

"The primary challenge of building outdoor seating is striking a harmony between durability and comfort." –Matt Kenney

s furniture makers, we aspire to build things that will look beautiful for a lifetime. We spend a lot of time on the design and choose the best-looking lumber for the project. We work hard to cut strong, long-lasting joinery and add in tolerances that allow for expansion and contraction of the wood so that doors and drawers don't bind and tabletops don't split. Last, we apply our favorite finish to illuminate the wood and protect it over time.

When you build for the outdoors, though, many of those efforts are in vain. Think about all that an outdoor piece must endure throughout the seasons. It gets soaked with rain and scorched dry by the sun. It freezes in winter, gets scratched up by squirrels, cats, and other critters, and even endures the indignation of being used as a Porta-Potty for the birds. Not exactly a prime environment for a period piece with a French polish.

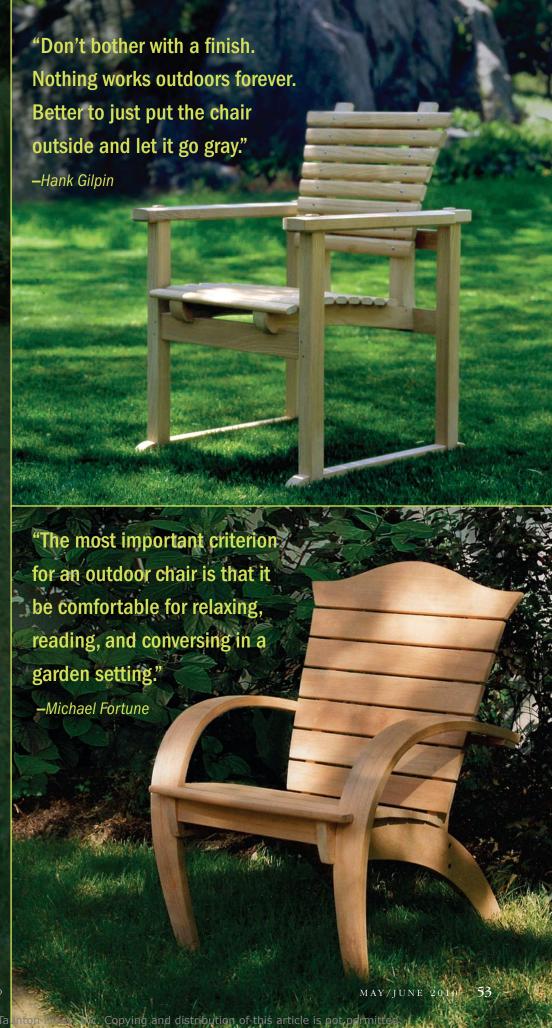
We're not recommending that you head to a discount store and buy resin chairs and tables. Far from it. You can still make elegant furniture for your garden, deck, or patio. You just have to figure out the best approach to building for a brutal, decay-prone environment, and accept the fact that nature always wins.

As Hank Gilpin says, "Enjoy the pleasure of making it, but remember that all things go away."

In this article, you'll learn about designing for the outdoors from three furniture makers. Gilpin and Michael Fortune have been building outdoor furniture for many years. Matt Kenney, a *FWW* associate editor, had never built a piece for the outdoors until this year. So he took tips from Gilpin on how to make a piece last.

Each of these makers offers an out-door chair (Kenney's is a bench) that is both attractive and comfortable, using materials and joinery that will push back against nature's onslaught. If you want to go beyond these designs, you'll also get some great tips on building for the outdoors in general, such as choosing the right wood, glue, and hardware, and whether to apply a finish (some do, some don't bother).

Tom McKenna is senior editor.



Adirondack with a twist

BY MICHAEL FORTUNE

The most important criterion for an outdoor chair is that it be comfortable for relaxing, reading, and conversing in a garden setting. The Ad-

irondack chair is a traditional outdoor design, and the form has been widely copied. I'm not big on copying, and I wanted to introduce some playful curves while increasing the comfort. So I made some changes.

Most traditional Adirondack seats are around 14 in. high and sit rather low at the back. To make my version easier to get in and out of, I made the seat 16 in. high at the front. I also made the back of the seat a bit taller. By the way, the part of the seat that protrudes past the arms is the perfect place to set a summer drink.

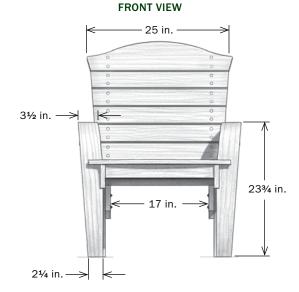
The wide curved arms make strong visual statements, reflecting the natural shapes found in gardens, and they provide structural integrity. Each arm is made from eight, ½-in.-thick laminations, assembled on a bending form (see drawing) using Titebond III, which is highly water resistant. You'll need to draw a full-size side view to work out the arm curve.

