

The family handyman®

ULTIMATE GUIDE TO

OUTDOOR LIVING

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YOU CAN BUILD
IN A WEEKEND**

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HOW TO MAKE YOURS
LOOK NEW AGAIN**

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Reference: 1. Nutrient data for 11-oz frozen mocha drink with whipped cream. FoodDataCentral. USDA website. <https://fdc.nal.usda.gov>. Accessed November 24, 2021.

* Milk Chocolate with Caffeine and Café Mocha flavors have 100mg of caffeine, as much as an 8-oz cup of coffee.

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A VIEW FROM THE PATIO

PULL UP A CHAIR, SIT BACK, RELAX, AND VIEW THE BACKYARD FROM OUR EYES.

When I was growing up, the front porch was the place to be. It was somewhere to sit and chat with neighbors, read a book or just watch the world pass by.

As I grew up and got my own apartments in Chicago, I still clamored for that front-row seat to the neighborhood and would regularly hunker down on a concrete step or stoop. This, of course, was not as comfortable as a porch swing, but it was just as eye-opening.

These days, living in a 1920s home outside of the city, I've shifted my focus to the backyard. Quiet. Serene. Nothing but me and the birds and trees. It's refreshing. Meditative, even.

Of course, the backyard opens up plenty of opportunities to create livable spaces. It's where you can create unexpected extensions of your home, and let activity flow freely from

inside to outside. I'm not talking about sunrooms. I mean real outdoor spaces.

At my home, this means a covered patio and a garden. For you, it could be a deck, terrace, porch, fire pit circle ... when it comes to using the sky as your ceiling, the sky truly is the limit. And that's exactly what this issue is all about.

Be ready to be inspired by outdoor living ideas—and even get your hands dirty if you feel like undertaking a project. Our team has created an original step-by-step plan for a porch swing. Want a project you can do in a weekend? Look no further than our how-to for building a table and chairs, perfect for a patio. And don't miss the chance to add a little ambience; we show you how to build planter boxes three ways.

Because having a solid foundation matters, you'll also learn



the ins and outs of maintaining and building a deck. Find out how to restore, repair and replace a deck, so no matter what state your wood is in (or what state your mind is in for doing some heavy lifting), you'll get some token advice.

Is gathering around a fire pit more your style? We have fire pit tricks and tips, instructions on how to build your own, and an homage to the Solo Stove.

One thing is certain: The time is ripe to get outside. And we're here for you, for every sunrise and sunset along the way. **fh**

KELLY AIGLTON

DEPUTY EDITOR



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BUILD A DREAM PORCH SWING

Get the step-by-step,
plus fresh inspiration.



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DECK REPAIR MADE EASY

Shabby surfaces? Bad boards? Turn an old deck into a like-new oasis.

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Build them for your patio, window and railing.

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Clever solutions from our readers will help get your home in shape for spring.

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BEST PRO TIPS

Yes, "petscaping" is a real thing. A pro landscape designer reveals how to make your garden dog-friendly and enjoyable for everyone.

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HOME CARE

Are you ready to take on Operation: Organization? We have ideas to get your bathroom, kitchen and laundry room all tidied up.

Where does the armpit end and the body begin?



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TOP 5 PROJECTS YOU CAN DO IN A MORNING

There's nothing quite like the satisfaction of knocking out a project in a weekend. And if you can get the job done on a breezy Saturday morning? All the better.

That's the idea behind *Saturday Morning Projects*, a popular show streaming on the At Home with Family Handyman channel. Nina Bricko, a studio project editor for this magazine, contributes to the show, guiding you through quick, simple solutions that solve problems around your home—and, even better, increase its value. As a busy mom of two, Bricko has seen it all in her own home, whether it's cracked kitchen counters, peeling paint or bath toys that need a good organization. She shares her expertise and also takes you on the personal journeys of DIY enthusiasts just like you, who endeavor to improve their homes in a short time.

Got a single morning and DIY spirit? Try one of Bricko's favorite ideas from the kitchen episode:

1. Use paint to create a marbled look on your counters.
2. Create your own drawer with dividers from veneer plywood.
3. Build a sliding shelf under your sink and use it to hold trash and recycling bags.
4. Make an innovative spice rack with elastic bands that keep the spices in place.
5. Use a peel-and-stick backsplash for a fresh look and feel.

Bricko offers some advice for those up to the challenge of taking a small but impactful project into their hands: "DIYers make mistakes—even the most skilled woodworkers," she says. "Whatever you do, don't give up. Just keep going and trying. Each build, no matter how small, brings out new skills in you. And most of what we do can be redone. So you might as well dive in and have some fun."

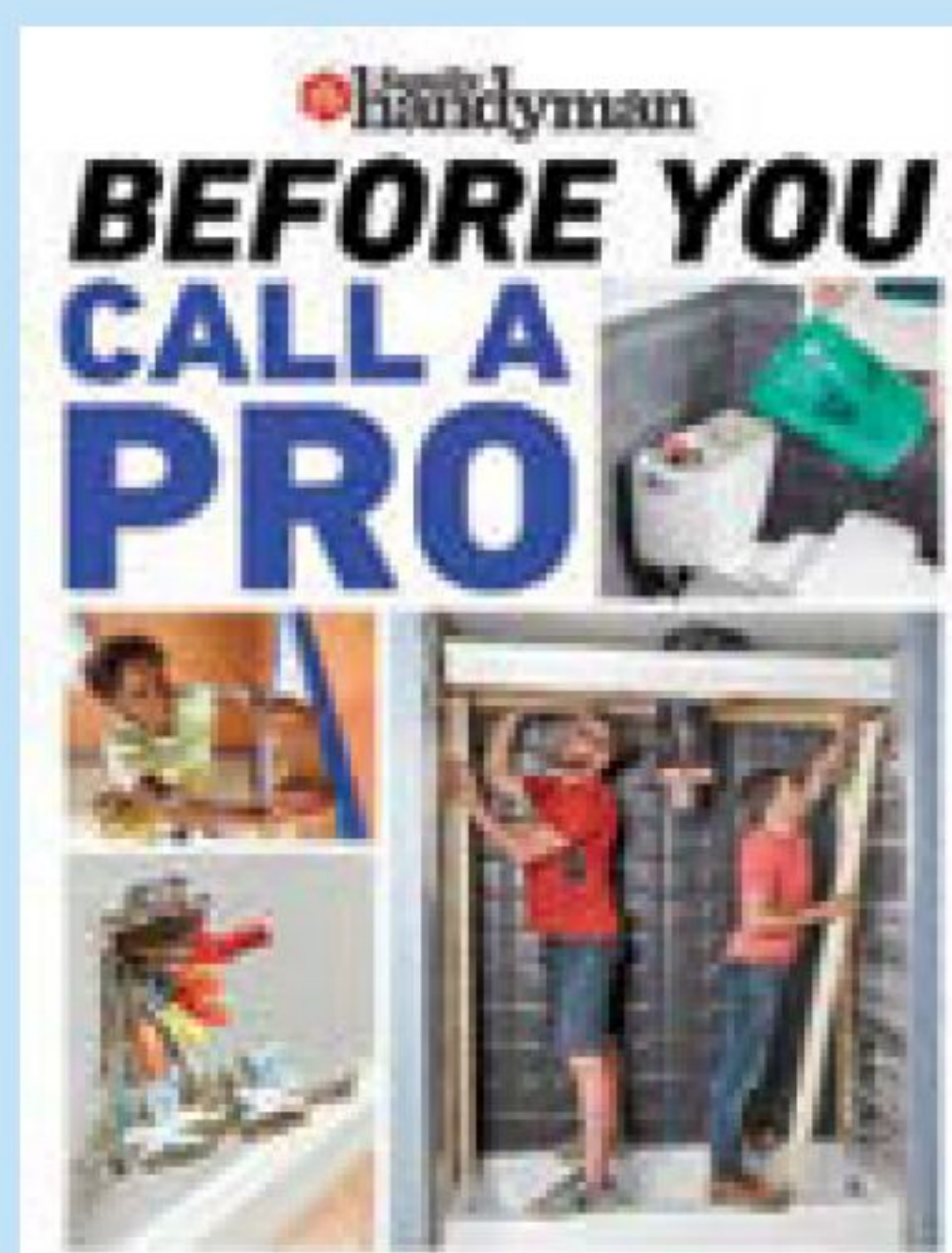
Stream *Saturday Morning Projects* on the At Home with Family Handyman channel on LG Channels, Samsung TV Plus and others.



Nina Bricko shares her Ikea hack on *Saturday Morning Projects*.

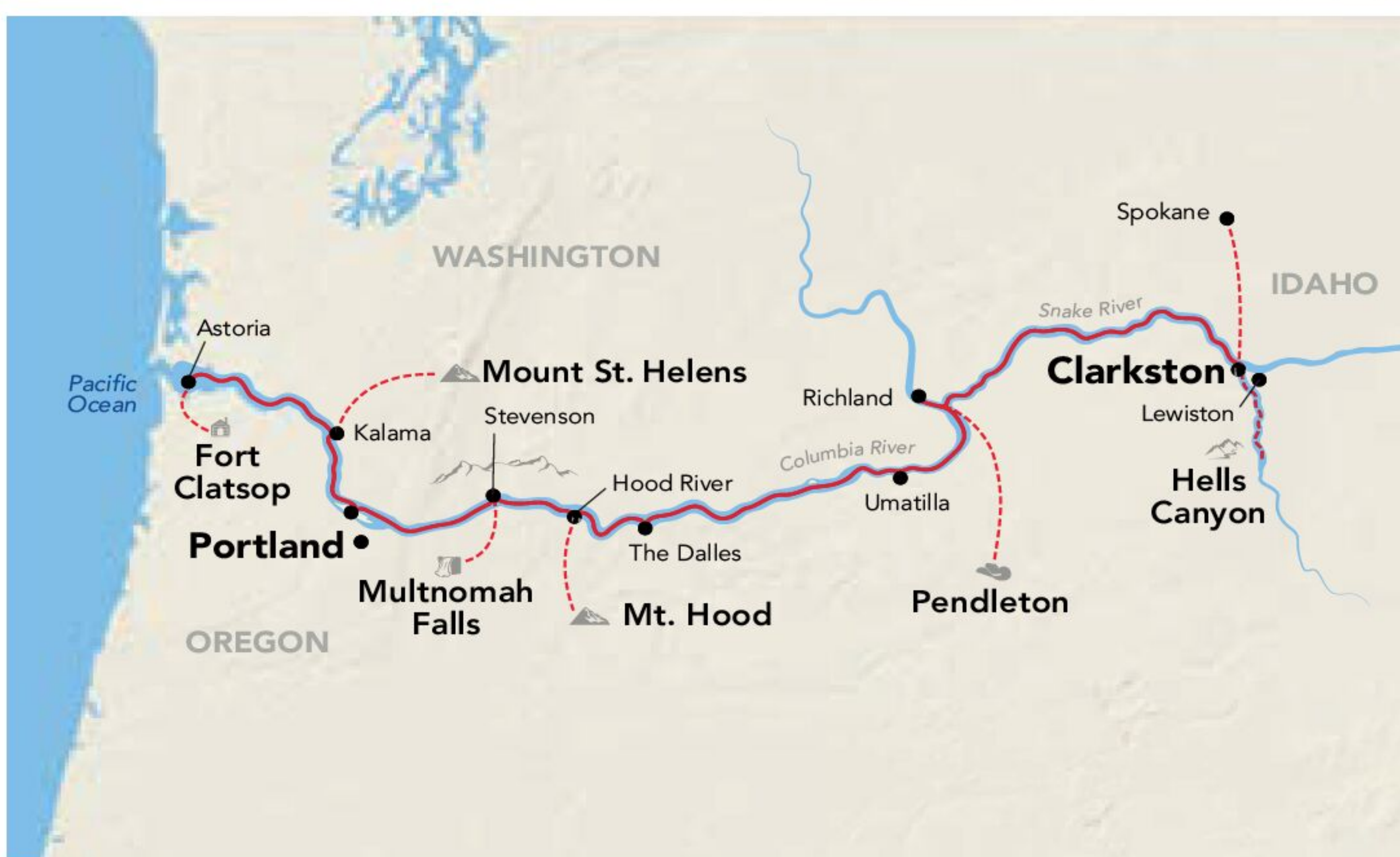
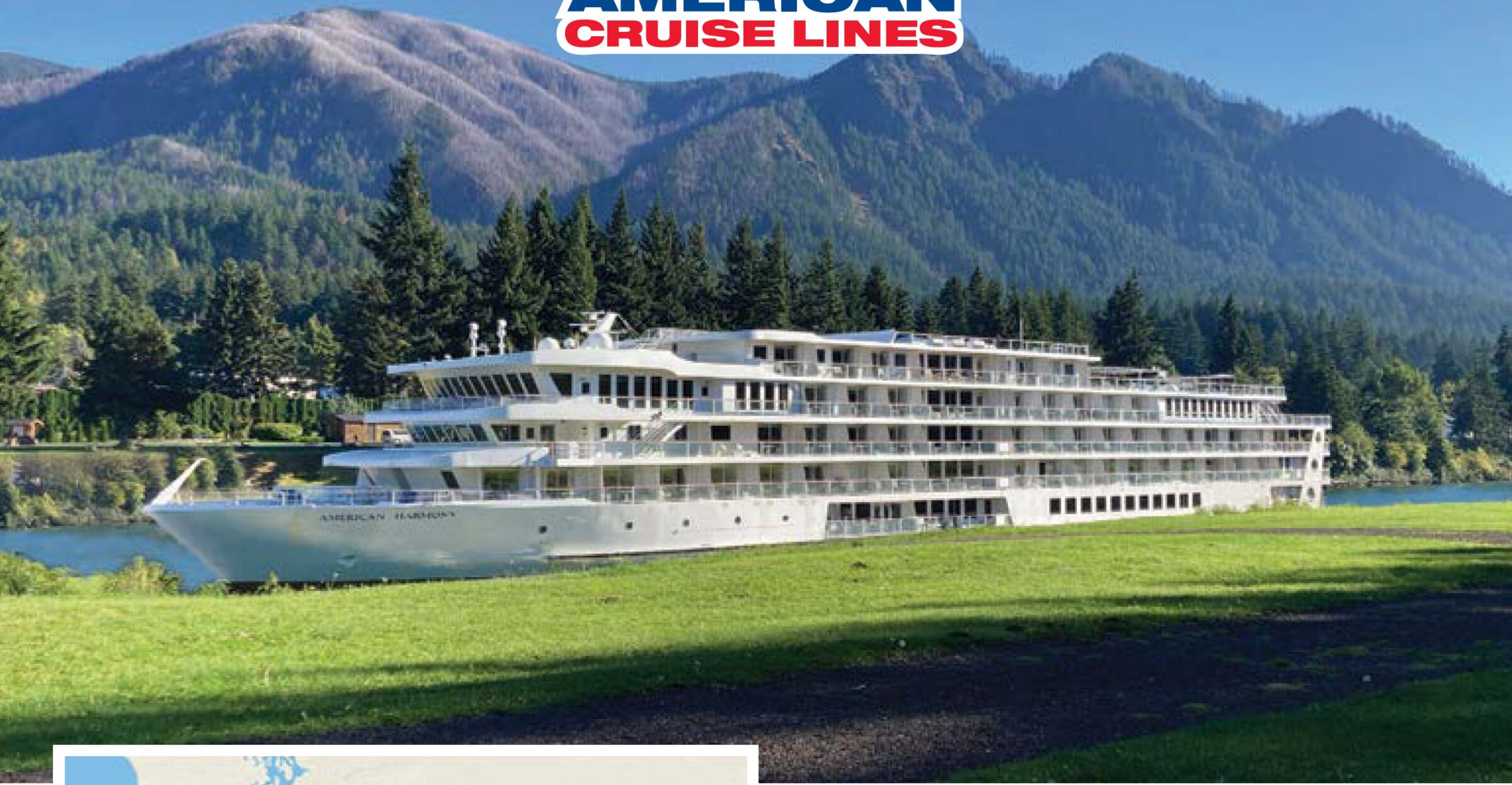
BEFORE YOU CALL A PRO ...

With a little know-how, you wouldn't need to hire a pro for many household jobs. Get money-saving ideas and up your skills with the help of our new book *Before You Call a Pro*. You'll benefit from 875-plus expert tips tailored for every skill level and space of your home. You'll be ready to tackle common repairs—from quick, clever hacks to major renovation pointers—yourself. Get the book now for \$10. Shipping is free. Order at familyhandyman.com/C2403.



SHOW AND ... WE'LL TELL!

Are you proud of a recent shop project, home renovation or other DIY feat? Submit your photos and a brief description to us at familyhandyman.com/submissions for a chance to be featured in our all-new Show & Tell department. We'll highlight DIY projects from builders and makers across the country and delve into the stories behind before-and-afters that make you say "wow!"



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HIKE WITH A FOLDING CHAIR



The Helinox Chair One is an ultra lightweight seating option perfect for tailgating, camping or even packing with you on a hike. Coming in at 2.1 lbs. and sitting just 10 in. off the ground, it breaks down effortlessly, fitting into a compact pouch. Setup is also quick, thanks to a single internal bungee cord that self-assembles the poles. Once the frame is set, simply slip the ripstop polyester seat cover over the frame and take a seat.

Remarkably sturdy despite its size, the chair can hold up to 320 lbs., and I haven't had any issues with the aluminum frame bending or warping. However, as a taller woman, I do wish the back came up a little higher. If you are taller than average or simply prefer more support, the Helinox Chair Two, which features high-back support and weighs just 2.7 pounds, may be a better option.

The Chair One retails for \$110 on Amazon. It comes in six colors, and several accessories make the chair even more comfortable—including a personal shade that offers sun protection and a ground sheet that prevents sinking on soft or uneven ground.

MARY HENN, ASSOCIATE SHOPPING EDITOR 

CREATE A NO-FLY ZONE FOR MOSQUITOES

Before I embarked on a family camping trip in Colorado, an outdoorsy friend clued me in to Thermacell products, which use a heat-activated repellent to establish a 15-to-20-ft. mosquito-free zone. The butane cartridge that powers the MR450—the model I tested—lasts about 12 hours, and each repellent pad provides about four hours of protection.

The push-button ignition, while simple enough, took some fiddling: A faint sound was the only indication that the device was on. Fifteen minutes later, our campsite was buzz-free! The protective zone effectively covered our picnic table, stove, coolers and washing station, though when I left the campsite to use the restroom, mosquitoes quickly found me.

A spatial repellent like the Thermacell is great for when you're outside and mostly stationary (e.g., fishing or cutting wood) or if covering yourself in a spray-on repellent with DEET isn't an option, like at a backyard dinner party. Keep multiple options on hand for maximum protection. The Thermacell MR450 is available on Amazon for about \$33.

RYAN VAN BIBBER, EXECUTIVE EDITOR 



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GET HOOKED ON STAY-PUT MAGNETS

If you need a quick and versatile storage solution, look no further than Gator Magnetics. We tested out several of Gator Magnetics' storage hooks and found them to be incredibly convenient for hanging tools, decorations, materials and more. The hooks can hold a surprising amount of weight (Gator's Mega models hold up to 45 lbs.), and you can easily attach the hooks wherever they would come in handy—on a toolbox, metal shed, work truck, or even the side of your washing machine. The hooks require no drilling or installing of permanent fixtures, so they can easily be moved around to rearrange a space. These little powerhouses are both functional and stylish, providing a clutter-free alternative to traditional storage methods. Check them out at gatomagnetics.com.

SAMUEL ROSENMYER, PROJECTS EDITOR/BUILDER 



TOTE AROUND A HEAVY-DUTY WORKBENCH

They say time is money, and the Keter Folding Work Table has saved me time in spades. The portable workstation—which comes fully assembled—can be unfolded, locked in place and ready to use in less than 30 seconds. You can use it as a miter saw stand, to secure boards for cutting or painting, or for whatever projects are on your to-do list.

The table's standout features are the guide rails integrated into the worktop and the set of two 12-in. ratcheting clamps that can be mounted vertically or horizontally to secure a workpiece. A lower shelf offers storage for tools or other supplies, such as a power strip. The heavy-duty plastic resin construction can handle up to 1,000 lbs., yet the table is still light enough to load onto a truck. And when the job is over, it folds into a 4½-in.-thick briefcase shape with an ergonomic handle—a big convenience for transport and storage. I highly recommend the Keter Folding Work Table as a portable clamping table and as a work stand for power tools. Find it online on Amazon or Wayfair for \$110. 

CATHY HARMS, PRO WOODWORKER 



PULL UP STUBBORN SHRUBS

Like every homeowner, I have unwanted trees and shrubs that have taken root in my yard. With Brush Grubber's Handy Grubber, I can handle the problem before the invaders get out of control. The hand-held tool extracts small trees, woody weeds and shrubs with stems up to 1 in. in diameter. It's made from heavy-duty steel, with powerful spring-loaded gripping teeth that grab the offending stem. To operate the Handy Grubber, first open the jaws by pulling back the lever, then place the grips on the tree's trunk, close to the ground. Lastly, pull on the large D-ring-shaped handle. It's that simple.

I easily pulled ¼-to-½-in. shrubs, and I'm confident that stronger users will be able to pull larger brush. But depending on the soil conditions and maturity of the plant, this tool may not work for extracting every pesky thing in your yard. (Note: Extracting trees and roots is much easier if the ground is sufficiently moist.) That said, when the Handy Grubber works, it works very well. I would never be able to pull by hand what this tool does in two seconds. When the next generation of seedlings appears, I'll be ready. The Handy Grubber is available at Walmart and on Amazon for under \$70.

SHERI KAZ, ASSOCIATE SHOPPING EDITOR 

TOP LEFT: VIA GATOR MAGNETICS; BOTTOM LEFT: VIA BRUSH GRUBBER; RIGHT: VIA KETER

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HANDY HINTS



CLEVER SOLUTIONS FROM OUR READERS

MAKE YOUR DRILL PRESS SHINE WITH A SELFIE LIGHT

Lining up the drill bit to any marked item to be drilled in partial shade sometimes requires a flashlight to eliminate the shadows. I bought a “selfie” light with a flexible arm that fit right around the drill press chuck so I could position it to fully illuminate the drill bit and work area. You can attach the light multiple ways, but I used zip ties to hold it snugged right around the drill press chuck. The light ring now travels up and down with the drill chuck effortlessly.

