quality of your new outdoor room. Consider, also, all of the ways you hope to use the new space and decide how the layout and other design elements will best accommodate those activities.

Next comes the choice of paving material. Whether it's classic clay brick, naturally rough-hewn flagstone, simple and sleek concrete, or any of the other great options you'll learn about here, the surface material you choose will be the defining feature of your patio or path.

In addition to the appearance and performance qualities of the different paving options, make sure to think about the logistics of installation. Flip ahead to the step-by-step projects in this book and review the materials to get an idea of the work involved and to gauge which applications best suit your design, budget, and time frame. Other practical matters to consider—including zoning restrictions and natural conditions on your property, such as drainage and seasonal weather—are addressed in this chapter as well.

When it's time to pull it all together, you'll find it helpful to draft a site plan. The patio and walkway plans on pages 33 to 37 offer inspiration and tips for thinking globally about your patio or walkway in the context of your outdoor home.

In This Chapter:

- Design Themes for Patios
- Material Selection
- Practical Considerations
- Patio & Walkway Plans

Design Themes for Patios

If you were planning new living spaces for your indoor home, you would probably start by listing the main uses of each room—cooking meals, throwing parties, relaxing with the family, sitting down for a chat with the neighbors, etc. Keeping these desired uses in mind, you then decide how each space should look and feel. What is the essential character, or theme, of the space? Should it be formal and intimate, or should it have an open feel, with casual furnishings setting the tone for each activity? The same thought process applies to designing a new patio (which is, in essence, an outdoor living space). The following discussion of patio design themes can help get you started.

Entertaining & Dining

If a patio is perfect for one thing, it's alfresco meals. Whether enjoying a meal with the family or throwing a casual weekend barbeque or late-night hors d'oeuvre party, food just tastes better outdoors. A patio intended for everyday meals should be casual and convenient. Having a table and chairs set up at all times lets you

decide at the last minute to eat outside without much fuss. Choose lighting that is bright enough for eating comfortably but can easily be lowered for after-dinner conversation. Locating the patio just off your indoor kitchen makes the space convenient enough to be used as a second dining room. On the other hand, an outdoor kitchen brings the cooking right into the space, so the cook is never stuck inside during those precious summer evenings.

Entertaining on a patio involves a special combination of indoor comforts and outdoor pleasures, where the open atmosphere invites guests to lounge under the stars or take a stroll through the garden. A well-designed entertainment space should be roomy yet comfortable. Overheads and walls promote a feeling of intimacy, while a wide walkway or broad steps can encourage guests to wander off the patio and into the yard. Furniture and more permanent features, such as a fireplace, bar, or large dining table, can define the room's layout and set the stage for specific activities. Lighting is critical for setting the mood and should be adjustable for tailoring your patio space to different settings.



A simple dining setup with easy access to the kitchen is ideal for everything from morning coffee to romantic dinners to late-afternoon cocktails.



Customize your patio shape and size to better accommodate a special kind of entertaining you enjoy, or perhaps a unique furnishing such as this 14-seat round dining table.



The shelter of plants and overheads can be an especially welcome feature for dining and entertaining areas, blocking the glare and heat of direct sunlight.

Private

When you want to be outside, but don't want to feel exposed or on display, a private patio space is the answer. Privacy can take many forms and often is as much a result of perception as physical seclusion. Adding privacy might mean screening out the views of neighbors or locating the patio in a distant corner of the lot. A fountain or other water feature can provide a sense of privacy by drowning out noise and letting you dwell in your own thoughts. Along with increased

privacy comes a feeling of enclosure and shelter, which may result in a space that is intimate but may be somewhat limited functionally. If this is not what you want for your entire patio, you can always make some parts private while leaving others open. Another option is to build a small private retreat away from the main patio. Whatever the design, a private patio should be personal and comfortable, particularly for those who will spend the most time there.



Urban patios often rely on tall fences or walls for much-needed privacy. Plantings help soften the look of the barriers and prevent a closed-in feeling.

Expansive



This sprawling outdoor room maintains an expansive feel with a visual flow between levels. Accents of boulders and trees that echo the view of distant mountains blend this patio into the natural openness of the land.

The most important idea behind expansive patios is openness. Where private spaces are sanctuaries closed off from the outer world, an expansive patio unfolds into the broader landscape, often blending with its surroundings.