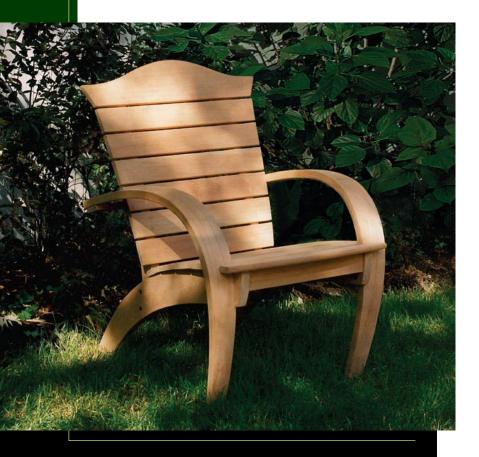
The legs appear to angle inward toward the back, but the side assembly is an easy-to-make flat plane. The illusion makes the chair more interesting from all angles.

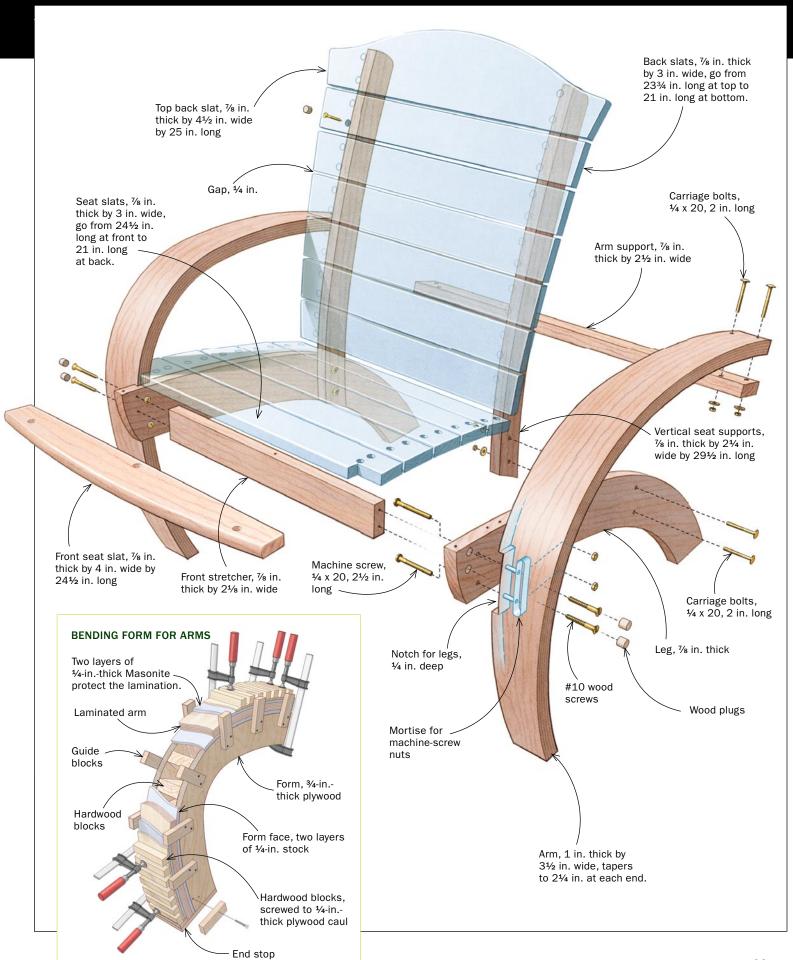
All of the joints are assembled using stainless-steel bolts and decking screws. To notch the arms for the legs, I used a couple of quick jigs to guide the router: one for the right assembly and one for the left.

I've made these chairs in a variety of woods suitable for outdoor use, such as cedar, larch, and mahogany. With these woods, I often apply a clear penetrating finish, like Watco exterior. You also could allow them to weather and develop a silvery color—I like that transformation on this particular chair. I've even painted some of these chairs my favorite color, periwinkle blue.

SIDE VIEW 9½-in. radius 16 in.







This chair celebrates its joinery

BY HANK GILPIN

When it comes to building this, or any, outdoor chair, the wood choice and joinery are most important to making it last.

The top wood choice would be teak, the miracle outdoor wood. It doesn't move, has no coarseness, and ages into a beautiful silvery-gray sheen. It also has natural decay-resistance. The problem with teak is its hefty price tag. Other candidates that work well include black locust, osage orange, mulberry, white oak, cedar, redwood, and walnut.