COLIN STEELE



BACK-BREAKING WORK REQUIRES SOME HELP

Everyone feels aging pain, but CBD can help

By: Beth Giles

Life really does fly by. Before I knew it, my 60s had arrived, and with them came some new gifts from dear ol' Mother Nature—frequent knee pain, stress, low energy and sleeplessness. Now, I'm a realist about these things, I knew I wasn't going to be young and springy forever. But still, with "golden years" nearly on my doorstep, I couldn't help but feel a little cheated. That is until I found my own secret weapon. Another gift from Mother Nature.

It began a few months back when I was complaining about my aches and pains to my marathon-running granddaughter, Jen. She casually mentioned how she uses CBD rub to help with her joint pain. She said that CBD gave her more focus and clarity throughout the day and that her lingering muscle and joint discomfort no longer bothered her. She even felt comfortable signing up for back-to-back marathons two weekends in a row this year. That made even this self-proclaimed skeptic take notice.

But I still had some concerns. According to one study in the Journal of the American Medical Association, 70% of CBD products didn't contain the amount of CBD stated on their labels. And, as a consumer, that's terrifying!

If I was going to try CBD, I needed to trust the source through and through. My two-fold research process naturally led me to Zebra CBD.

First, I started calling my family and friends. Call me old fashioned but I wanted to know if there were people whom I trusted

(more than anonymous testimonials) who've had success using CBD besides my granddaughter.

Secondly, I wanted cold hard facts. Diving deep into the world of CBD research and clinical studies, I came across Emily Gray M.D., a physician at the University of California at San Diego (UCSD) Medical School and medical advisor to Zebra CBD who is researching the effects of CBD. Dr. Gray wrote "early results with CBD have been promising and we have a lot of research underway now. I've had several patients using CBD with good success. It's important that you know your source of CBD and how to use it properly."

After hearing it from the doctor's mouth, I returned to my research, asking more people and was amazed by the number of close friends and family who were already on the CBD train. Apparently, I was the only one without a clue! And funny enough, a couple of friends who commented were using the same brand as my granddaughter—Zebra CBD. There was no consensus as to why they were using CBD, but the top reasons given were for muscle & joint discomfort, mood support, sleep support, stress and headaches, as well as supporting overall health & wellness.

Eventually, even the most skeptical of the bunch can be won over. With a trusted CBD source in mind, I decided to give it a go.

When I viewed Zebra CBD's selection online, I was impressed by its array of products, including CBD oils called

tinctures, topicals, chewable tablets, mints and gummies. After reading on their website that all their products are made with organically-grown hemp, I ordered... and it arrived within 2 days!

The first product I tried was the Rub. Now this stuff was strong. Immediately after rubbing it on my knee, the soothing effects kicked in. It had that familiar menthol cooling effect, which I personally find very relieving. And the best part is, after two weeks of using it, my knee pain no longer affected my daily mobility.

The Zebra Sleep Gummies, on the other hand, had a different but equally positive effect on my body. To take it, the instructions suggest chewing thoroughly. This was simple enough, and the taste was, well, lemony. After about 15 minutes, a sense of calm came over my body. It's hard to describe exactly; it's definitely not a "high" feeling. It's more like an overall sense of relaxation—and then I fell fast asleep. Needless to say, I slept great and woke up refreshed. I haven't slept like that in a long time.

While it hasn't been a catch-all fix to every one of my health issues, it has eased the level and frequency of my aches. And it sure doesn't seem like a coincidence how rejuvenated I feel.

All-in-all, CBD is one of those things that you have to try for yourself. Although I was skeptical at first, I can safely say that I'm now a Zebra CBD fan and that I highly recommend their products.

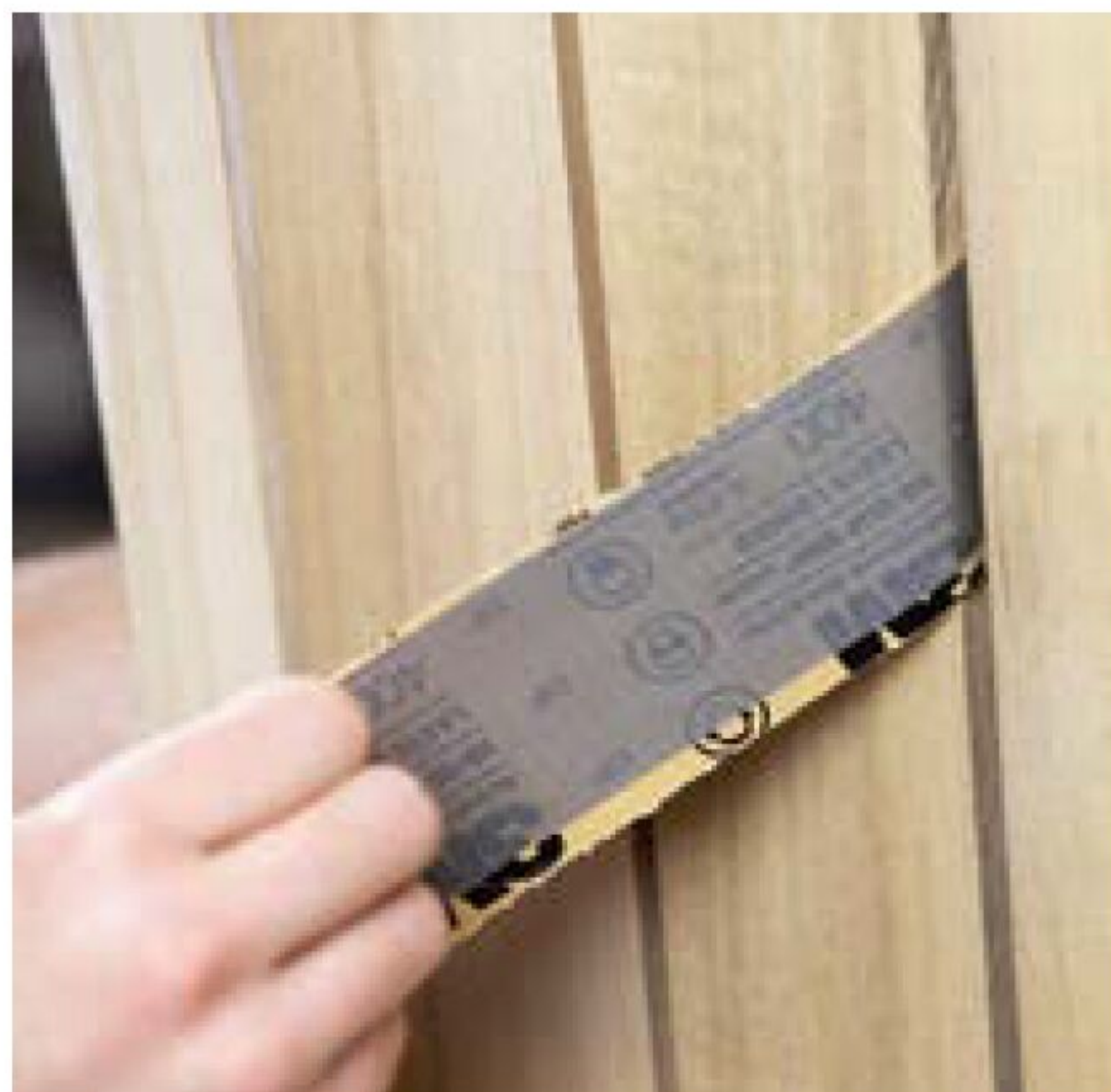
Also, I managed to speak with a Zebra CBD spokesperson willing to provide an exclusive. If you order this month, you'll receive \$10 off your first order by using promo code "FH10" at checkout. Plus, the company offers a 100% No-Hassle, Money-Back Guarantee. You can try it yourself and order Zebra CBD at ZebraCBD.com/FH or at 1-888-762-2699.



DIY PADDED VISE

Holding odd-shaped parts in a bench vise is tricky. When I need to sand or file an odd-shaped part, I sandwich it between two pieces of rigid foam in the vise. This solidly holds the part without marring it.

ANNE OF ALL TRADES



MAKE DURABLE SANDPAPER FOR TIGHT SPACES

I do a lot of finish-sanding free-hand, without a sandpaper block, so I can smooth edges and get into nooks and crannies. But the finer grits are usually bonded to thin paper. For me, the paper is too thin and tears long before the grit wears out. So I apply duct tape to the back of the sandpaper. The sandpaper is still flexible enough to sand a tight radius and it's far more durable. You can use this super-strong sandpaper like a shoeshine rag.

CHUCK MERCHANT



UNCLOG A SHOWERHEAD WITH VINEGAR

Over time showerheads can become clogged and not spray at full power because of mineral deposit buildup. An easy way to unclog your showerhead is to fill a resealable plastic bag with white vinegar and submerge the showerhead in the vinegar-filled bag. Secure the bag to the showerhead with a rubber band. Allow it to soak for a couple of hours, then remove the bag. Rinse off the showerhead with water and wipe with a clean cloth.

SAM TURNER



HOW TO ADJUST TIGHTLY SPACED PAVERS

If you have pavers or bricks close together, you know how hard it can be to lift one of them without disturbing the entire herd. I came across this tool when I was fine-tuning a patio with tightly spaced pavers, and it really came in handy to adjust some flagstones following frost heaves. The tool is advertised online for radiator hose removal. But the narrow shank and 90-degree bend at the end makes it ideal for hooking underneath a paver or stone without disturbing or displacing adjacent pieces. 

PATRICK EICHER

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THE DECK DOCTOR IS IN

////////////////////
**3 WAYS TO SPRUCE UP YOUR SPACE
BEFORE SUMMER ARRIVES**

BY FAMILY HANDYMAN EDITORS



REPLACE A BAD BOARD

Even if your deck has seen better days, a complete rebuild probably isn't necessary. Replacing problem boards is faster and cheaper. Whether you have one problem spot to replace or many, the process is the same.

1 CUT PROBLEM DECK BOARD FREE

Using a jigsaw, cut the bad section of board free from the joists at both ends. Mark and cut alongside the joist using a Speed square as a guide.

When determining where to cut out the board, keep these guidelines in mind:

- Splices should be offset by at least one joist space.
- New boards should be supported by three joists or cleats.
- If possible, stagger splices over four or more rows of boards.
- Mark the replacement boards before cutting—weaving the splices can be a puzzle.

2 PULL NAILS, REMOVE BOARD AND FASTEN CLEATS

Remove any nails still holding down the board by driving a cat's paw into the wood under each nail head and pulling back on the handle. If the nail head pulls off, grab the nail shank with locking pliers.

Remove the bad board as well as any deck fasteners stuck in the joists. Then install cleats to support the ends of the new board. Fasten 12-in.-long cleats to the joists after pulling them up against the bottom of the adjacent deck boards.

3 INSTALL FLASHING

Before installing the new board, place a piece of flashing tin on top of the cleat. If possible, lift the abutting board slightly and slide the flashing underneath it as well. The flashing keeps water from standing



on the cleat-joist seam, preventing future joist rot.

4 INSTALL NEW BOARD

Using the same material as the rest of the deck, cut a length to fit the opening. Leave a $\frac{1}{16}$ -in. gap between the boards to allow the ends to dry when they get wet. Position the board, drill pilot holes and fasten the board to the joists. Use the same spacing and fasteners as you used on the rest of the deck.

WHAT IT TAKES

TIME	SKILL LEVEL	COST
1-2 hours	Beginner	Varies

TOOLS

Cat's paw, circular saw or miter saw, cordless drill/driver, extension cord, hammer, hearing protection, jigsaw, locking pliers, nail set, pry bar, safety glasses, sawhorses, Speed square, tape measure

MATERIALS

Deck boards, galvanized nails and screws, flashing tin

RESTORE A SHABBY SURFACE

Even if you stain or seal your wood deck, the boards can still crack and splinter, making the surface look old and worn. That's where deck paint restoration products come in, if you're up to doing some handiwork.

These coatings are thick enough to fill all cracks, knotholes and splinters in your deck. They provide a new textured surface that can last more than a decade without additional applications. And, as icing on the cake, you can do the prep work in one day, then apply the coating over a two-day period the following weekend.

1 MAKE SMALL REPAIRS

Break off any large splinters. Then reset any protruding nail heads, or remove them and secure the boards with deck screws instead. Be sure you have replaced any bad boards with new decking (follow the process outlined on pg. 15).

As you tighten any screws that have backed out, they may break off. If this happens, pull out and replace the old screws.

2 PREPARE THE DECK FOR PAINTING

Use an orbital sander with 80-grit sandpaper on any old paint or finish that's peeling or chipped. If you've applied a solid stain or clear sealer and then covered areas of the deck with planters or furniture, those sun-shielded areas must be sanded to rough up the surface.

3 CLEAN THE DECK

Dilute the manufacturer's recommended deck cleaner, apply it and let it soak in for the recommended time. Then scrub the entire deck with a stiff scrub brush and extension handle.

Pay attention to any greasy areas; get all the grease off. Then power-wash the deck to remove



ground-in dirt and loose stain. Aim the nozzle into the board gaps to clean them out as well. Be careful: Too strong of a stream can damage the wood's surface.

4 MASK OFF THE HOUSE

Before applying the restoration product, let the wood dry completely and mask off any surface you want to protect from the paint, such as siding or bushes.

WHAT IT TAKES

TIME	SKILL LEVEL	COST
Multiple days	Intermediate	Varies

TOOLS

6" stain brush, drill/driver, pressure washer, roller extension pole, roller screen, safety glasses, special application rollers, stiff scrub brush, orbital sander

MATERIALS

Deck restoration coating, manufacturer's recommended deck cleaner, masking tape, paint stir sticks, plastic sheeting, 80-grit sandpaper

5 START WITH THE RAILING

Stir the coating and begin coating the railings. Start with the balusters and the posts, then move to the rail. At this stage, also cut in the coating into the corners of the deck at the base of the posts and balusters.



6 ROLL ON THE DECK COATING

Use a roller screen made to hang onto the side of the 5-gallon bucket to limit unwanted drips as you roll the coating right from the bucket onto the deck boards. Then lift, reload and do the next section.

7 BRUSH THE COATED BOARDS AND FILL GAPS

Roll the entire length of the deck boards a few rows at a time. Once you've rolled a few rows of boards, switch to a 6-in. stain brush and glide it over each of the coated boards, all the way across in one stroke. A brush with a threaded handle can be attached to an extending paint pole so you can reach into the corners.

As you're rolling, take notice of areas the coating doesn't fill in completely. If you come across any knots, nail holes or cracks that aren't filling up, load up a brush and drip it in to fill the gaps.

8 ROLL ON A SECOND COAT

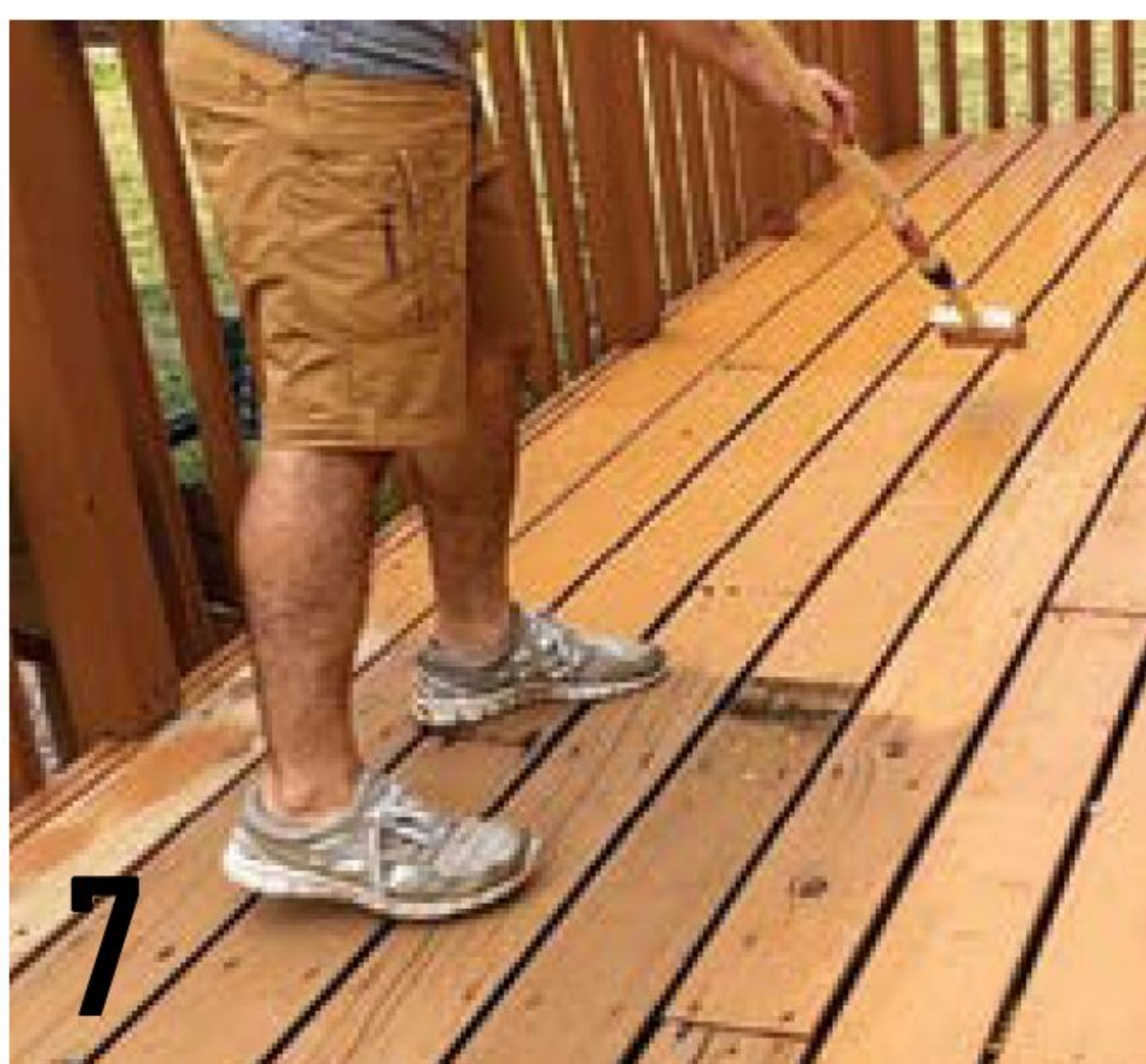
Clean up with soap and water and let the first coat dry for three to six hours, or until dry to the touch. Apply the second coat using the same method. Then let the deck dry for two full days before walking on it. For the longest-lasting result, clean the coating in the spring and fall using the manufacturer's recommended cleaner.

Note: You probably won't like the look of the first coat. Don't worry—the second coat is the “magic coat” that fills in all the gaps and provides the smooth texture you saw at the store.



PRO TIP

You'll have to reload the roller every few feet to get the proper coating thickness. Don't back-roll: Working the roller back and forth will thin the coating and load it with air bubbles.



DECK RESURFACERS 101

Deck paint restoration coatings, also known as deck resurfacers, are composed of a long-lasting tintable acrylic base material with UV inhibitors and added solids (aluminum oxide or sand). The solids provide texture and hold the product together, like aggregate in concrete.

Some brands allow the wood to breathe yet repel water, while others form an impermeable barrier. Some work on vertical surfaces as well as the decking surface. Coverage ranges from 20 to 75 sq. ft. per gallon.

All brands require rigorous surface preparation and application methods. The procedures vary by manufacturer—use our process as a starting point, and always read the product label!

Choose a color carefully, because deck restoration coatings absorb a lot of heat and retain it longer than plain wood. If you pick a dark color and your deck receives direct sunlight, it may be too hot to walk on with bare feet.

REPAIR A WOBBLY RAILING

A wobbly railing isn't just an annoying quirk of an aging deck—it's a safety concern worth addressing before warmer weather arrives. There are a few usual suspects when it comes to the wobble, and most can be fixed in a day.

1 TIGHTEN LOOSE BOLTS

From beneath the deck, tighten any loose bolts. If the post doesn't have any bolts, add them.

2 REPLACE STUCK CARRIAGE BOLTS WITH HEX HEADS

A carriage bolt that spins in place when you try to tighten it needs to be replaced. To do so, first spin two nuts on the end of the bolt, then tighten them together using two wrenches. Grab the stuck nut with one wrench and the nut nearest the end with the other. Then work the rusted nut loose. A shot of penetrating oil can help get it to move.