Wide-open patio designs are typically favored on lots that are large enough not to need privacy and in yards that offer a great view. However, creating an expansive feel is not about maximizing the patio's size. In fact, small patios can gain the most from an expansive theme—leaving patios open allows them to

borrow views of the natural landscape and create the perception of increased space.

This basic concept of openness also informs the layout and decoration of expansive patios. Designs are most often very simple, with no walls or large plantings that would block views or muddle the balance of the overall lot plan. Unobtrusive pots or shrubs placed to the side can help frame the view from the patio, but a large overhead might be too oppressive and can detract from the open feeling. An expansive theme works well for remote outdoor rooms as well as patios right next to the house.

Remote

Most patios are located right behind the house, but there's no rule saying they have to be. A freestanding or detached patio can be remote both literally and psychologically. A remote space can be private, tucked behind dense foliage at the end of a path, or it can be open and expansive in feel—a comfortable perch for taking in a view or catching the sunset.

Making your outdoor room out of the way inspires creativity—being free of the style

constraints set by the house, the patio can blend into the landscape or become an eye-catching focal point on its own. Detached patios are often created to supplement a patio or deck adjoining the house. This arrangement offers even more freedom for designing the remote patio, since the primary outdoor activities can take place on the main patio close to the house, while the remote space is used ostensibly as a private retreat.



A remote patio is ideal for a private retreat. Being away from the house, it can take on a unique architecture to elicit a particular mood. Here, a classical romantic setting allows the homeowners to feel as though they are far away when they are just in the back corner of the yard.

Multipurpose

Indoors, people congregate in their multifunctional spaces—namely the kitchen and family room. The same is true for patios: when the outdoor layout and features cater to multiple activities, the space tends to be used more often. After all, the purpose of a patio is to help you enjoy your home's outdoor space.

While a multipurpose patio requires careful planning, it doesn't have to be all about practicality. Centering the layout around a functional dining

area, for example, doesn't mean you can't include a natural garden plot, a decorative water feature, or a sequestered nook for a private reading space. The ideal plan is dynamic enough to accommodate your household's range of activities, yet remains unified in design and appearance. A broad view of the patio (which is most often the view from the house) should reveal an integrated layout with a natural flow from one area to another.



This multipurpose patio includes a built-in firepit on one side and a cozy spot for a bistro set on the other. The open area in the middle provides access to a screened gazebo for all-season recreation.

Welcoming

Not all patios need to be hidden behind the house. Often surrounding the front door or main entrance, welcoming patios are a warm greeting to visitors and can be an attractive link between the house and a driveway or public sidewalk.

The inviting appearance of an entry patio certainly adds curb appeal, but its true purpose is the same as any standard backyard space. In terms of use, the entry

patio is a return to the concept of the traditional front porch: a semiprivate space that allows homeowners to enjoy the outdoors while keeping in touch with neighbors. Being in full view, however, does place certain stylistic and architectural constraints on an entry patio. As the foreground to a home's façade, it's important that the patio complements the home's proportions and decorative scheme.



A charming walkway and casual sitting area convey a message of welcome and leisure to visitors of this house, as well as providing the perfect spot for spending warm evenings. The low gate adds a sense of privacy and closure to the patio area.

Sheltering



An open-sided roof structure protects the portion of this tile patio that's next to the house, but the patio extends out beyond the roof and into the yard for times when sunlight is the order of the day.

A patio shelter can be anything from a garden trellis covered in flowering vines to a permanent, built-in overhead that makes the patio livable in all kinds of weather. Arbors and pergolas are the most popular types of patio overhangs, and both are simple structures that lend themselves easily to personal creative touches.

Arbors are at home almost anywhere in the landscape, from front entryways to secluded gardens. On a patio, an arbor can serve as a dramatic entrance portal, a framework for climbing plants, or a cozy shelter for a corner seating area. The basic design of a wooden arbor includes two or four posts with a simple slatted roof. The sides between the posts can be left open or covered with trelliswork for supporting plants or adding privacy.

Pergolas are a step up from arbors in size and stature but are based on similar post-and-beam construction. In its traditional form, a pergola extends

from the side or roof of a building to create a semi-shaded area linking the building with the outdoor landscape. Pergolas work equally well as freestanding structures, with four or more columns supporting large roof beams topped with a series of cross beams or slats. Add a pergola to create an attractive ceiling—or the suggestion of a ceiling—over a large section of your patio. Cover your pergola along the top with vines or fabric to gain privacy beneath the view of neighbors' upper-floor windows.