I tried to keep the joinery simple and I hid none of it, choosing to make it a key element of the design. The chair has straightforward mortise-and-tenon joints, bridle joints, and lap joints. The most exacting joints to cut are the large through-tenons that connect the leg posts to the arms. I also kept the seat and back slats narrow to reduce the amount of wood

movement. An outdoor chair is going to get soaked with rain one day then baked by the sun the next, so movement will be severe.

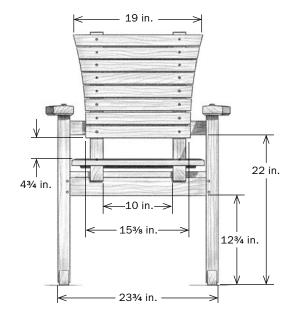
The only curves are in the seat and back supports, and they are simple bandsaw cuts. You'll need to draw a full-size side view to work out these curves. The seat and back slats are profiled using a router and screwed on with visible, stainless-steel screws. Why hide them? Instead, I make the countersunk hardware part of the overall design. By the way, use good hardware. If you think you are gaining by putting a plug over a cheap screw, you're fooling yourself. The moisture goes in there and rusts it right out. You just don't see it happening until the thing falls apart.

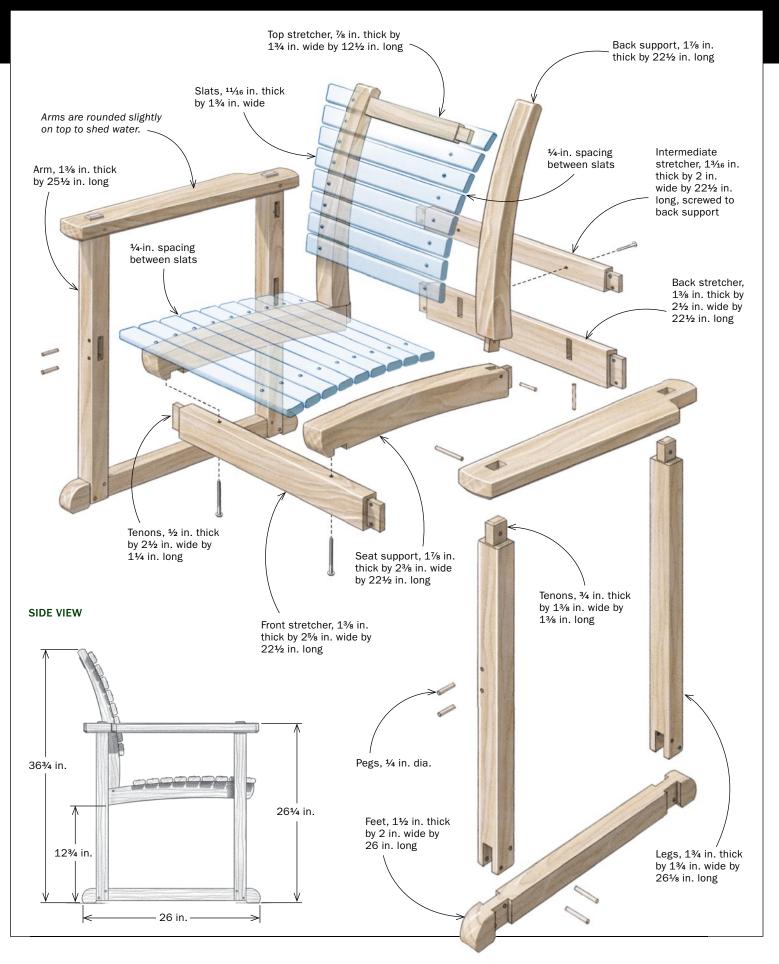
I didn't bother with a finish. Maintaining a finish on outdoor furniture is an assignment to hell because you'll be refinishing your furniture all the time. Nothing works outdoors forever (and I mean nothing). Better to just put it outside and let it go gray.

Remember, when it comes to building an outdoor chair, don't obsess. Just accept the fact that the chair is essentially being placed into a decayprone situation and you're only going to get X number of years out of it. You can make a nice chair, but don't be too precious about it. Ultimately, you want a comfortable place to sit outside, read a book, and drink a beer.



FRONT VIEW





Comfortable bench for a garden, patio, or deck

BY MATT KENNEY

When my family and I moved to Connecticut, we found ourselves living in a house with a large deck out the back door. Unfortunately,

we didn't have much furniture to put on it. So I decided to build a garden bench.

I had no experience with outdoor furniture, but while visiting with Hank Gilpin I asked him for some advice. Gilpin has been building beautiful outdoor furniture for decades, and he gave me some great tips on design and construction.