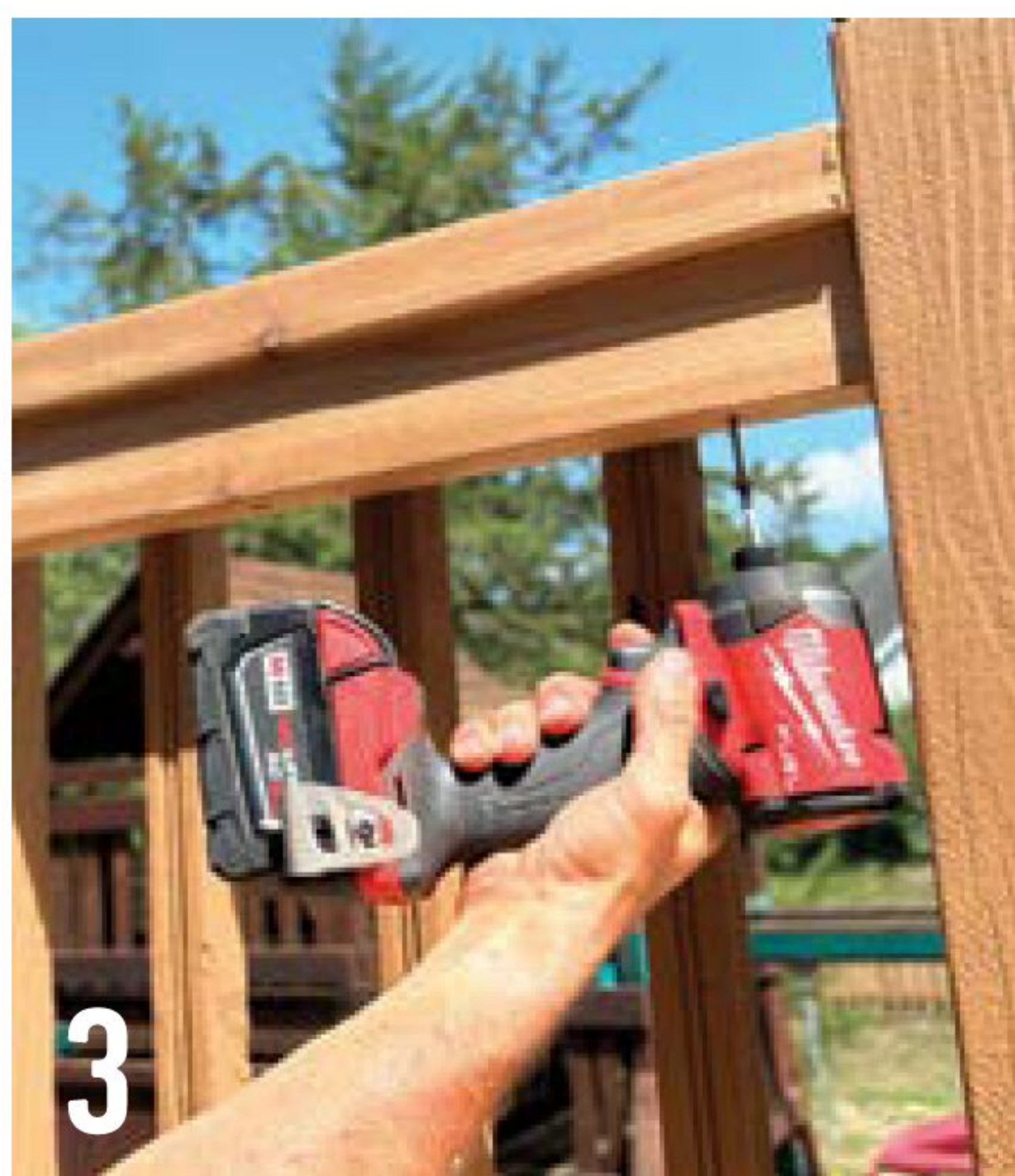
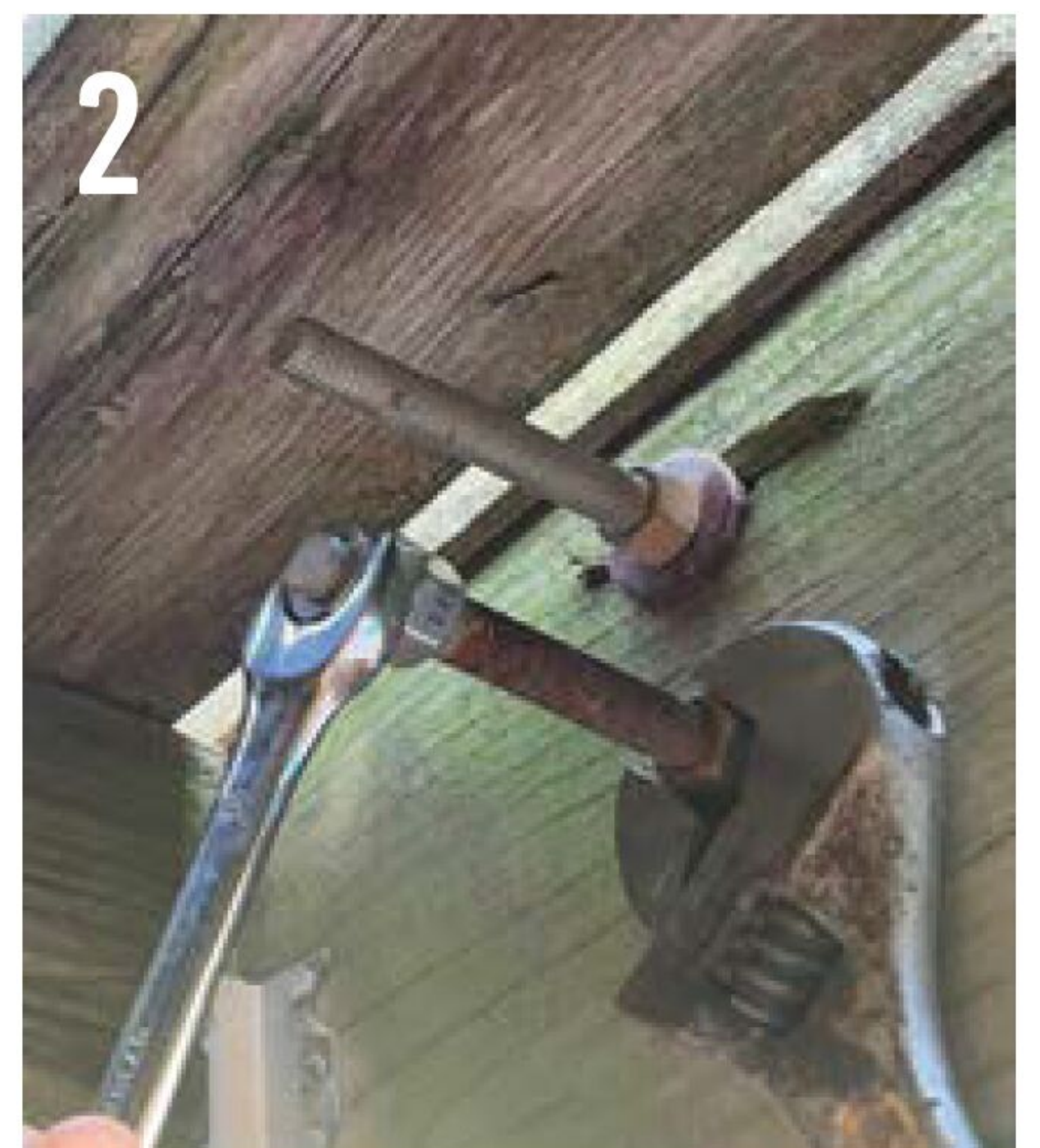
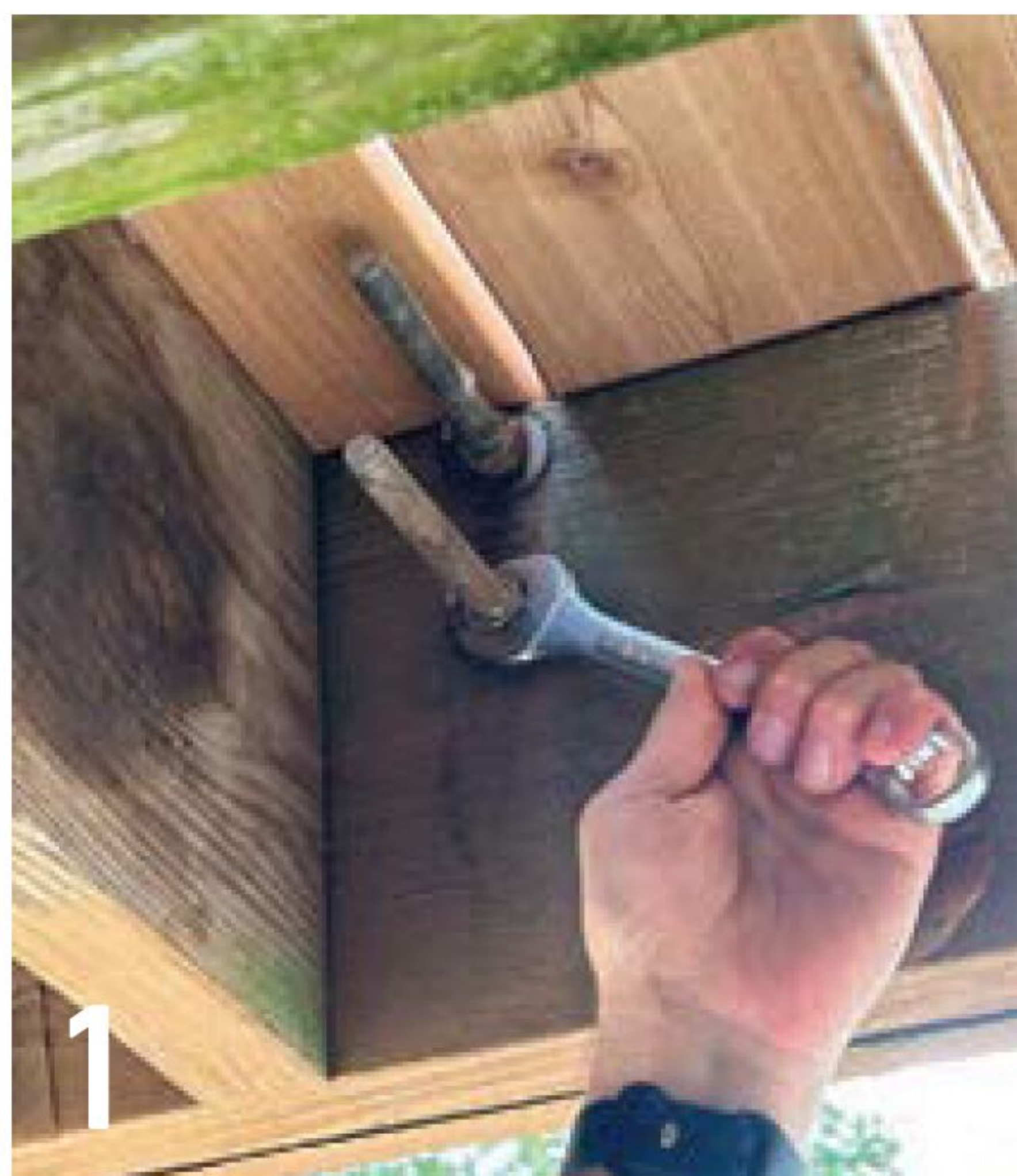
Remove the old carriage bolt and replace it with a hex-head bolt of the same diameter. Now you can turn the nut and hold the bolt still to tighten the post.

3 FIX RAILING GAPS

To fix any gaps in railings or even loose railing, start by disassembling it. Sometimes all it takes is tightening up a few screws. If the handrail is too soft to tighten, however, it will need to be replaced. Mark where the parts are lined up on the post, then remove them. Measure and cut new parts to fit and match the rest of the rail, then line up the apron with the marks on the post and toe-screw it into place. Fasten the top rail from below.

4 ADD BLOCKING

Cut pressure-treated 2-by blocking (the same width as the floor joists) to fit tightly between the rim joist and the next joist. Place the blocking



directly behind the post and toe-screw it into both the rim joist and neighboring joist. Fasten additional blocking every 4 ft. along the rim joist. **fh**

PRO TIP

Deck posts and railings screwed to a single rim joist feel wobbly because the rim joist flexes when you lean against the railing. Adding blocking stiffens the rim joist.

WHAT IT TAKES

TIME	SKILL LEVEL	COST
2-3 hours	Beginner	<\$100

TOOLS

Wrenches, circular saw, drill/driver, spade bit

MATERIALS

Pressure-treated 2-by (match the joist size); 3-in. deck screws; 2x4 (to match the railing); 1/2" carriage bolts, nuts, and washers; 1/2" hex-head bolts; spray penetrating oil



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WHAT IT TAKES

TIME

2 days

COST

\$400-\$500

SKILL LEVEL

Intermediate

TOOLS REQUIRED

4-in-1 screwdriver, adjustable wrench, block plane, caulk gun, circular saw, cordless drill, countersink drill bit, drill bit set, hacksaw, jigsaw, miter saw, table saw, orbital sander, half-round file, paintbrush, safety glasses, sanding block, square





SWING INTO SPRING

////////////////////////////////////
**THIS SWING'S SMOOTH, GENTLE GLIDE WILL
KEEP YOU DAYDREAMING FOR HOURS. BETTER
YET, YOU CAN BUILD IT IN A WEEKEND.**

BY FAMILY HANDYMAN EDITORS

Simple cuts and a no-hassle glue-and-screw assembly technique make this swing a great first-time woodworking project. We designed the swing with a unique suspension system made from 1/2-in. galvanized steel pipe slipped through the swing frame to act as a cradle and eliminate stress on wood joints. We then fastened eye bolts through the steel pipe and covered the pipe ends with soft rubber caps to prevent scrapes. Welded steel chain supports the swing assembly, securely fastened to solid framing in the porch roof.

A WORD ON WOOD

When selecting a wood for this project, stay away from cedar, redwood and soft pine. They'll mar easily and they won't hold screws as well as other, denser woods. Instead, go with fir, southern yellow pine, cypress, poplar, white oak or maple. Oak and maple are harder to cut, sand, drill and screw, so avoid them if you're a first-timer. We chose poplar because it's strong, readily available, easy to work with and takes paint well.



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OF THE
BUILD?
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CODE.**

OVERALL DIMENSIONS:
39" T X 51⁵/₈" W X 29¹/₂" D



MATERIALS LIST

ITEM	QTY.
½" galvanized pipe (no threads)	51"
½" galvanized pipe (no threads)	56"
1¼" galvanized deck screws	2-lb. box
1⅝" galvanized deck screws	2-lb. box
4" x ⅜" closed eye screws	2
⅜" welded steel chain (zinc-plated or galvanized)	20 ft.
1x4 x 8' boards (poplar)	3
Construction adhesive	4 oz.
1x6 x 8' boards (poplar)	7
2¼" quick-link eyes	8
2½" pan head screw	1
¼" eye bolts	4
2" #8 sheet metal screw	1
¾" rubber caps	4
4" x ¼" lag screws	12
100- and 150-grit sandpaper	



1 CUT SLATS

Using a table saw, make eight 1×3s by ripping four 1×6 boards to 2¹¹/₁₆ in. Cut the boards to length for the seat (N) and back slats (J).

Mark a diagonal taper onto a 1×3 (see Photo 1). Use a jigsaw to cut along the line, making the two outer slats (K). Use a block plane to smooth the cut edges.

2 RIP BACK BRACES

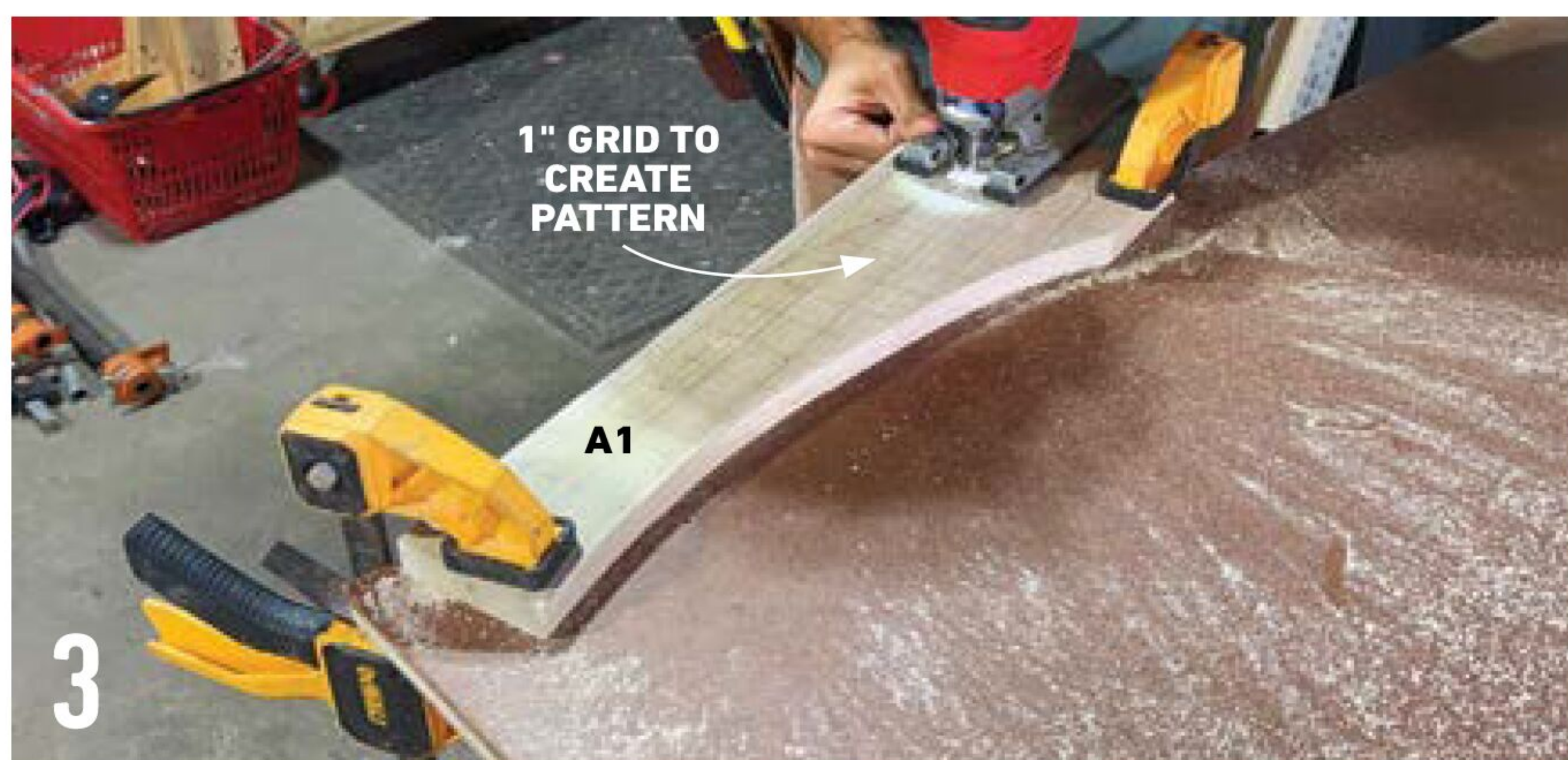
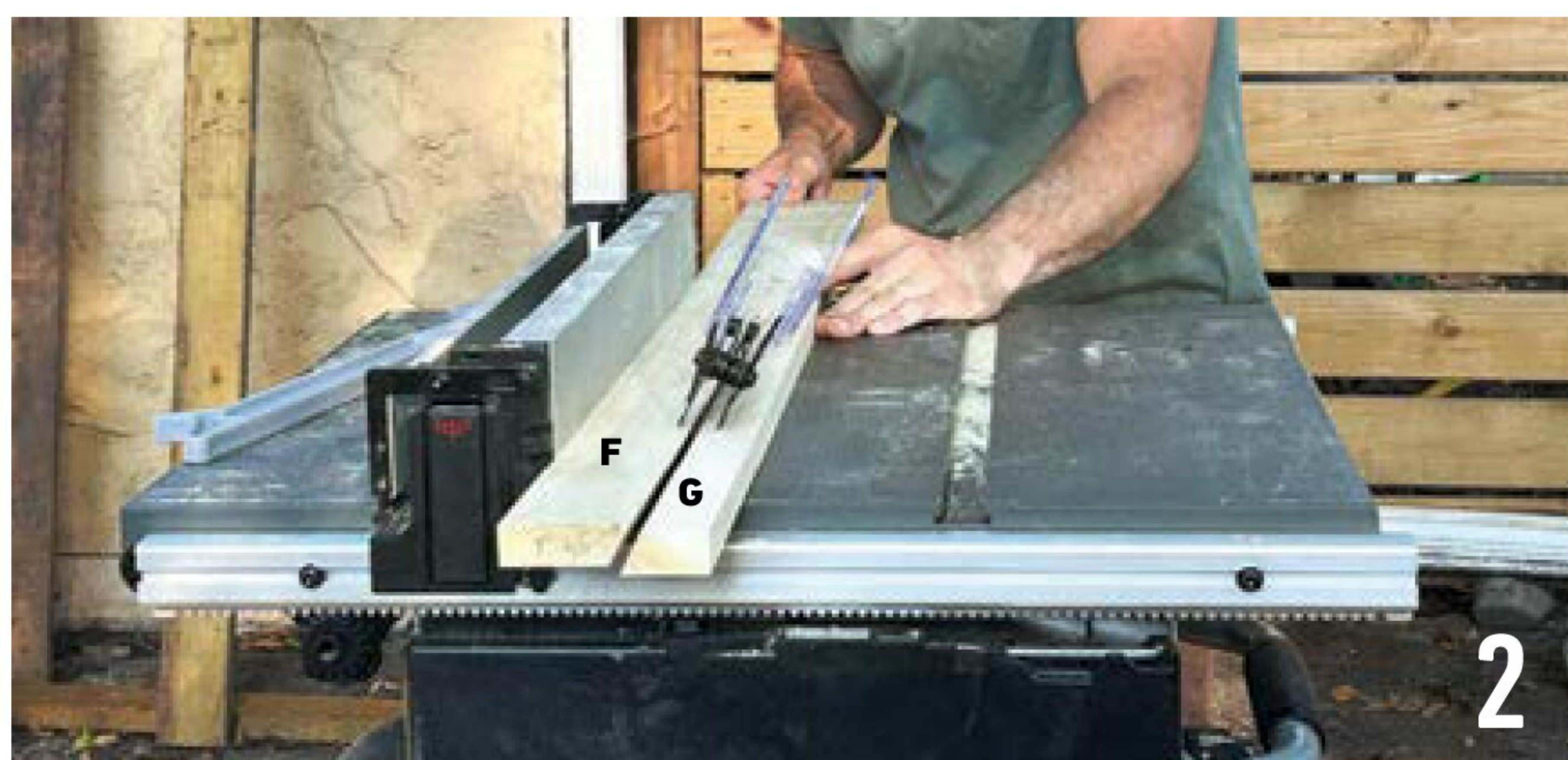
Set your saw at 27½ degrees and rip the pieces that make the center (F) and top back braces (G).