Careful placement of the overhead slats on patio shelters lets you enjoy sun or shade at specific times of the day. For example, if the summer sun is too hot at midday, angle the slats toward the morning sun while blocking out the hottest rays at midday and into the afternoon. But remember, any shading on an attached patio may limit the amount of natural light that reaches the house.

Material Selection

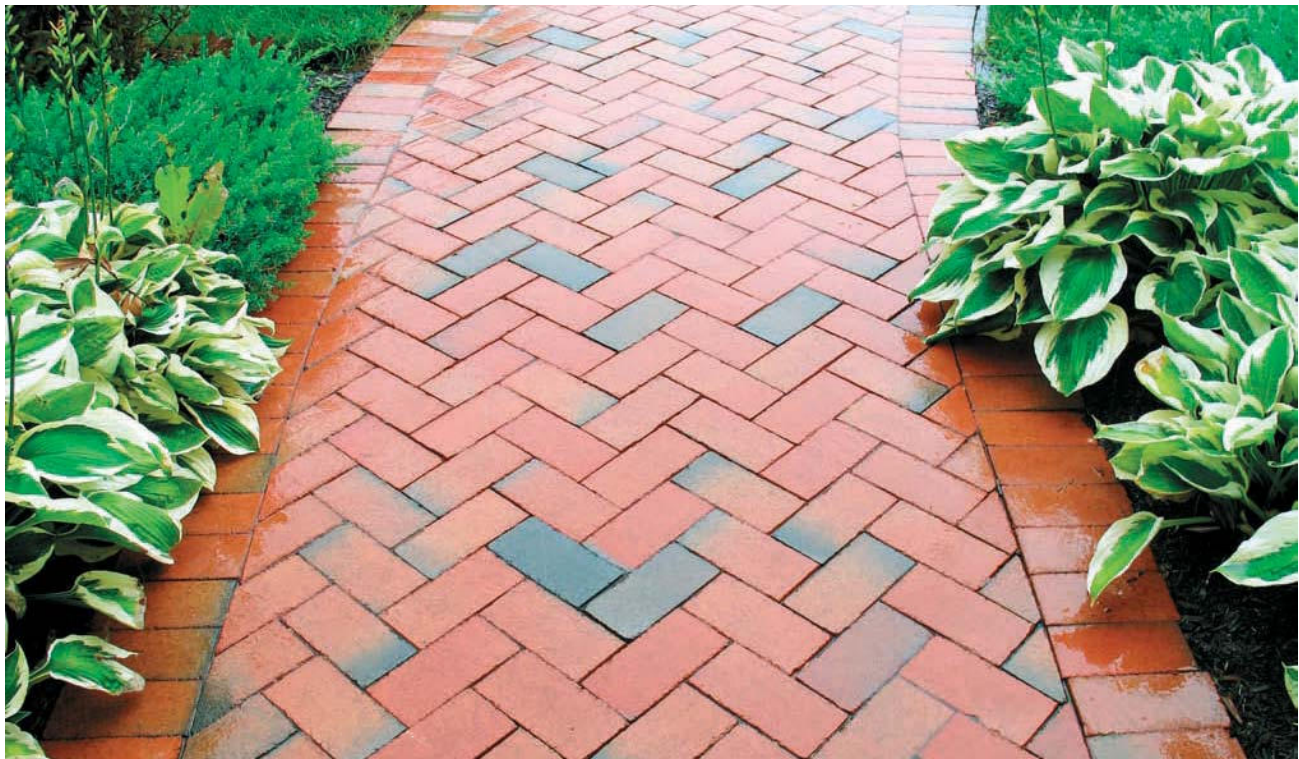
Brick, stone, and concrete rightly make up most people's short list of good patio and walkway surfaces, but these materials in their basic forms are just the beginning. Brick alone comes in a range of colors, textures, and styles, while the availability of stone and the variety of concrete pavers are both constantly expanding. After giving some thought to your preferred flooring surface, it will be well worth it to spend a few hours browsing local stone yards, landscape suppliers, and building centers to see what's available in your area. Ask about delivery pricing while you're there.