The primary challenge of building outdoor seating is striking a harmony between durability and comfort. The first step is choosing the right wood. I used sipo, a tropical wood and cousin to mahogany. It stands up to the outdoors very well and its surface has remained comfortable to the touch after several months outside.

One tip Gilpin gave me was to make the seat slats narrow to reduce the amount of wood movement. I used five narrow seat slats, spaced about ½ in. apart, rather than

fewer wider slats. Gilpin also recommended that I design to shed water wherever possible. Toward that end, the seat curves downward from the front, which not only helps water roll off but also is more comfortable than a flat seat. And I set the seat slats on top of the side rails (instead of between them) to expose the slats' end grain so it can dry easily after each rainstorm.

Ceramic-coated decking screws hold the slats to the rails, and I plugged the counterbores with face-grain plugs made from cocobolo.

Face grain sheds water better than

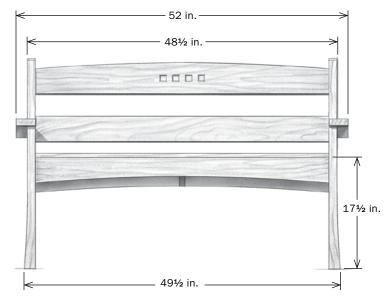
end grain, and cocobolo is a dense, weather-resistant tropical wood. Gilpin avoids plugs and leaves his screws exposed, but I think my plugs will hold up.

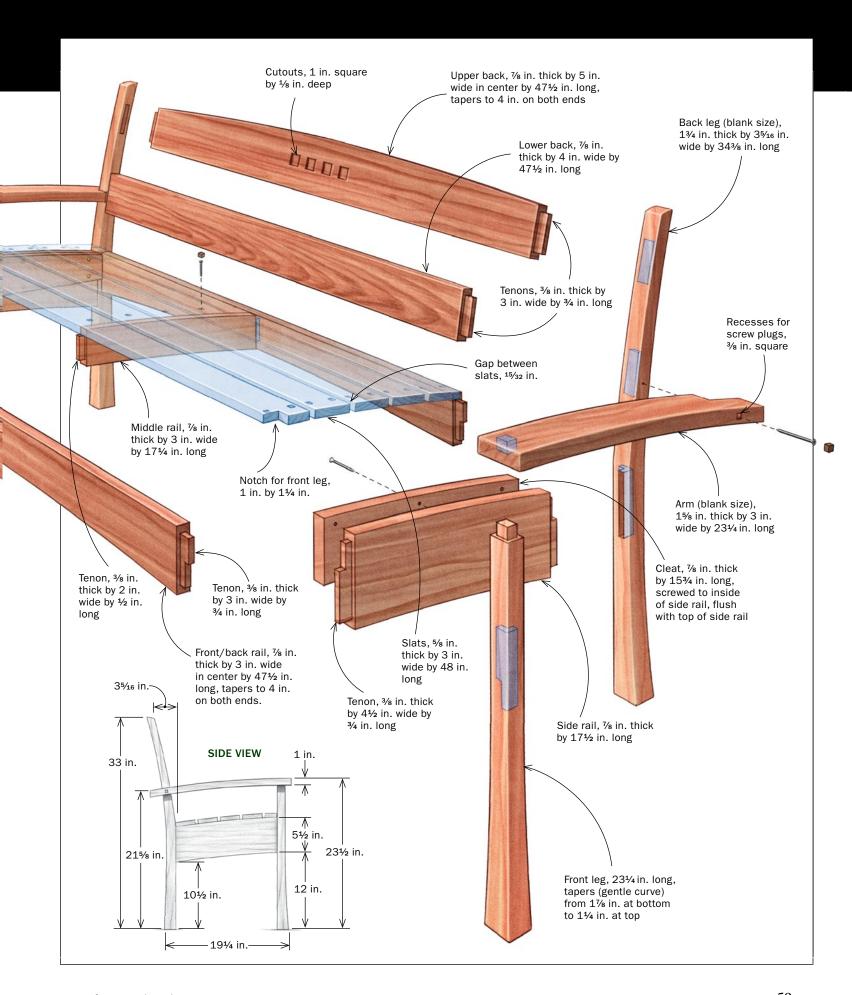
The back is sloped and curved, which adds comfort. Again, a full-size side view will help you work out the angles and curves. The arms are wide enough to serve as a drink rest, but not so wide that expansion and contraction becomes a worry. And water rolls off their downward curve.

Finally, like Gilpin, I used mortise-and-tenon joints, held together by Titebond III, to bring all the parts together (except for the seat slats). It's very important that the joint fits well and that there are no gaps around the shoulders, where water might sneak in and eventually tear apart the joint. And, like my mentor, I chose not to apply a finish.



FRONT VIEW





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