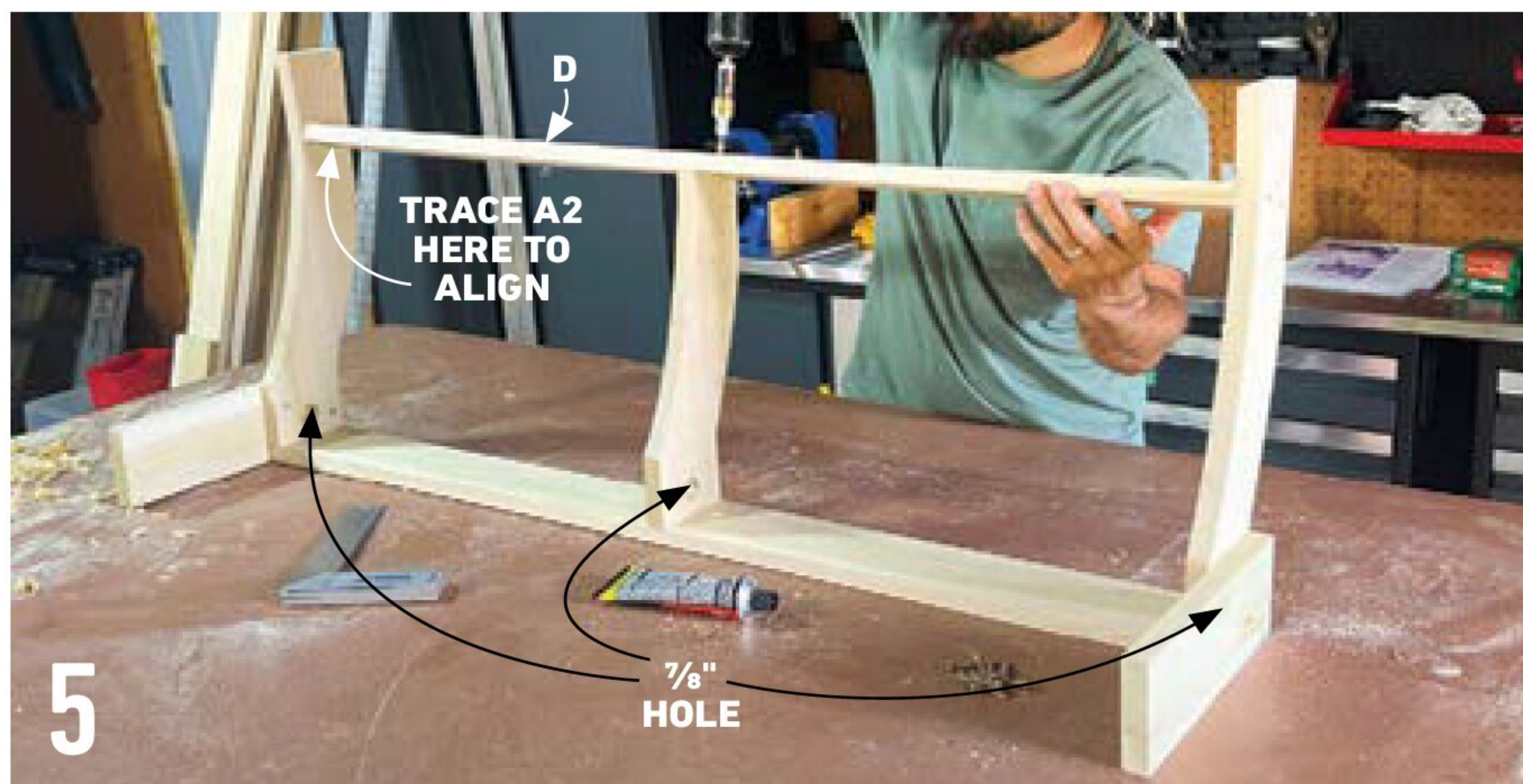
3 CUT CURVED PIECES

Draw a 1-in. grid directly on the wood for the side (A1) and center seat braces (A2) and arms (P) (see Figure A). Use the grid to copy the curves. Clamp the seat support parts to the workbench as you cut the curves with a jigsaw. Sand along the curves with 100-grit sandpaper. Use a sharp spade bit to drill 7/8-in.-dia. holes into parts A1 and A2 for the front pipe hanger.

4 ASSEMBLE FRONT ARM SUPPORTS

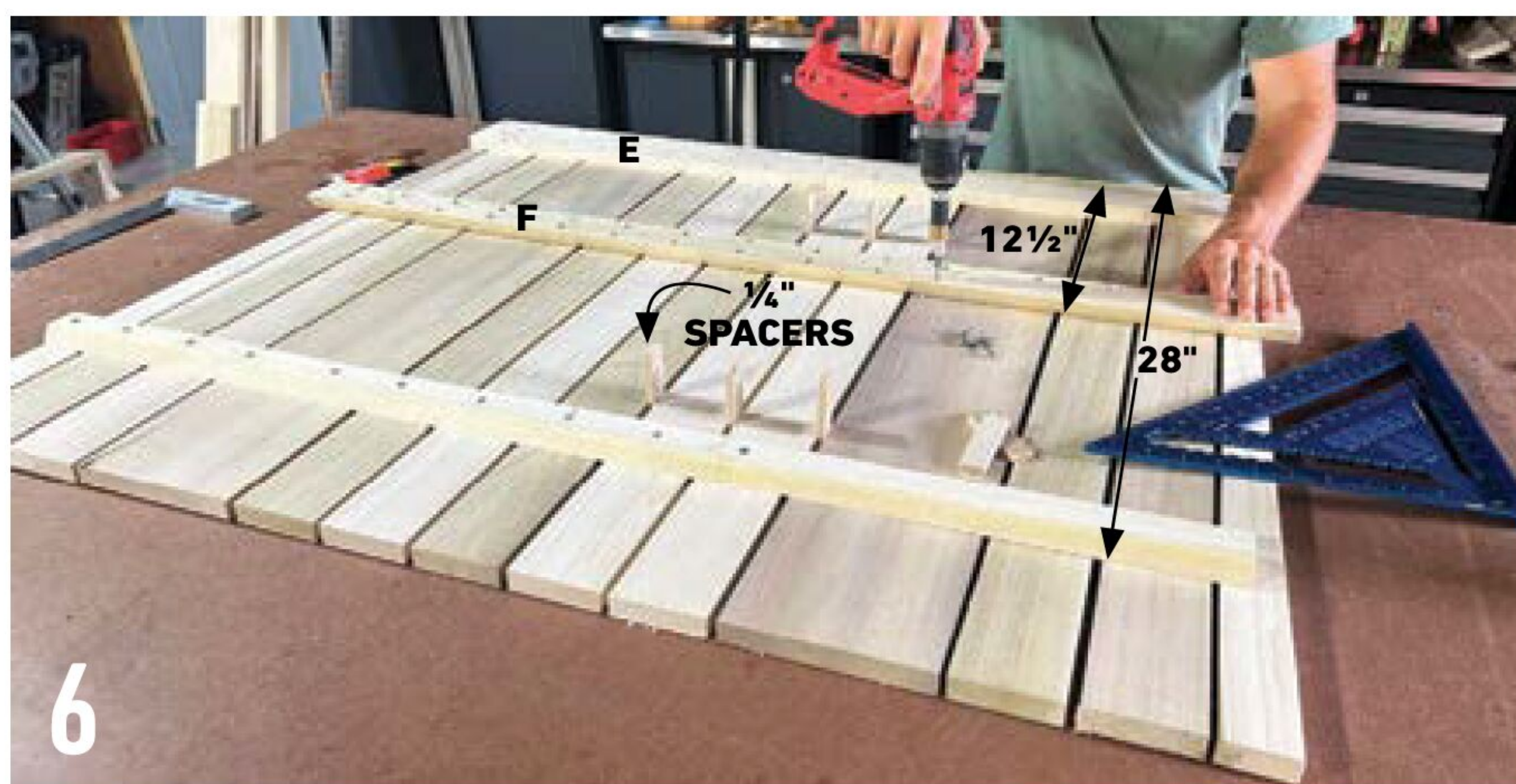
Notch the front arm braces (B) with a jigsaw to accept the front stringer (C). Drill pilot holes and countersink them. Apply a dab of construction adhesive at each joint. Fasten with 1½-in. deck screws.





5 ATTACH REAR STRINGER

Trace the angle of the center seat brace (A2) onto each side seat brace (A1) to get the proper positioning of the rear stringer (D) fastening points. Again, drill pilot holes and glue and screw the seat braces to the front stringer and the front arm braces. Next, glue and screw the rear stringer to the seat braces.



6 FASTEN THE BACK SLATS

Lay all the back slats face down on a flat surface and slip temporary 1/4-in. spacers between the slats. Fasten the bottom brace (E) to the middle slat, using a framing square to ensure they're joined at 90 degrees.



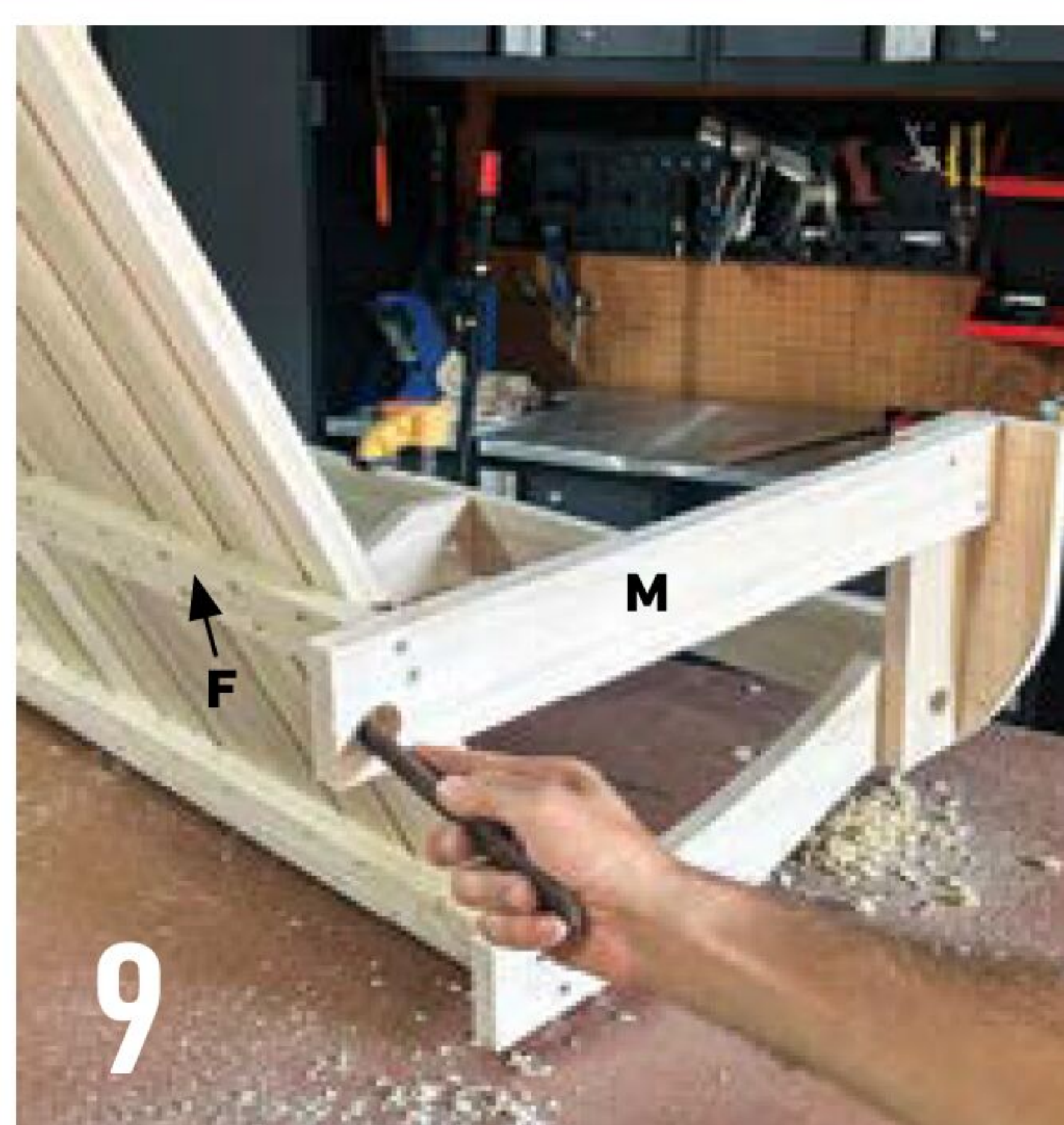
7 CUT THE TOP CURVES

Trace the top curves on the front side of the back assembly using a homemade beam compass. Nail one end of the compass 14 in. from the top and in the center of the 1x6 back slat. Insert your pencil into the 1/4-in. hole drilled in the other end of the compass. Cut along the mark with your jigsaw.



8 JOIN THE BACK AND SEAT ASSEMBLIES

Hang the lower part of the back assembly over the edge of your work surface to make room as you slide the seat assembly onto it. Align the rear stringer of the seat assembly with a mark drawn 2 1/2 in. from the bottom of the back assembly. Glue the joint, then clamp and screw the assemblies together.



9 FIT THE PIPES

Cut and drill the pipes (Q and R) and slide them into the holes. File the inside of the 7/8-in. hole in the arm support (M) with a coarse half-round file if the support pipe won't easily slide through. The rear support pipe should fit snugly under the center back brace (F) as it protrudes through each arm support.

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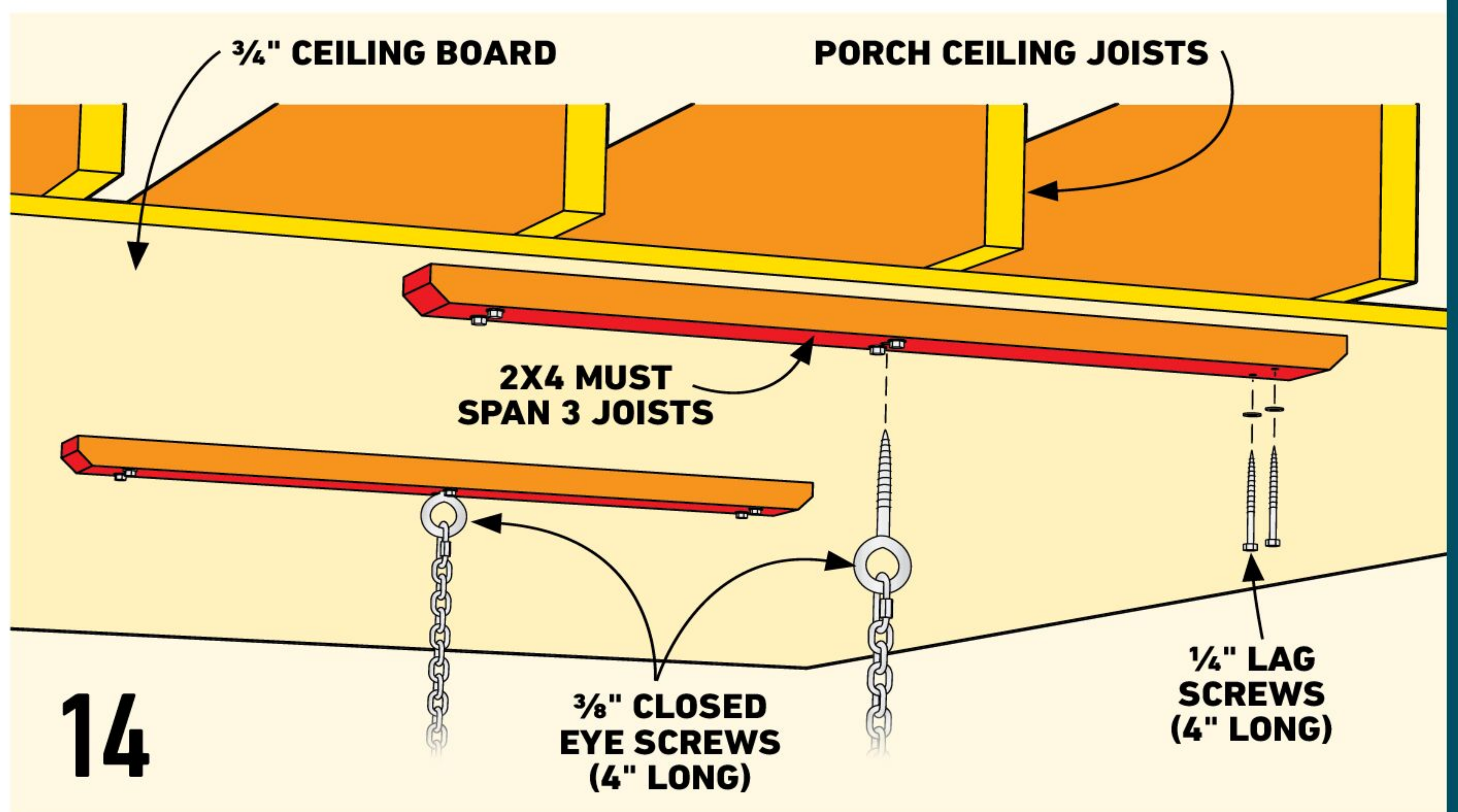
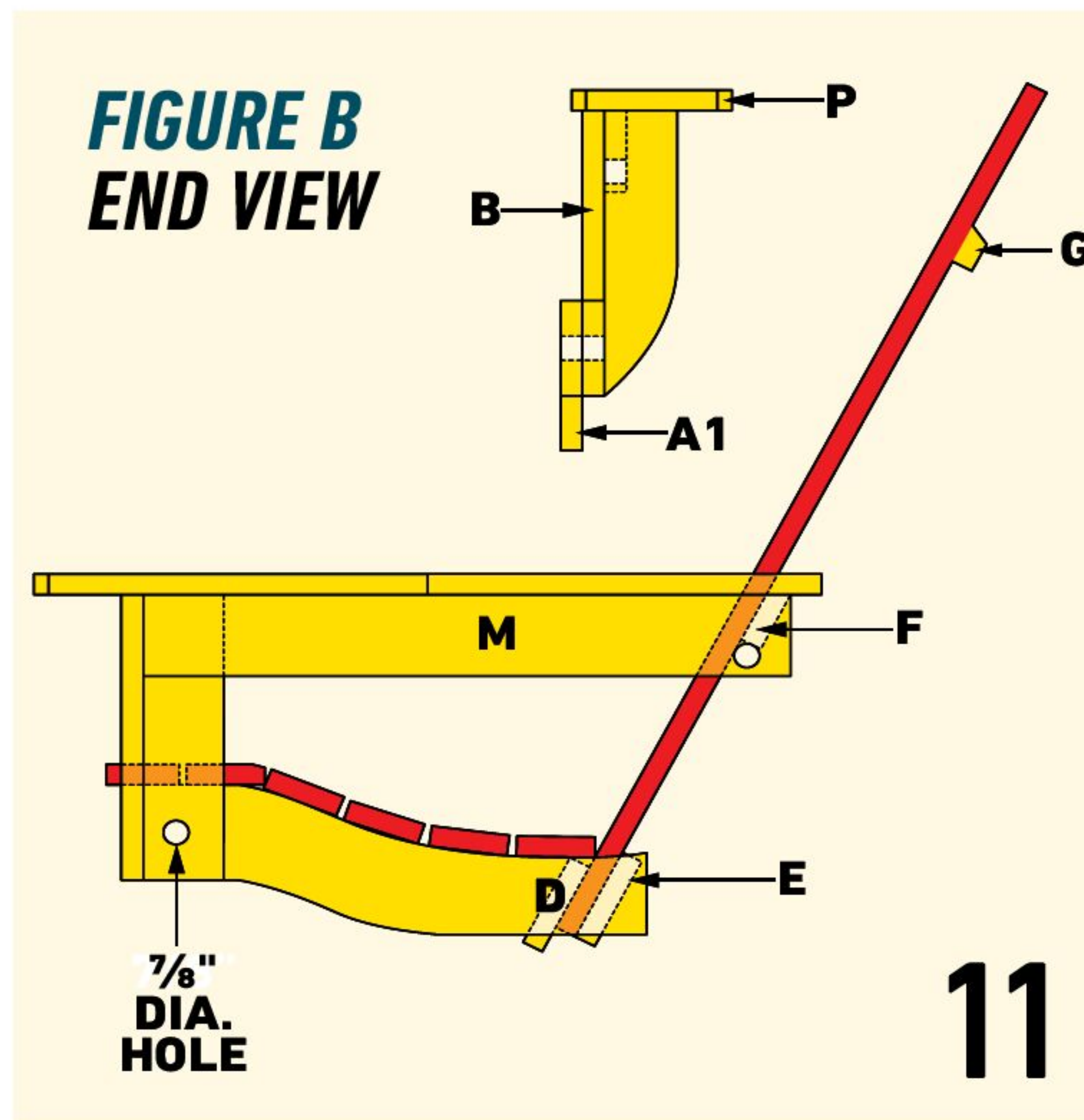
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10 ADD SCREWS FOR STOPS

Drill a $\frac{3}{16}$ -in. hole in the center of the rear support pipe, then screw a 2-in. #8 sheet metal screw (use a $\frac{1}{8}$ -in. pilot hole) up into the center back support. This connection will keep the pipe from sliding to one side while the swing is swinging.

With the pipes in place, drill a $\frac{9}{32}$ -in.-dia. hole 1 in. from the end of each pipe for the eye bolts. Angle them slightly toward the center of the swing to minimize the torque on the pipe and prevent the bolts from breaking.

Note: During the final assembly, squirt thread-locking compound on the eye bolt threads. Cut the eye bolts flush with the nuts and add rubber caps to the pipe ends for safety.

11 INSTALL SEAT SLATS

Attach the six seat slats (N) to the seat braces (A1 and A2) by predrilling and screwing them into place with $1\frac{5}{8}$ -in. deck screws. Use a countersink bit to ensure the heads are sunk below the seating surface. Attach the seat slat at the base of the seat tight against the back slats (H and J). Space the remaining slats so the gaps between them are even (around $\frac{1}{4}$ in.) and the front seat slat overhangs the front stringer (C) by $\frac{1}{2}$ in. Note: A few slats may touch due to the shape of the seat—see Figure B.

12 EVEN OUT HIGH SPOTS

Because the seat curves, the slat edges can ride high in some areas, making for an uncomfortable ride. Smooth any high spots in the seat slats

with an orbital sander. Then sand the entire swing with 150-grit sandpaper.

The swing is now ready for any exterior stain, paint or finish (we used a semitransparent exterior stain). Wipe off the dust and vacuum the swing, then use a brush or roller to apply.

13 HANG THE SWING

Hang the swing securely using special quick-link eyes to join the lengths of chain. The swing should tip back slightly at the arms, about 1 in. from back to front, when at rest.

14 INSTALL THE SWING

Screw a length of treated 2×4 into solid framing to support each chain. Be sure to use 4-in.-long lag screws and span at least three ceiling joists on your porch. 