Brick

Natural clay brick is generally considered the most classic surface material for patios and walkways—a well-deserved distinction. With its combination of warm, natural coloring and texture and its orderly geometric shapes, brick is the perfect blend of house and garden. And with its small unit size, brick is also

quite versatile and can be easily applied to formal layouts or imaginative curved patterns. The standard brick patio installation consists of setting brick into a sand bed in an ordered pattern, but brick can also be mortared over a concrete patio slab or walkway for a highly finished appearance and a surface that won't be affected by ground movement.

Bricks for outdoor floor surfaces are called pavers. These flat, solid units have a porous texture that helps provide traction in wet weather. Brick dimensions vary by manufacturer and range approximately from 1½ to 2¾ inches in thickness. The standard size (width and length) for sandset (mortarless) installation is 4 × 8 inches. Bricks for mortared jobs are a little smaller to account for the mortar joints. Pavers are also rated for load-bearing strength and weather resistance. Types 2 and 3 are suitable for heavy foot traffic. SX (or SW) brick is for cold climates, MX brick is for warm climates without a hard frost, and NX brick is for interior applications. Don't use standard wall brick, fire brick, or other types of building brick for flooring surfaces.



Bricks made from natural clay have a softness, both visually and in texture, that many designers prefer to the relative hardness and coldness of cast concrete pavers. Natural brick does tend to break and decompose more rapidly, however.

Concrete Pavers

Concrete pavers are the most popular alternative to traditional brick and are installed the same way—either sandset or mortared over a concrete slab. Like brick, concrete pavers are highly durable, and their uniform dimensions make them easy to work with. While most clay bricks only come in standard rectangular units, concrete pavers are available in a wide range of sizes and shapes, including small and large rectangles and squares, various interlocking designs, and trapezoidal shapes used for circular and fan patterns.

Concrete pavers can be manufactured with different textures and edge treatments that can greatly alter their appearance. Among the most popular styles are “tumbled” pavers that have

softened, randomly chipped edges, giving the paving an age-worn look. The tumbled effect is an important component of the many cobblestone styles of concrete paving. For sandset installations, you can use virtually any type of concrete paver. Many come with spacing lugs molded into the sides of each unit—these automatically set an even space between pavers that you fill with sand to complete the installation (most clay bricks don’t have spacing lugs, and you have to set the gaps with temporary spacers). For mortared finishes, choose concrete pavers with square sides (with or without spacing lugs); interlocking styles and other irregular shapes make it difficult to fill and finish the mortar joints.



Concrete paver products have evolved from commercial-looking units in basic pink and tan tones to a diverse assortment of colors, shapes, and textures. Pavers are now commonly available in sets of blended colors and shapes for a more natural look; they are tumbled with nicely variegated patterns.

Stone

Natural stone has an organic beauty that's unmatched by all other building materials. Stone paving is used all over the world in grand courtyards, ancient roadways, and backyard landscapes alike. In nature, stones frequently form paths for crossing streams and skirting muddy fields—it's not surprising, then, that it's a popular material for patios and walkways. Stone is available in many forms, while the most commonly used types for do-it-yourself projects are flagstone and stone tile.

Flagstone

Flagstone is the general term given to any broad, flat stone that has been split to a thickness of around one to four inches, making it good for paving. Common species of flagstone include sandstone, limestone, bluestone, and slate. Individual stones may have cut edges for paving in linear patterns, while stones with jagged edges and irregular shapes are best for creating a patio or walkway surface with a natural, casual feel.

Flagstones can be set in sand or stable (tamped) soil, or they can be permanently laid in mortar over a concrete patio slab or walkway. For an organic, stepping-stone effect, you can space stones widely and fill the gaps with gravel or groundcover plantings.

Availability of flagstone varies by region; see what types are offered at local stone yards. For paving on patios and primary walkways, make sure the stone is thick enough for furniture and/or heavy foot traffic and that the surface of the stones won't become dangerously slick when wet.



Natural flagstone is cleft into slabs with irregular shapes and an often interesting, flaky top surface. Flagstone is also available in precut tiles.



The beauty, strength, and unique character of stone makes it a natural choice for all sorts of hardscaping, especially patios, walkways, and garden paths. Paving a path with stones of varying shapes and sizes is just one way to create a one-of-a-kind paving surface.