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2 NO NEED TO DIG UP OLD GRASS

Plant Amazoy in an old lawn or bare ground. Set plugs into holes in the soil checkerboard style. Plugs spread to create a lush, thick lawn, driving out weeds. Easy instructions included with every order.

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No weeding means no costly chemicals. Amazoy Zoysia lawns naturally resist insects, so you'll save money, while helping to protect the environment. Never expose your family and pets to weed killers and pesticide poison.

4 FOR SLOPES, PLAY AREAS, BARE SPOTS AND PARTIAL SHADE

Can't beat Amazoy as the low-cost answer for hard-to-cover spots, play-worn areas, partial shade and erosion on slopes.

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"The hotter it gets, the better it grows!" Amazoy Zoysia thrives in blistering heat, yet it won't winter-kill to 30° below zero. It goes off its green color after hard frosts, and begins regaining its green color as temperatures in the spring are consistently warm.



6 CHOKES OUT CRABGRASS AND WEEDS ALL SUMMER

Your established Zoysia lawn grows so thick, it simply stops crabgrass and most summer weeds from germinating!

7 NOW 3 WAYS TO START YOUR AMAZOY ZOYSIA LAWN!

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Max Plugs	Free Plugs	Grass Sheets	Your PRICE	+Shipping	SAVINGS
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750	+150	6	\$ 72.50	\$32.50	29%
1100	+400	10	\$110.00	\$47.50	36%
2000	+1000	20	\$185.00	\$75.00	47%
3000	+1500	30	\$245.00	\$90.00	55%

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Super Plugs	Free Plugs	Tray	Your PRICE	+Shipping	SAVINGS
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25	+5	2	\$ 42.50	\$25.00	26%
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120	+30	10	\$150.00	\$60.00	54%
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SWAY YOUR WAY

WHETHER YOU BUILD IT OR BUY IT, A SWING CAN FIT YOUR PORCH—AND YOUR LIFESTYLE

BY CHRISTINE CAMPBELL

LOUNGE THE DAY AWAY

Keystone Amish Co. York Red Cedar Porch Swing Bed, \$1,540, theporchswingcompany.com

Increasingly popular across the South and in coastal areas, roomy daybed-style swings are often bedecked with a mattress-like cushion and pillows. Sturdy ropes enhance the coastal aesthetic, and in true southern summer style, the four-point installation offers

a relaxed sway more than a true swing.

Highlights: Comfortable, roomy, high weight capacity

Drawbacks: Expensive, large



WICKER WONDERLAND

International Caravan Diamonds 4-ft. Resin Wicker Porch Swing, \$575, theporchswingcompany.com

Lightweight, stylish wicker can be made with a variety of materials—the term “wicker” simply refers to the weaving method itself. For an outdoor swing, opt for a synthetic material that won’t weather in the sun or harbor moisture and mold. Pair with hanging planters, flower boxes, and colorful outdoor cushions for a boho-botanical feel.

Highlights: Lightweight, attractive

Drawbacks: Bulky profile, tricky to repair/clean

NO PORCH? NO PROBLEM

Arlmont & Co. Kemora Porch Swing with Canopy, \$340, wayfair.com

Standalone swings can be placed anywhere from a stone patio to the backyard. There are just as many styles as there are for your porch, and some models come loaded with accessories such as cup holders, reclining seats and awnings to keep you shielded from the elements.

Highlights: Easy to install, versatile, room for custom features

Drawbacks: Exposed to weather, no “built-in” look, large footprint 



TOP RIGHT AND BOTTOM LEFT: VIA THE PORCHSWING COMPANY; BOTTOM RIGHT: VIA WAYFAIR FOR ARLMONT & CO.

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DINING ON DECK

EATING OUTSIDE? COUNT US IN. HERE'S HOW TO MAKE A SIMPLE TABLE AND CHAIRS WORTHY OF FAMILY MEALS AND ENTERTAINING.

BY FAMILY HANDYMAN EDITORS

WHAT IT TAKES

TIME

1 day

COST

\$60-\$90
each

SKILL LEVEL

Beginner

TOOLS REQUIRED

Basic hand tools, clamps, drill/driver, level, socket wrench, jigsaw or handsaw, miter saw, table saw or circular saw



WHAT IT TAKES

TIME

1 day

COST

\$500

SKILL LEVEL

Beginner

TOOLS REQUIRED

Basic hand tools, drill/driver, drill bit set, miter saw/circular saw, 1½-in. Forstner bit, pocket hole jig, socket wrench

W

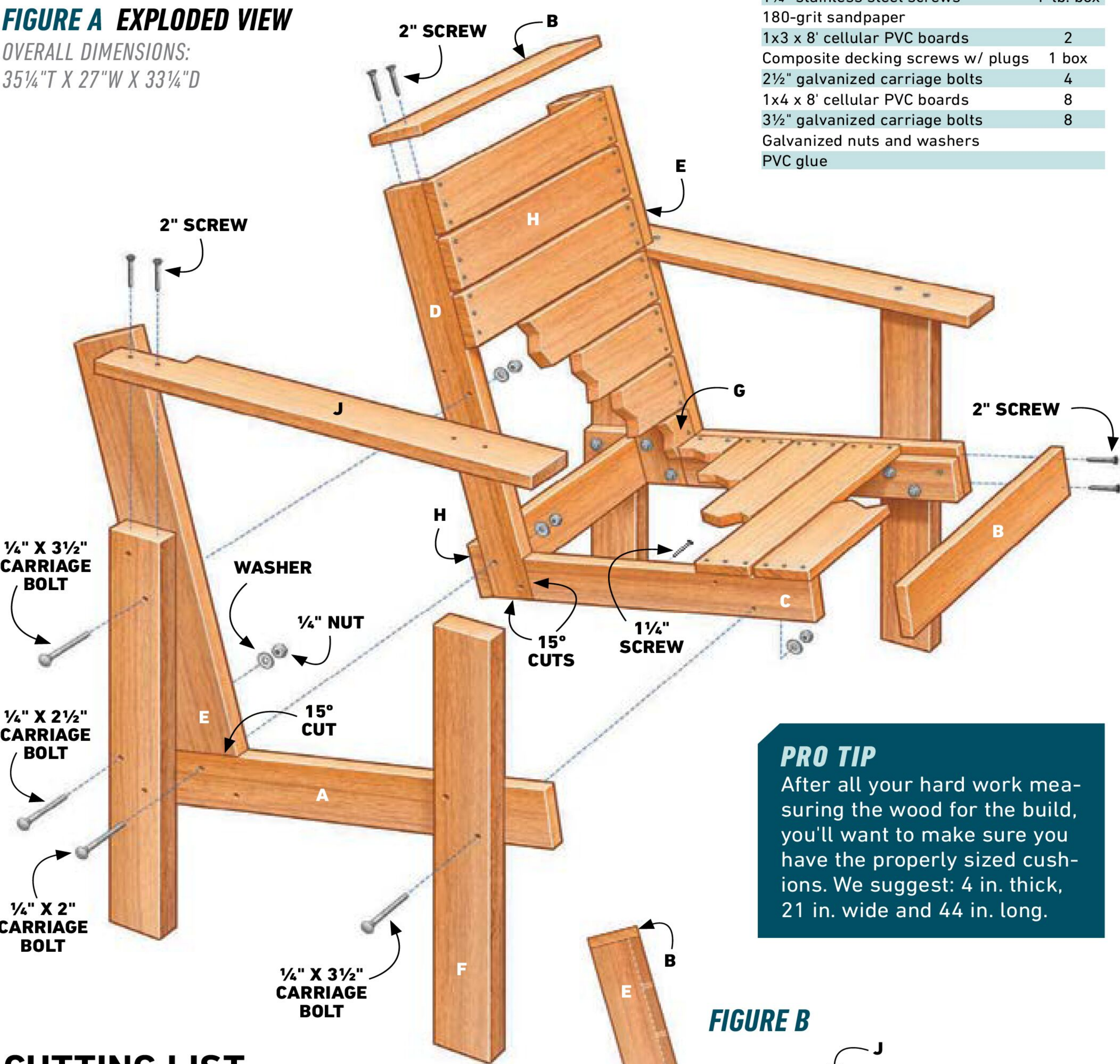
hether it's breakfast as the sun rises or dessert under a blanket of stars, there's nothing like dining on your patio. Don't have a table to hold the potluck dishes, or chairs to place around the fire pit? Skip the store, save money and satisfy your appetite for a quick and easy DIY with these simple step-by-step projects.

Having woodworking skills certainly helps, but these builds are easy enough for even a beginning builder to hammer out in one weekend.

THE CHAIRS

FIGURE A EXPLODED VIEW

OVERALL DIMENSIONS:
35¼" T X 27" W X 33¼" D



PRO TIP
After all your hard work measuring the wood for the build, you'll want to make sure you have the properly sized cushions. We suggest: 4 in. thick, 21 in. wide and 44 in. long.

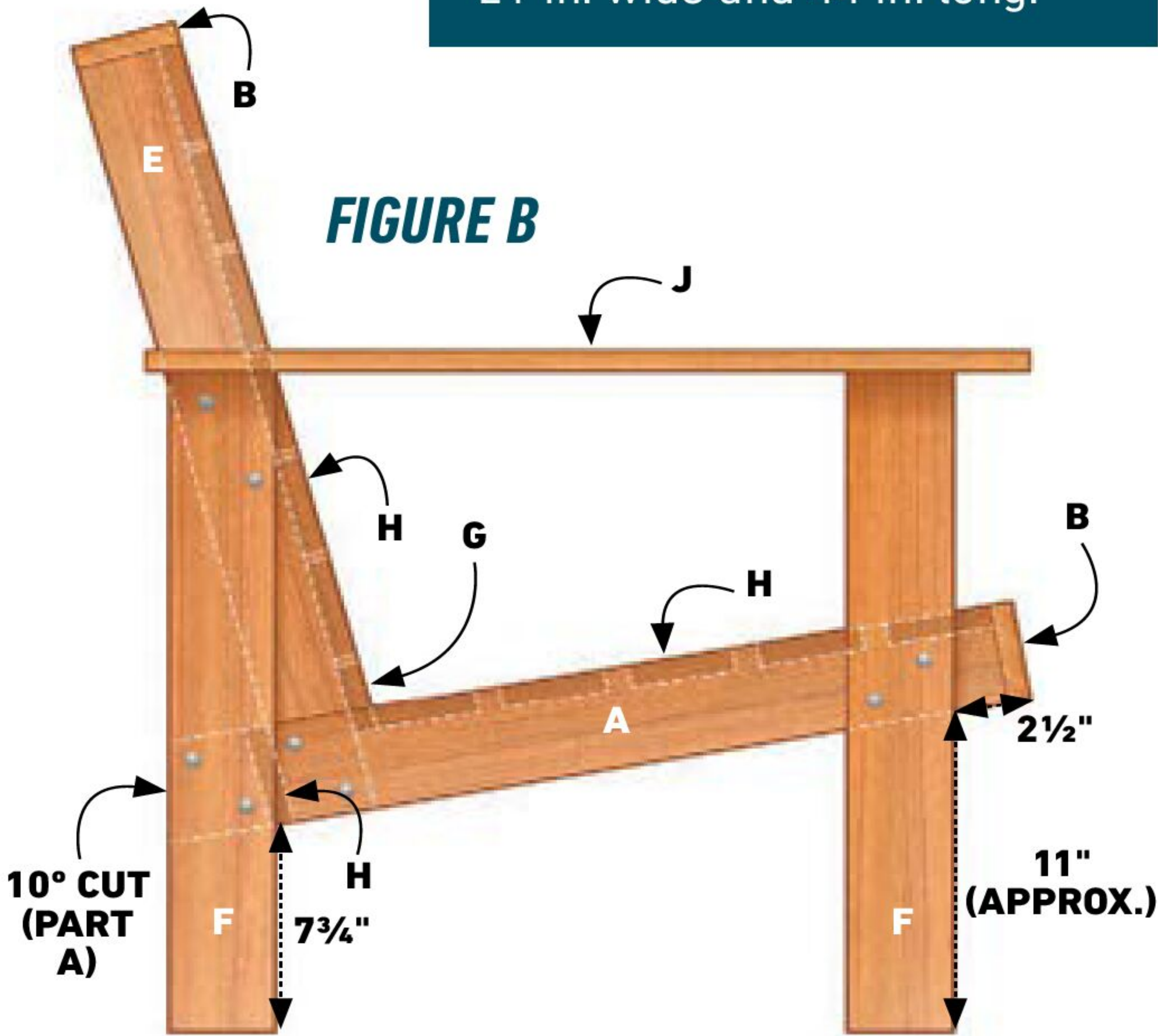
CUTTING LIST

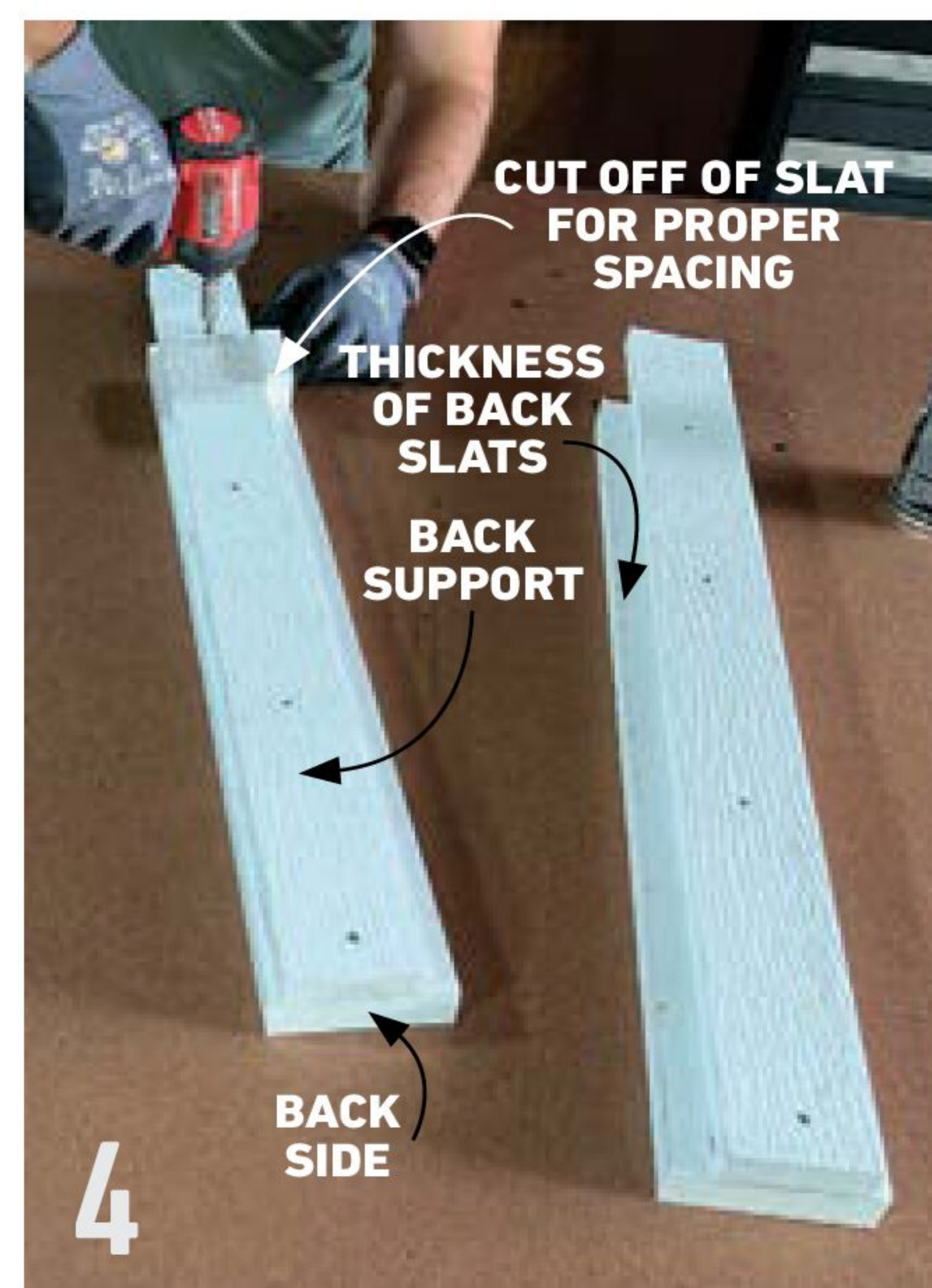
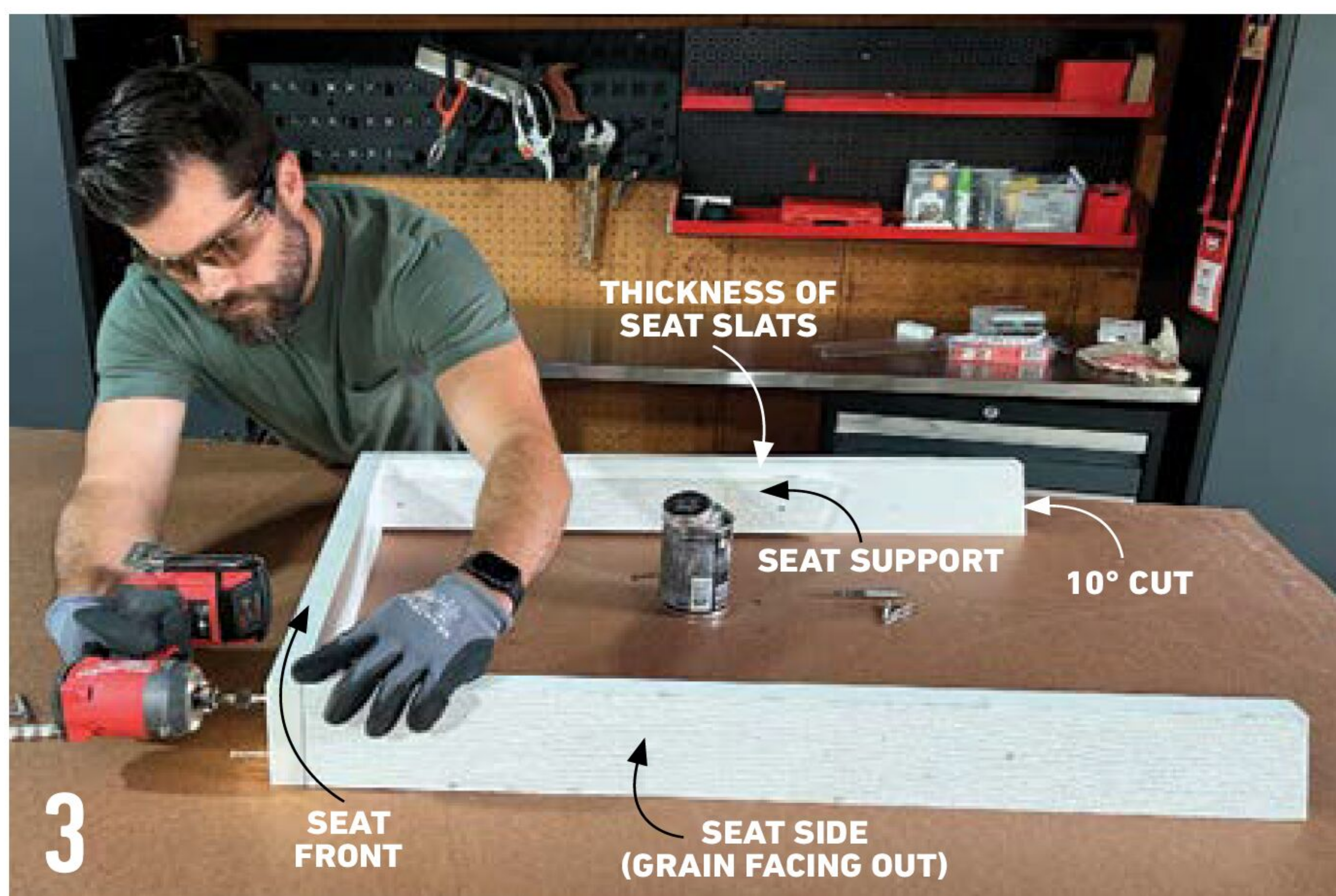
(FOR ONE CHAIR)

KEY	QTY.	MATERIAL	LENGTH	NAME
A	2	1x4	28¼"	Seat sides (10-degree cut one end)*
B	2	1x4	21½"	Seat front, back top
C	2	1x3	19½"	Seat supports (15-degree cut one end)*
D	2	1x3	27½"	Back supports (15-degree cut one end)*
E	2	1x4	24½"	Back sides (15-degree cut one end)*
F	8	1x4	23½"	Legs
G	1	1x3	19¾"	Bottom back slat (cut to fit)
H	12	1x4	19¾"	Slats, back brace (cut to fit)
J	2	1x4	29¼"	Arms

*Measure to long point on all angled parts

FIGURE B





1 USING PVC

Cellular PVC is a great material for outdoor furniture. It will last forever without needing sanding or refinishing.

We recommend switching out your saw blades for specialized blades to cut composite or PVC material; you'll end up with smoother cuts. You can find the 1-in.-thick PVC boards we used at home centers. Mostly used for exterior trim, they have one smooth side and one grain side. That means you'll have left and right sides to Parts A, D and E.

For each of these pairs, make sure the angled cut goes one direction on one part and the

opposite direction on the other. This will allow you to assemble the chair with the grain side of the cellular PVC facing out.

PVC also requires special composite screws. They come with a special bit that sinks them just right into the material as well as plugs to hide the holes.

2 CUT THE PARTS

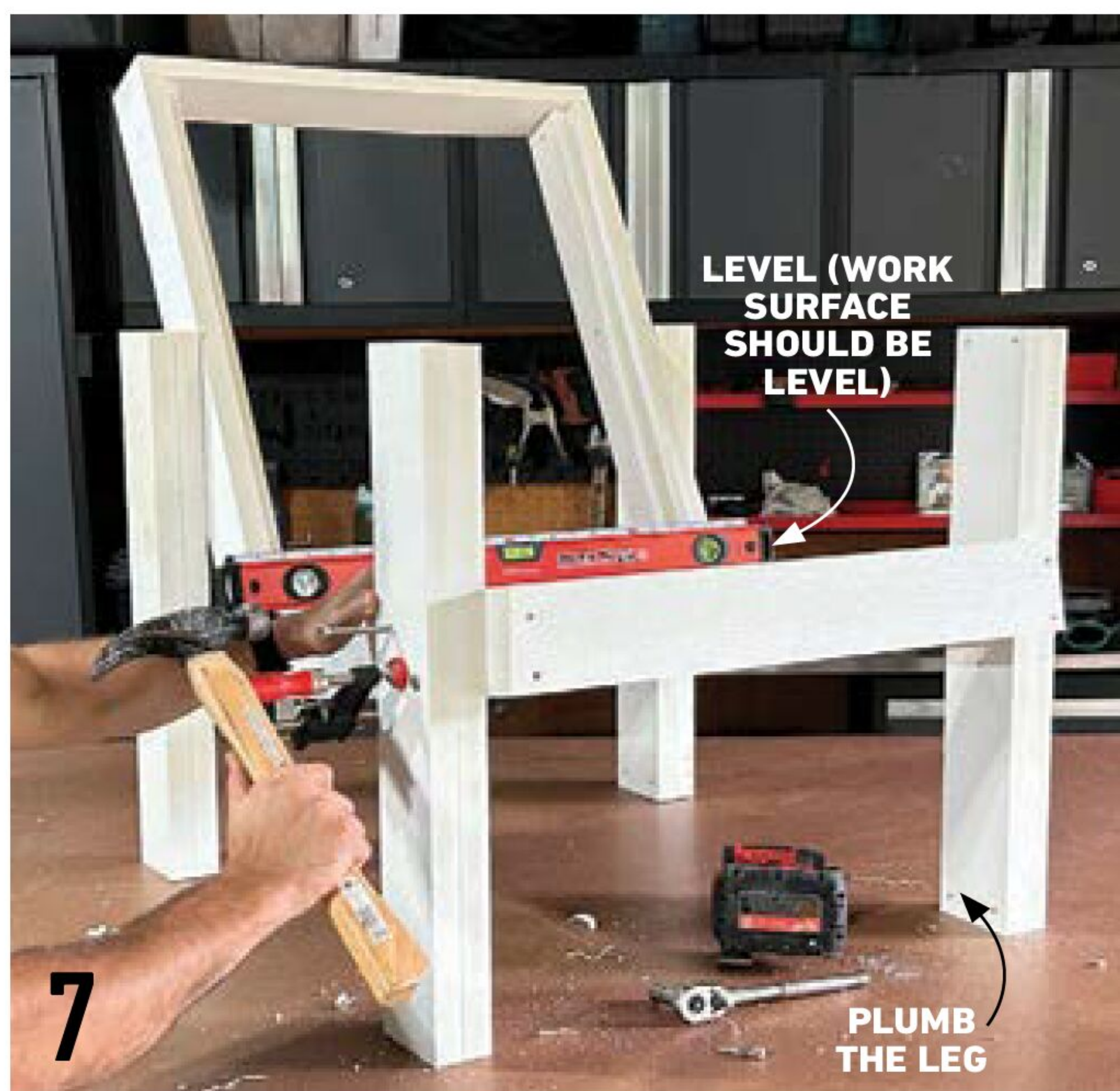
Making more than one chair means cutting a lot of pieces to the same length. A stop block lets you cut a bunch without measuring and marking each board. Using a miter saw, begin by cutting all the parts except G and H.

3 ASSEMBLE THE SEAT BASE

Screw the front to the sides using 2-in. composite decking screws, then PVC glue and screw the seat supports to the sides using shorter 1¼-in. stainless steel screws. If necessary, raise or lower the seat supports slightly so that the space above them matches the thickness of the seat slats.

4 BUILD UP THE BACK SUPPORTS

Screw and glue the back supports to the back sides. Position the back supports to match the thickness of the back slats.



5 BOLT ON THE BACK

Attach the back to the seat side with galvanized carriage bolts. Then screw the back brace to the back side supports.

6 BUILD THE LEGS

Because PVC can be somewhat flimsy, we doubled up the legs for this chair. Take two of the leg parts (F) and glue the smooth sides together flush on all sides with PVC glue. Keep the parts flush with a few 1¼-in. stainless steel screws.

7 ATTACH THE LEGS

On a flat and level workbench, clamp a pair of legs to the seat and back. The front legs should be clamped 2½ in. from the front of the seat base and 11 in. from the bottom of the leg. The back legs should be close to 7¾ in. to the bottom of the leg and flush with the back angle of the seat base (A).

These measurements are approximate and will need adjustment if the legs are not

all flat on the floor. Check the legs for plumb and the seat for level, then bolt on the legs.

8 FASTEN THE SLATS

Place the slats on the seat and the back. Position the end slats first, then space out the slates between them evenly (typically ¾ in. apart).

We started spacing the slats for the back from the top and left a slightly larger gap where the outdoor cushion will cover at the bottom. We used spacers to keep the



spacing consistent, then fastened the slats securely with a composite decking screw on each end.

9 MARK THE ARM NOTCH

Place the arm on top of the legs and mark the angle where it meets the back of the seat. Transfer the mark to the top and bottom of the arm and mark a notch that matches the width of the seat back sides (E).

10 CUT THE NOTCH

Set the table saw fence and cut the long side of

the notch first. Keep the top of the armrest facing up and stop when you reach the line at the end of the notch. To cut the rest of the notch, use a jigsaw or handsaw to match the angle traced in the previous step.

11 MOUNT THE ARMS

Set the arms in place and screw them to the tops of the legs. After the chair is completely assembled, it's a good idea to take 180-grit sandpaper and ease all the corners. It's for your safety; the PVC

boards don't have rounded corners and can get a little sharp.

12 PLUG THE SCREW HOLES

The last step is filling all the screw holes. The plugs feature the same grain pattern as the boards; to really help them blend in, be sure to line up the grain direction of the plug with that of the chair.

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THE TABLE

FIGURE A

OVERALL DIMENSIONS:
30" T X 66" W X 33 5/8" D

1 CUT THE TABLE BASE PARTS

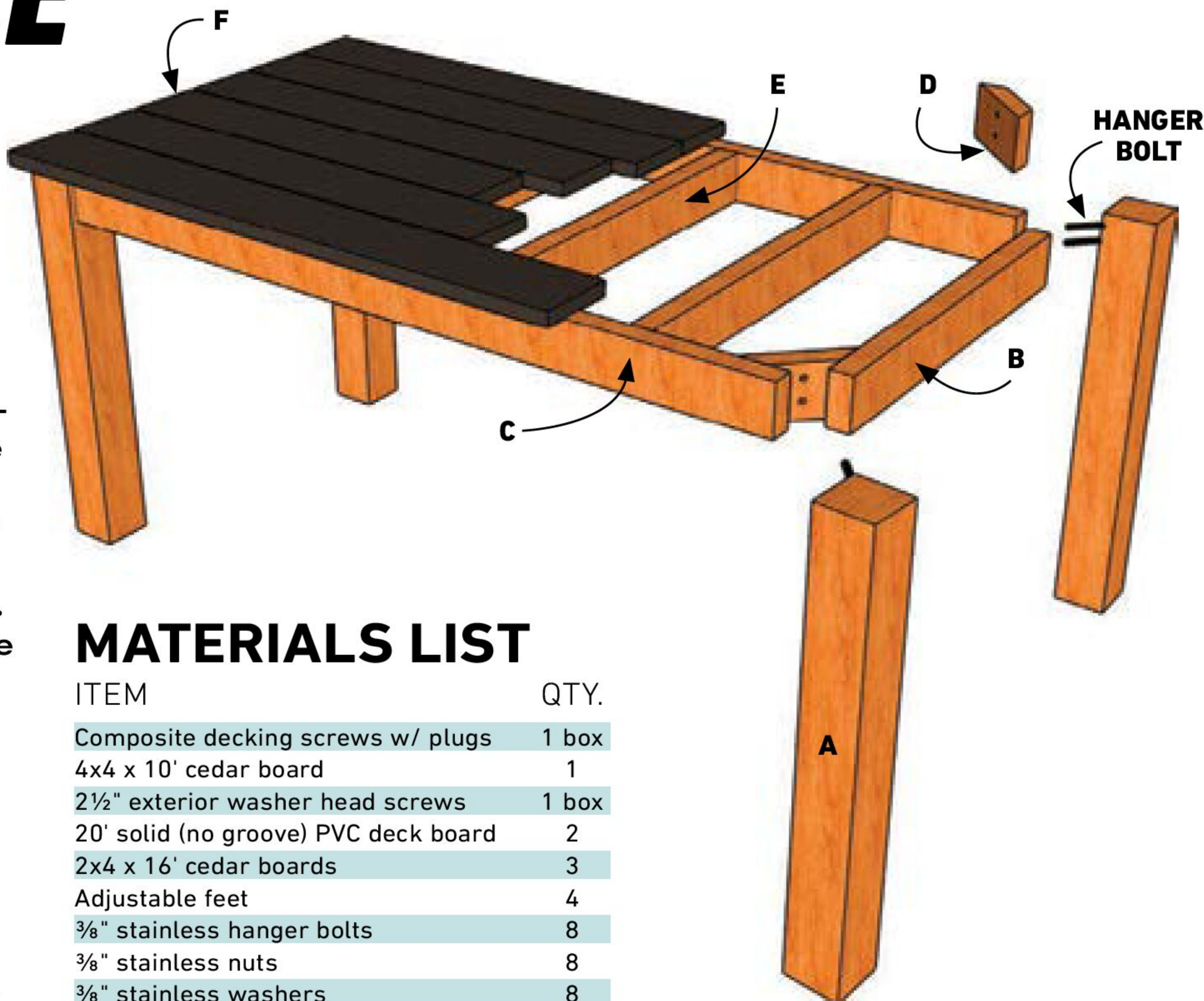
It's best to use a miter saw to cut all your parts, but a circular saw will be just fine if you're accurate with your cuts.

We set up a stop block on our miter saw to cut the legs, side and end aprons, and stretchers. With a stop block, you can make sure each part is cut to the same length.

2 CHOOSE THE BEST FACE

Identify the most attractive sides of the cedar pieces. Look for imperfections as well as the tone of the wood so that it matches the other sides. Mark the "bad" side of the board, then drill two pocket holes on each end of the aprons (B and C) on this side.

While you're at it, drill pocket holes into the ends of the stretchers (E). One side gets one in the center, and the other gets two near the edges.



MATERIALS LIST

ITEM	QTY.
Composite decking screws w/ plugs	1 box
4x4 x 10' cedar board	1
2 1/2" exterior washer head screws	1 box
20' solid (no groove) PVC deck board	2
2x4 x 16' cedar boards	3
Adjustable feet	4
3/8" stainless hanger bolts	8
3/8" stainless nuts	8
3/8" stainless washers	8

CUTTING LIST

KEY	QTY.	DIMENSIONS	PART
A	4	4x4 x 29"	Legs
B	2	2x4 x 26 3/4"	End aprons
C	2	2x4 x 55"	Side aprons
D	4	2x4 x approx. 6 7/8" (cut to fit)	Corner braces
E	4	2x4 x 28 1/4"	Stretchers
F	6	1x5 1/2" x 66"	Tabletop

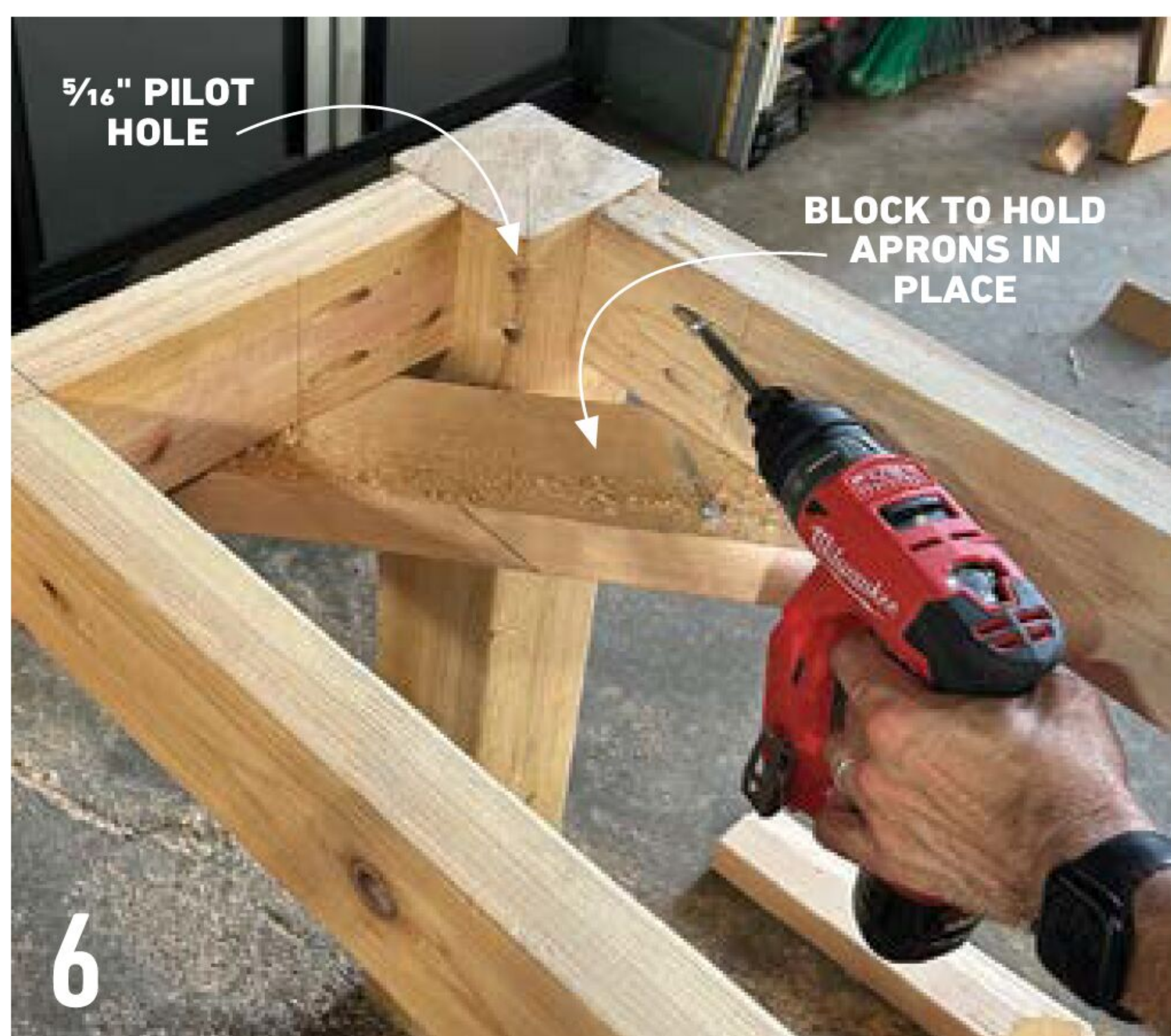
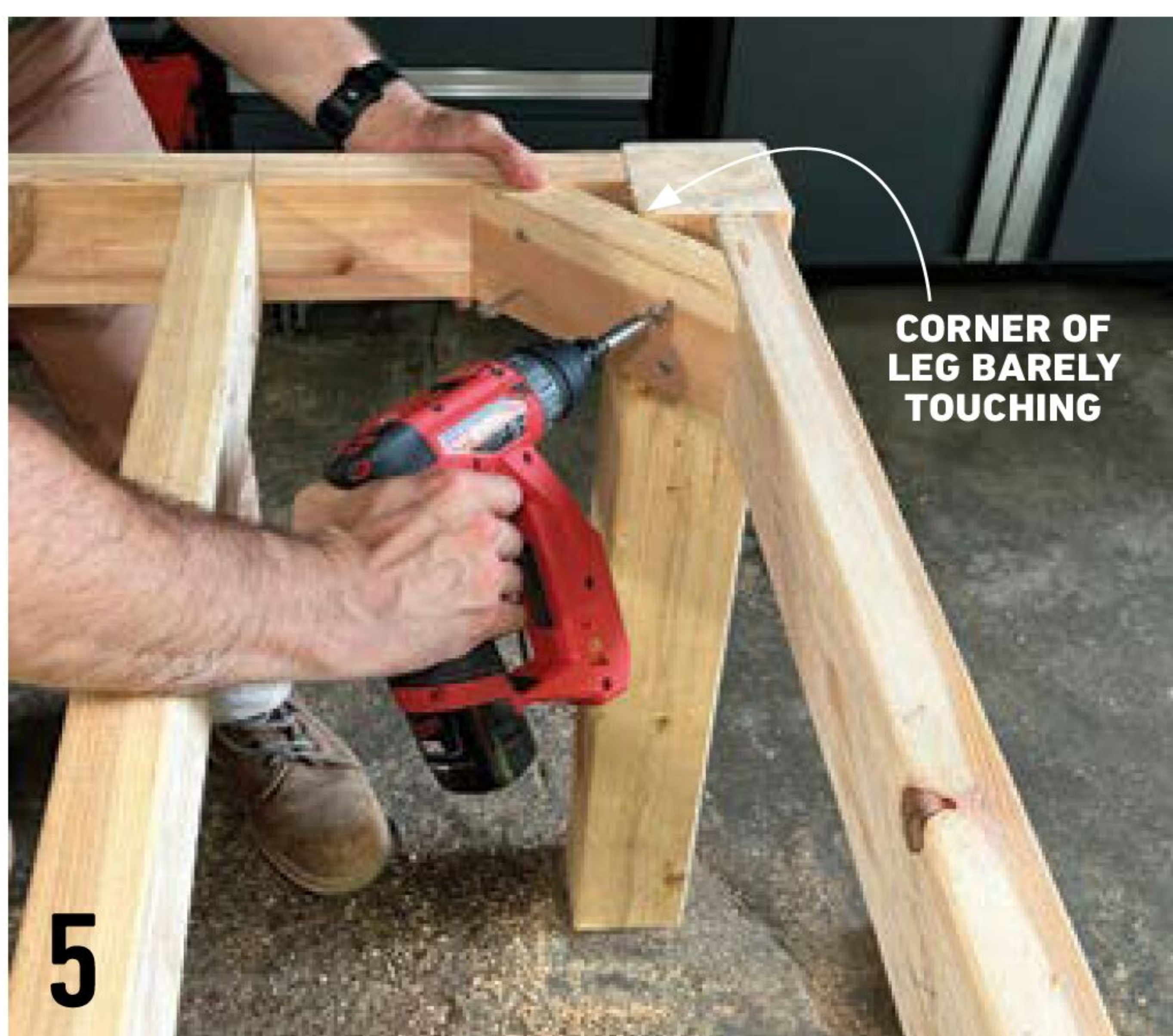
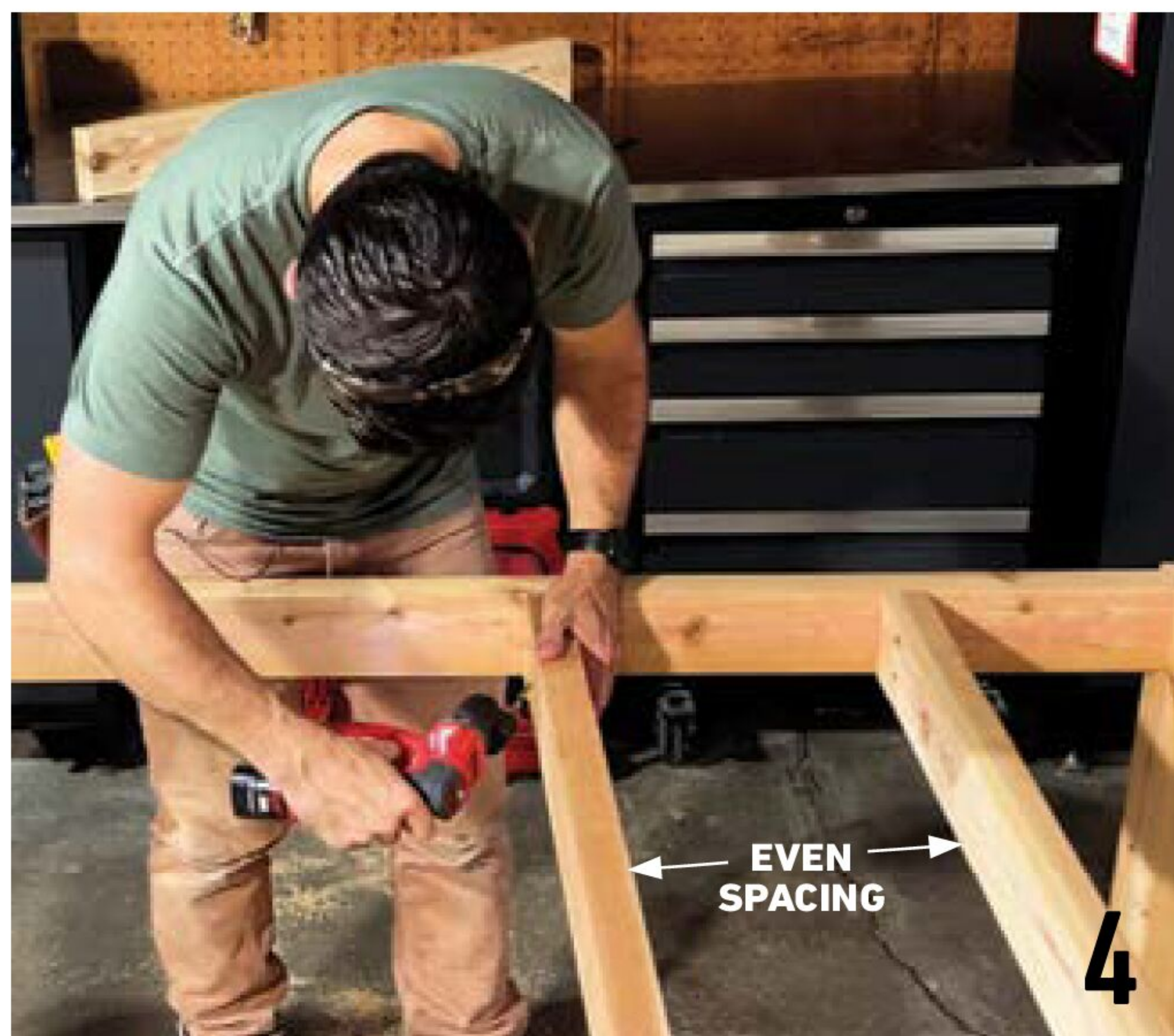


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3 PATIO TABLE LEGS

Arrange the aprons and legs with their good sides facing out on a large flat work surface. Position each apron $\frac{1}{2}$ in. from the outside edge of the legs, then fasten them together using exterior washer head screws through the pocket holes. Fasten all four legs in this way to create the frame of the table.

4 SPACE OUT THE STRETCHERS

Flip the table to stand on its feet. Then space out the four stretchers (E) evenly, about $10\frac{3}{8}$ in. on center. Fasten them between the side aprons using exterior washer head screws.

Be sure the tops are flush with the side apron (C).

5 FASTEN CORNER BRACES

Using a few longer cedar 2×4 offcuts, cut a 45-degree angle on the ends, then cut the four corner braces (D) using a miter saw. The measurement from the long points of the cuts should be approximately $6\frac{7}{8}$ in. With the corner braces sitting tight against each apron, the brace should be just touching the corner of the leg, but a small gap here will work fine.

Fasten each of the braces in place with a pair of screws into each apron. Next, drill two $\frac{5}{16}$ -in. pilot holes through the

center of the brace and into the leg for the hanger bolts. Bore out the holes in the corner brace with a larger $\frac{7}{16}$ -in. drill bit.

6 REMOVE POCKET SCREWS

Fasten the aprons near the legs together with a piece of scrap 2×4 , then remove the corner brace followed by the pocket screws securing the aprons to the leg. The leg is now detached from the table base.

Reattach the corner brace, slide the legs in place and tighten them on. Upon removing the pocket screws, the legs can be removed for easy transport as well as storage of the furniture during winter.



7 DRIVE IN THE HANGER BOLTS

With the corner brace reattached, slide a washer on the hanger bolt followed by two nuts. Keep the nuts toward the end of the bolt. Using two wrenches, tighten them together. When tightened together, they won't turn on the bolt. This lets you tighten the hanger bolt and drive it all the way into the table leg.

Once the hanger bolt is in place, loosen the bolts against each other. Remove one and tighten the other to secure the table leg.

8 BORE A HOLE FOR FEET

Flip the table upside down. On the bottoms of the legs, draw two lines connecting opposite corners to form an X. This is the center of the leg. Then, with a 1½-in. Forstner bit, bore a hole in the bottom of each table leg about ¾ in. deep.

9 DRILL DEEP FOR ADJUSTABLE FEET

The feet we're installing are adjustable up to 1½ in. They're fastened with a T-nut into the 1½-in. hole we drilled in Step 8.

To make room for the adjustment bolt, drill a ½-in. hole 2 in. deep. Then place the adjustable foot's bolt into the hole and give it a light tap with a hammer to seat the T-nut.

10 LAY OUT THE OUTDOOR TABLETOP

Flip the table upright and cut all the PVC deck boards 2 in. longer than the table base. Lay the boards on top of the base with a gap of around 1/16 in. between each. Make sure the overhang is consistent on the sides and the ends.

11 FASTEN THE TOP

Use special composite deck fasteners made for PVC deck boards. We ordered

these screws along with the composite decking at a local lumberyard. The screws came with a special drill bit that sets the screws into the boards just right, along with matching plugs.

We used a Speed square lined up to the framing in the table base to help drive the screws in the same place and in a straight line over the width of the table. If you're building this table to be taken apart, don't drive screws into the tops of the table legs.

12 HIDE THE SCREW HOLES WITH PLUGS

The plugs for the decking material come with grain on the surface that matches the grain of the composite decking perfectly. Orient the plugs so the grain direction is continuous. Give them a few taps with a hammer to drive them flush with the tabletop. You're done! 



PLANTER BOXES 3 WAYS

////////////////////
**THERE'S MORE THAN ONE WAY TO
SHOW OFF YOUR GREENERY. HERE'S
HOW TO CREATE PLANTERS FOR A
RAILING, PATIO AND WINDOW.**

BY FAMILY HANDYMAN EDITORS

Planters not only add a beautiful and vibrant element to your outdoor space but also provide a practical way to grow and display your favorite plants, herbs or flowers. Whether you have a small balcony or a spacious deck, there is a planter style for you.

WINDOW PLANTER

This stripped-down window planter can be built in less than an hour, and the simple design resists rot far better than traditional window boxes.

PRO TIP

Use colored clay pots to add some visual interest and boost your home's curb appeal.

1 CUT BOARDS TO LENGTH AND MAKE HOLES

Cut the 1x10 and 1x3 boards to length (see Photo 1 and Photo 3 for dimensions). The precise diameters of 6-in. pots vary, so size the holes by scribing and cutting out a 6-in. circle from cardboard to ensure that the pot will rest on its rim (Photo 1). If needed, keep testing to find the proper size. Next, mark three 6-in.-dia. holes with a compass (use your adjusted measurement if applicable). Drill 1/2-in. starter holes and cut out the openings with a jigsaw.

2 CUT WOOD BRACKETS

Mark the notch for the hanging strip and both 1 1/4-in. ends on the brackets. Make sure the grain runs parallel to the shelf for strength. Use a 5-gallon pail lid to scribe the bracket curves (Photo 2), then cut out the brackets with a jigsaw.

3 ASSEMBLE AND MOUNT PLANTER

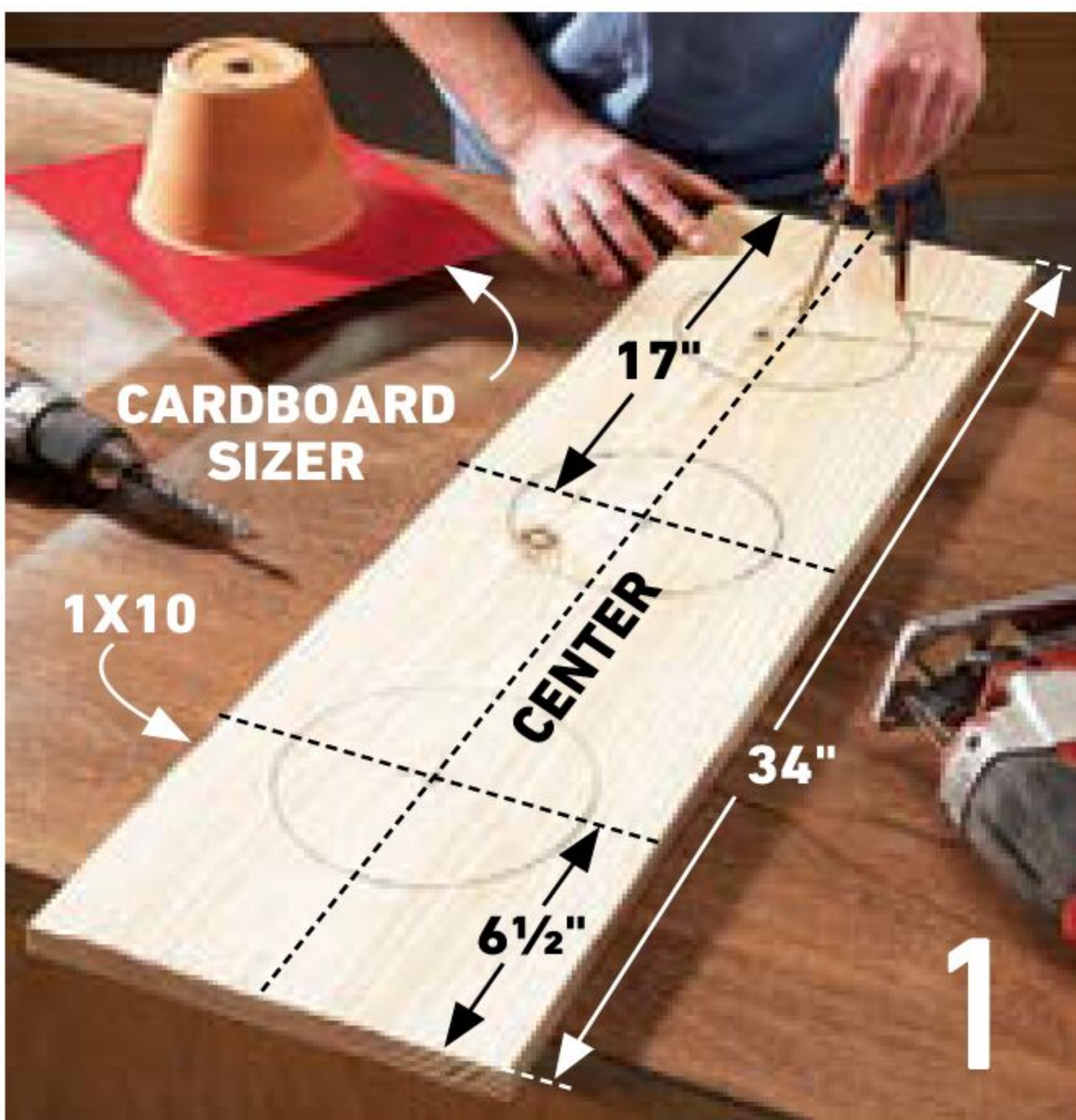
Smooth off any rough edges and paint all the parts before assembly. Predrill and screw the hanging strip to the brackets. Then center and screw the shelf to the brackets and to the hanging strip.

Mount the shelf to the wall by screwing through the hanging strip into the wall framing.

MATERIALS LIST

(FOR ONE PLANTER)

ITEM	QTY.
1x10 x 3' board	1
1x3 x 3' board	1
2" exterior screws	
2x8 x 2' board	1
3" exterior screws	
6" clay pots	3



WHAT IT TAKES	
TIME	COST
<1 hour	\$100
SKILL LEVEL	
Beginner	
TOOLS REQUIRED	
4-in-1 screwdriver, cordless drill, countersink drill bit, drill bit set, jigsaw, level, miter saw, compass, 5-gallon bucket lid (to use as template for brackets)	



3-SEASON PATIO PLANTER

This project is lined with an ordinary plastic planter box—the kind you can get at any home or garden center. That means you can lift out one plastic box and drop in another, instantly swapping container plants.

PRO TIP
Start the growing season with spring bloomers in your planter while the other plants grow elsewhere. When the spring plants fade, you can pot the next set of plants.



WHAT IT TAKES

TIME	COST
6 hours	\$125
SKILL LEVEL	
Intermediate	
TOOLS REQUIRED	
Basic hand tools, cordless drill/driver, table saw	

CUTTING LIST

KEY	QTY.	DIMENSIONS	PART
A	2	¾" x 8" x 11⅞"	Plywood ends
B	2	¾" x 32" x 11⅞"	Plywood sides
C	2	2¾" x 8" x 7¾"	Plywood braces
D	4	1" x 3" x 15"	Legs
E	4	1" x 2" x 15"	Legs
F	2	1½" x 3½" x 13½"	Beveled cap
G	2	1½" x 3½" x 36"	Beveled cap
H	4	¾" x 2½" x 28½"	Top trim (cut to fit)
J	4	¾" x 2½" x 6"	Trim (cut to fit)
K	22	⅝" x 3¼" x 6⅞"	Lengths of beadboard

Overall dimensions: 36"L x 13½"D x 16½"T

MATERIALS LIST

ITEM	QTY.
2' x 4' ¾" CDX plywood	1
⅝"x6 x 6' deck board	1
2x4 x 6' cedar or pine board	2
1x3 x 6' cedar or pine board	2
⅝" x 3½" beaded tongue-and-groove	14'
Water-resistant glue	
4d, 8d and 12d galvanized casing nails	
6d galvanized box nails	
1¼" deck screws	
Plastic planter (to fit 6½" x 29" opening)	

1 BUILD THE BOX

Cut the plywood ends (A) and sides (B) to size and glue and nail the sides to the ends. Use clamps to hold the ends upright.

2 ADD THE BRACES

Center plywood braces (C) at each end of the planter. Pre-drill screw clearance holes through the planter sides and screw in the braces.

3 ASSEMBLE THE LEGS

Rip $\frac{5}{4}$ -in. decking material and cut it to length for the legs. For each leg, glue and nail a 3-in. piece (D) to a 2-in. piece (E).

4 ATTACH THE LEGS

Set the plywood box on a flat surface and screw the leg assemblies to it. Make sure the legs are flush with the top of the planter box.

5 BEVEL THE CAP BOARDS

Rip a 20-degree bevel on the 2×4 caps with a table saw. Use a featherboard and push stick for extra safety.

6 ASSEMBLE THE CAP

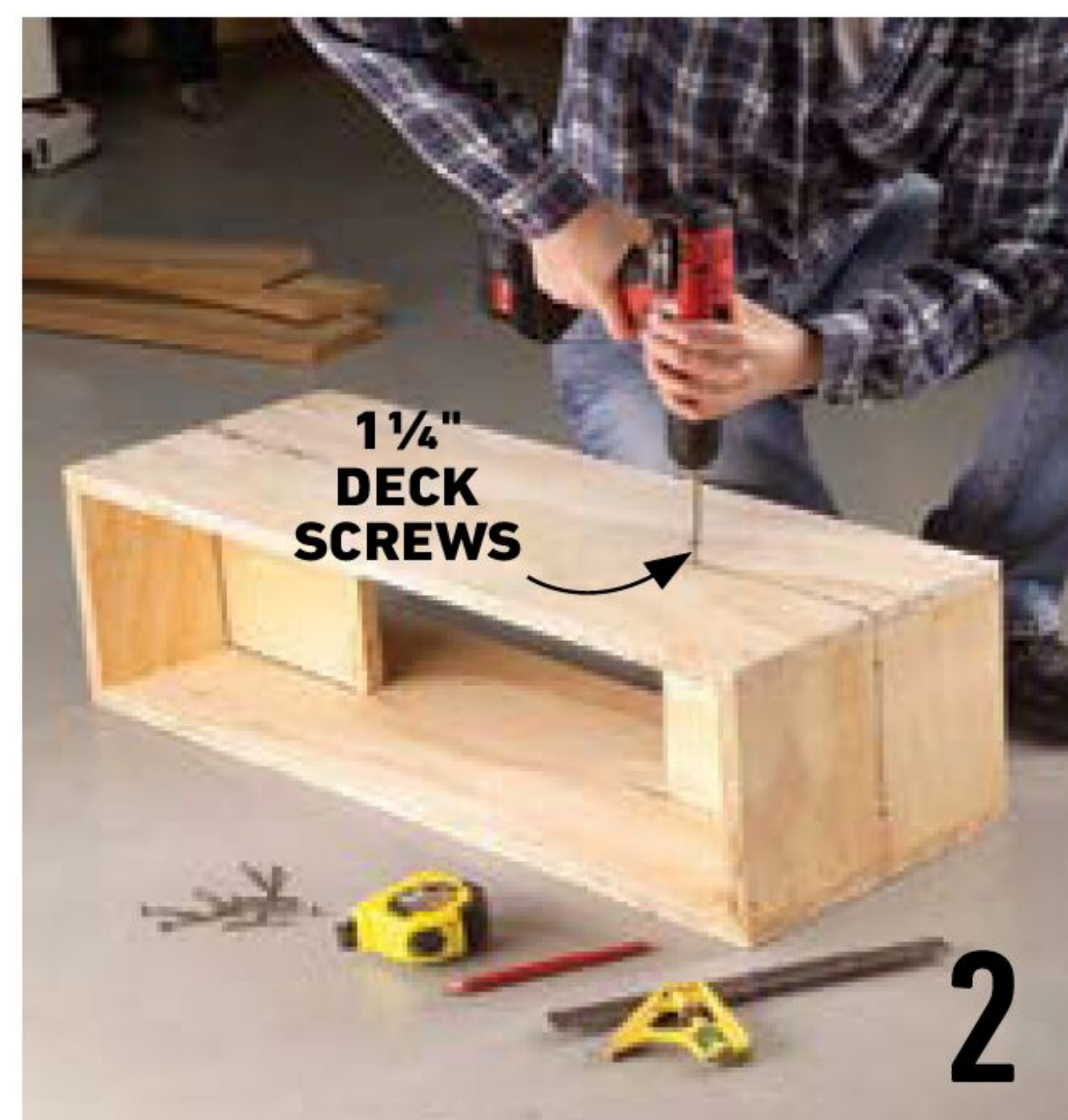
Cut the cap pieces (F and G) to length with 45-degree miters on the ends. Drill pilot holes for the nails. Then glue and nail the miters together.

7 ATTACH THE CAP

Drill pilot holes and glue and nail the cap to the planter, measuring to make sure the overhang is even on all sides.

8 COVER THE BOX

Cut the trim pieces (H and J) to length and nail them to the top and bottom edges of the box with 4d galvanized casing nails. Cut the beadboard (K) to fit and glue the pieces onto the plywood with construction adhesive. Let dry.



RAILING PLANTER

Got leftover wood? Try this compact project. It takes about a day to build and you don't need a lot of woodworking skills to give it a try.

PRO TIP

Line the bottom few inches of the planter with rocks to keep it securely in place.



1 CUT PLANTER BOX PIECES
Following the measurements specified in the Cutting List, use a miter saw to cut the two long sides (A) from 1×10 material. Then cut the two short sides (B) and the planter bottom (C) from 1×6 material.

CUTTING LIST

KEY	QTY.	DIMENSIONS	PART
A	2	¾" x 9¼" x 36"	Long sides
B	2	¾" x 5½" x 7⅞"	Short sides
C	1	¾" x 5½" x 34½"	Bottom
D	8	¾" x 1½" x 37½"	Long slats**
E	8	¾" x 1½" x 8½"	Short slats**

**Mitered ends; cut to fit.
Overall dimensions: 37½"L x 8½"W x 9¼"T

MATERIALS LIST

ITEM	QTY.
1x10 x 8' cedar board	1
1x6 x 8' cedar board	1
1x2 x 8' cedar board	5
1¼" 18-gauge nails	
2" 18-gauge nails	
Exterior polyurethane	

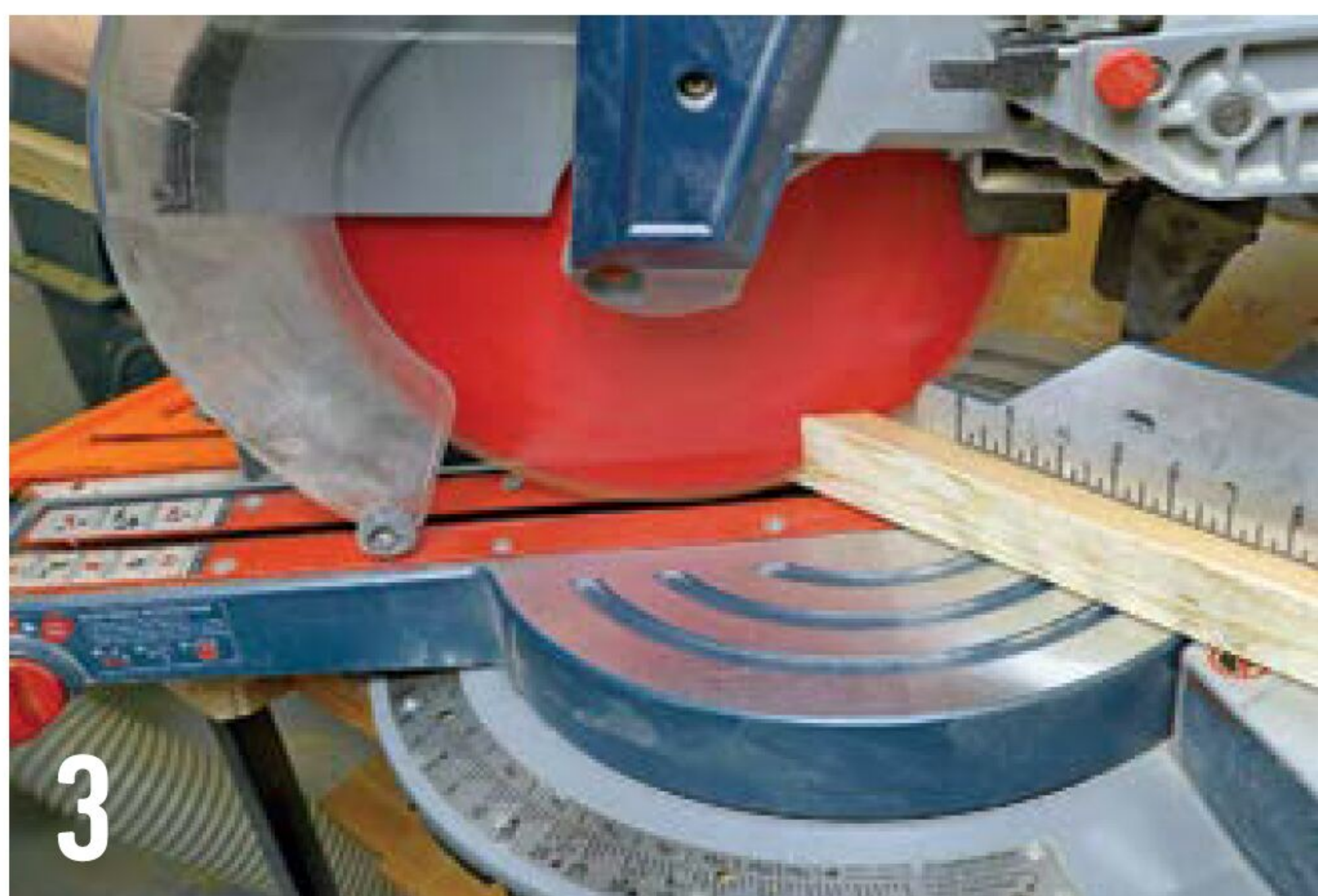
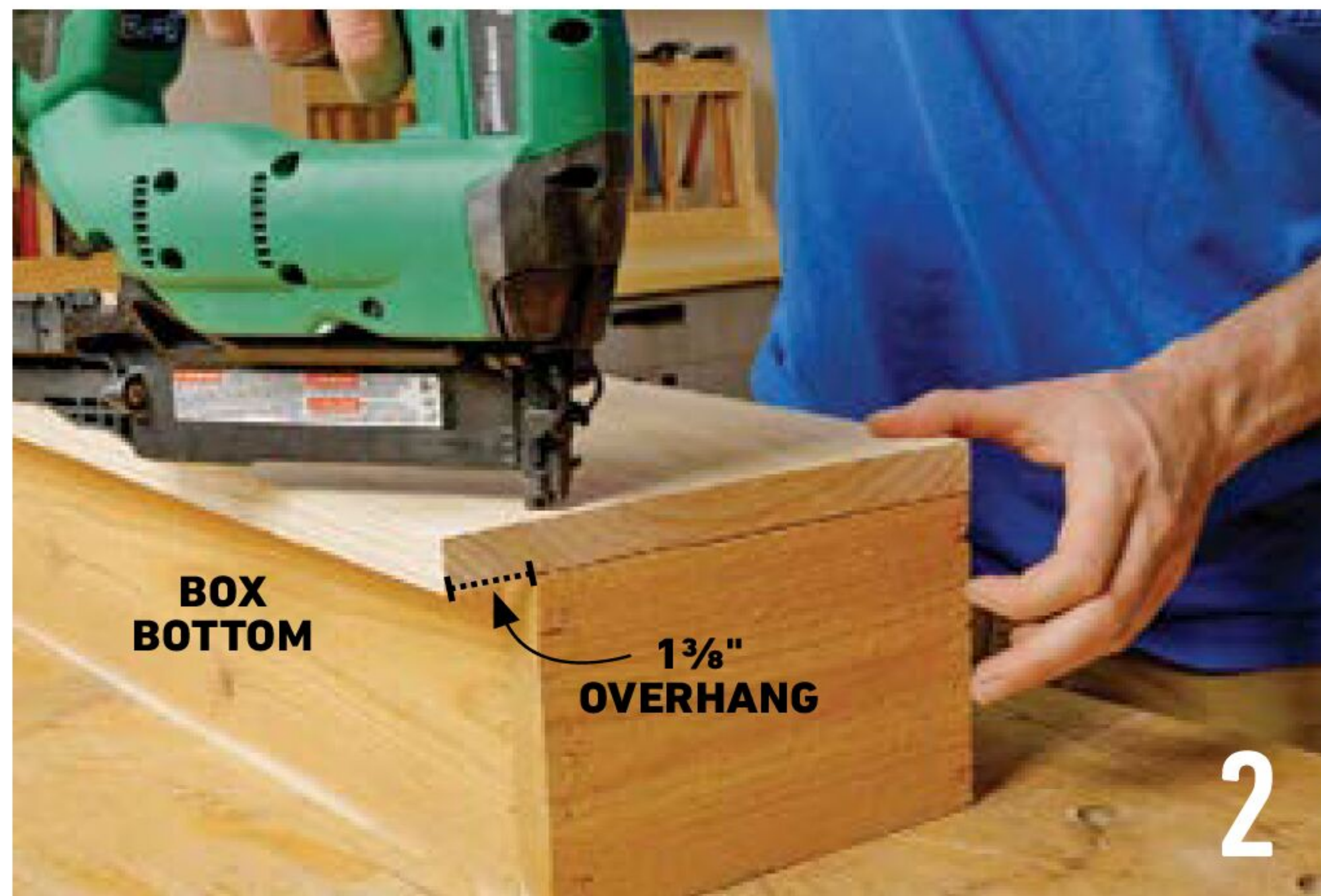
2 ASSEMBLE THE BOX
Use an 18-gauge nail gun with 2-in. nails to secure the bottom edge of the short sides (B) flush to the bottom face of the box bottom (C). Next, nail the long sides (A) onto the U-shaped short side/bottom configuration so that the top edge is flush with the top of the short sides (B) and there is 1⅜ in. of the long sides (A) extending past the bottom (C).

WHAT IT TAKES

TIME 5 hours	COST <\$100
SKILL LEVEL Intermediate	
TOOLS REQUIRED Miter or circular saw, 18-gauge nail gun, drill/driver, ⅜-in. drill bit, clamps, Speed square, tape measure, foam brush	

3 CUT THE SLATS
Cut the long (D) and short slats (E) from 1×2 material with a 45-degree miter on each end. Be sure to measure and cut these pieces carefully so that the distance between the miters precisely equals the box dimensions.

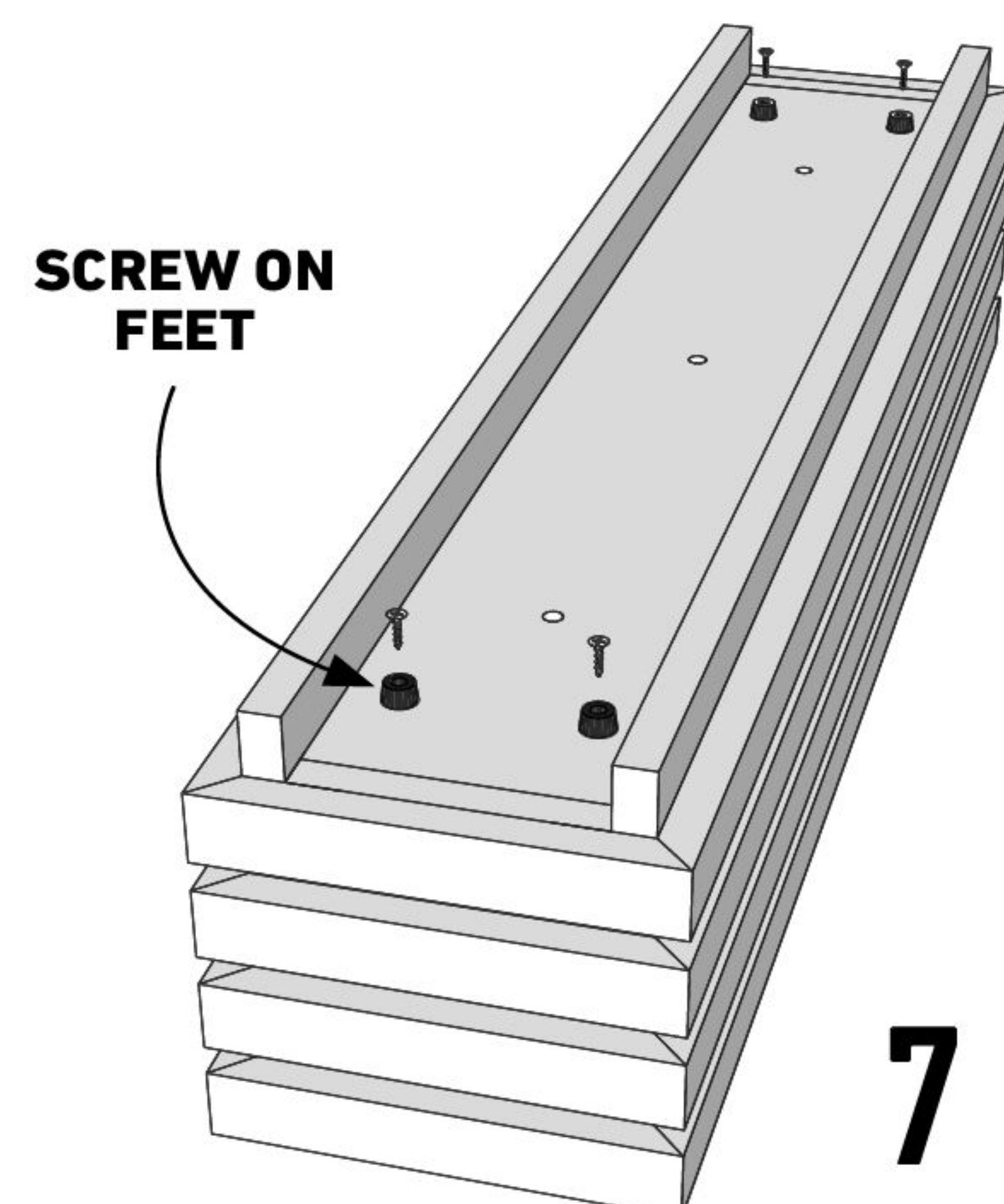
4 ATTACH THE SLATS
Attach the long (D) and short slats (E) to the planter with an 18-gauge nail gun and 1¼-in. nails. You may find it easier to put all the slats on a single side of the box at a time, but you can also attach them ring by ring. However you attach them, ensure they are evenly spaced, leaving a ⅝-in. gap between the slats. Use clamps to hold the slats in place while laying them out and nailing.



5 DRILL DRAINAGE HOLES
Use a drill with a $\frac{3}{8}$ -in. drill bit to drill three drainage holes in the bottom of the planter.

6 APPLY POLYURETHANE
With a foam brush, apply two coats of exterior polyurethane to the planter. Allow appropriate drying time (read the manufacturer's directions) before using the planter.

7 KEEP IT ELEVATED
Elevating the planter box slightly off the railing is essential. This ensures that the deck railing and planter bottom do not rot out. You can use pebbles or composite shims for this task, but we opted for plastic feet. They are often advertised as cutting board or furniture feet and are usually $\frac{1}{4}$ -in. or $\frac{3}{8}$ -in. tall. Move your planter after each watering or rainfall to further protect your railing. 





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FIRE PITS: A PRIMER

BY FAMILY HANDYMAN EDITORS



We're here to spark some new ideas. Discover how to build, clean and maintain a fire pit and incorporate one into your backyard safely and stylishly.

Build an In-Ground Fire Pit

GATHER AROUND AS PRO BRICKLAYER DOUG MONTZKA SHARES HIS TIPS FOR BUILDING A LASTING OUTDOOR GATHERING SPOT

PLAN AHEAD

This project needs to be spread out over a few days. First, you'll have to pour the footing and give it time to set. Then you'll have to mortar the bricks into place.

Before digging out the space for your fire pit, call your utility companies (dial 811; for more info, go to call811.com) to check the location of buried utility lines.

Also check the fire pit code in your area. Most require a fire pit to be 25 ft. away from any structures and overhanging trees. And think about how the prevailing winds affect your space.

WHAT IT TAKES

TIME	COST	SKILL LEVEL
Multiple days	\$400	Intermediate

TOOLS

Brick hammer, bucket, concave jointer, concrete float, cordless drill, level, margin trowel, mason's trowel, safety glasses, shovel, tuck-pointing tool, wheelbarrow, hand tamper, sledgehammer

MATERIALS LIST

ITEM	QTY.
Face bricks	120
Firebricks	25
36" cardboard concrete form	1
48" cardboard concrete form	1
4x8 hardboard sheet (if making own forms)	1
Type N mortar mix, 80-lb. bags	5
Refractory cement (sold at brickyards)	½ gal.
Concrete mix, 80-lb. bags	10
⅜" rebar, 10' lengths w/ ties	2
Spray paint	1 can



1 MARK OUT THE FIRE PIT

First, choose a spot in your yard for the fire pit base.

A 3-ft.-dia. pit creates enough room for a good fire, yet keeps everyone close enough to chat (and complies with most codes).

To make your own forms, rip a 4 x 8-ft. sheet of 1/8-in. hardboard into four 8-in.-wide strips. Carefully bend and screw two strips together to create a 36-in.-dia. circle, and use the other two

to make a 48-in.-dia. circle. Set the larger form in position and spray paint around it.

2 DIG AND LEVEL THE HOLE

Following the painted guide, shovel out the soil to a depth of 8 in. for your fire pit base. Do not disturb the underlying soil.

Check the bottom of the hole with a level and remove any high spots by scraping off soil rather than digging. This leaves the underlying soil intact.

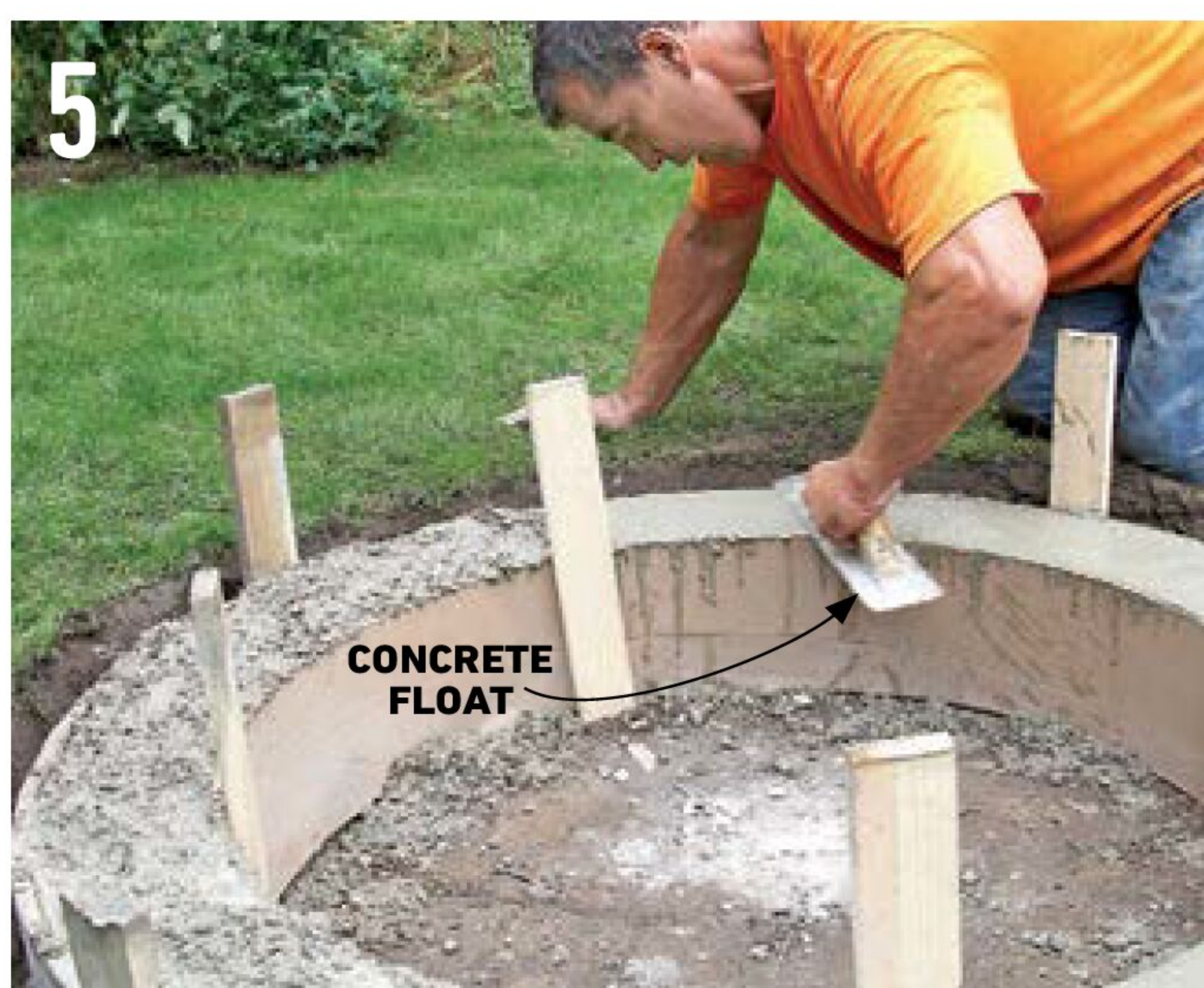
Compact the soil with a hand tamper or a 4x4 post.

3 STAKE THE FORMS

A concrete footing will create a stable base for the pit walls and keep the sides of your pit from cracking as the ground moves over time.

PRO TIP

To make measuring the pit and pouring the concrete footing easier, use two cardboard concrete form tubes (purchased from a concrete supply company).



Stake the forms and mix up ten 80-lb. bags of concrete mix per manufacturer directions.

If you're using hardboard forms, stake them so they're nice and round.

If the forms aren't quite level, raise one end and drive a screw through the stake.

4 ADD THE REBAR

Bend the two rebar lengths to form a 42-in.-dia. circle. Bind the overlapping ends with wire to form a sturdy ring.

Fill the forms halfway, then press the ring into the concrete for strength. Make sure it doesn't touch the sides of the forms.

5 FINISH THE FOOTING

Shovel in the remaining concrete until the forms are

filled to the top and then tap the forms gently with a sledgehammer until the concrete mix is level.

Recheck the level, hammering the forms down if necessary, and smooth the top of the footing.

Let the concrete completely set up overnight. Remove the forms the next day.

6 DRY-SET THE FIREBRICK LINER

Regular clay brick can crack at high temperatures, so we're using firebrick (also called refractory brick) to line the inside of the fire pit walls. You will need 25 firebricks for a 3-ft.-dia. pit.

Because firebrick is so dense, it's tougher to split than regular brick. "Soldiering" the brick

PRO TIP

Firebrick is kilned to withstand high temperatures. It's larger, thicker and wider than regular brick, and you can find it at most brickyards.

(standing it on end) minimizes splitting and lets you easily accommodate the pit's curve.

For this project, you'll only need to split four firebricks, which you'll place across from one another around the pit to create draw holes for oxygen for your fire (see Step 8).

Dry-set the firebricks in place on top of the footing. Space out the bricks so that you won't have to cut the last brick to fit.

Mark the position of every brick on the footing.



7 MORTAR THE FIREBRICK

Firebrick is mortared with refractory cement, which can withstand high heat. It comes premixed in a bucket and has the consistency of peanut butter.

Butter a thin layer of cement on the footer (like you're spreading peanut butter on toast) and position your first brick.

Butter the second brick and butt it tightly against the first.

Continue around the circle, checking the level side to side and back to front as you go. Leave brick-sized gaps in four opposite points around the ring.

PRO TIP

A margin trowel makes it easier to scoop cement out of the bucket and butter the bricks. And a tuck-pointer is useful for cleaning up the joints.

8 CREATE AIR HOLES

Fill the open gaps with half bricks. These gaps are draw holes that feed air to the fire. Prop up the half bricks until the mortar sets.

Check the level across the fire pit and the vertical level of the bricks as you go.

9 DRY-SET THE FACE BRICK

We used SW (severe weathering) face brick (also called common or building brick) to line the fire pit's outside walls. If your climate doesn't include freeze/thaw cycles, you can use MW (moderate weathering) building brick. You'll need 80 face bricks for a 3-ft.-dia. pit. Face brick with holes (cored) is easy to split with a brick hammer. It's easier to form the curve of the pit walls with half bricks. You'll lay three courses of face brick and mortar them together with Type N mortar mix.

Because face brick is smaller

PRO TIP

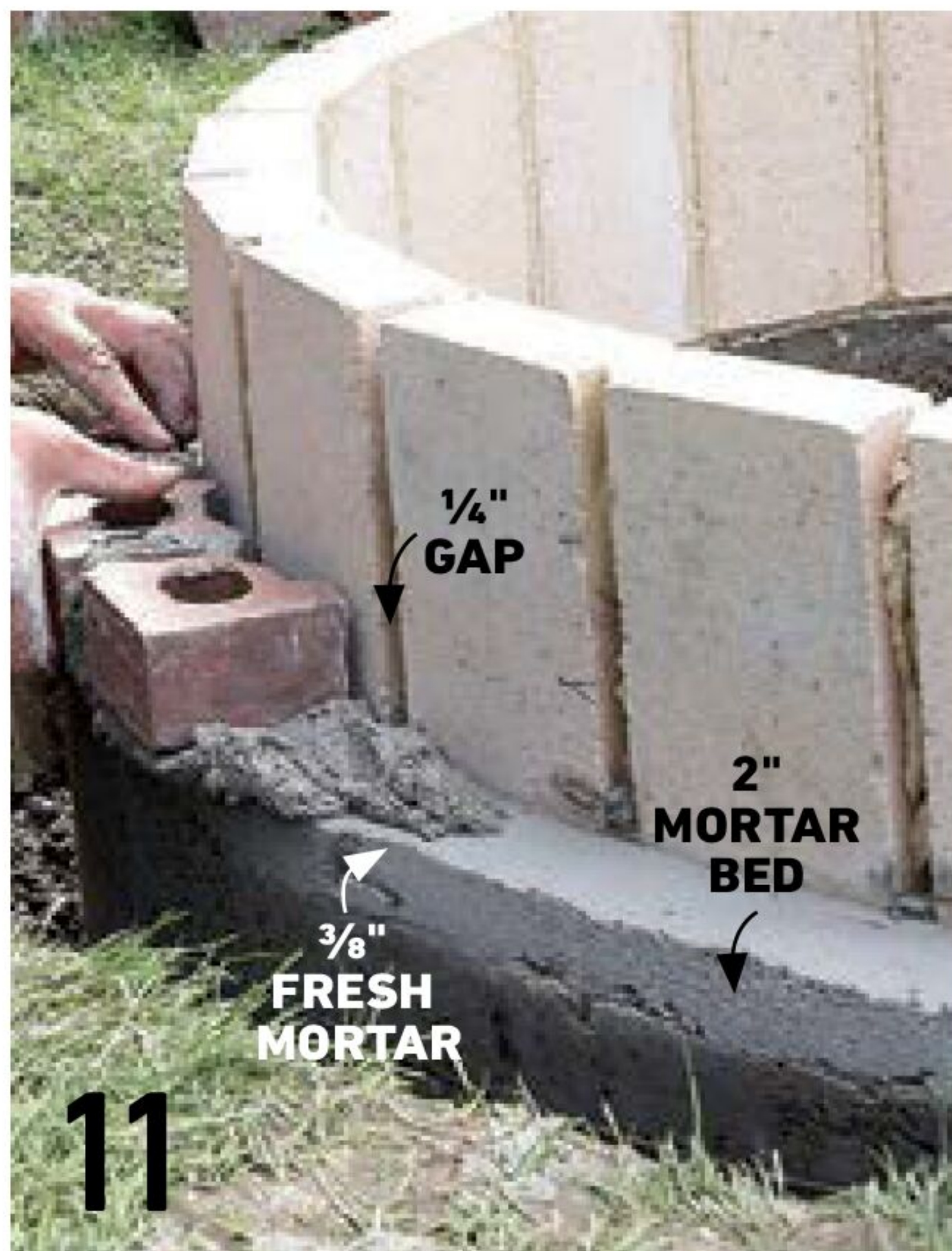
While our mason doesn't use gloves, we suggest you do!

than firebrick, you'll need to make up the size difference as you lay your three courses of face brick. The difference between the height of your firebrick and the total height of three stacked face bricks will determine the width of your mortar beds between courses.

Dry-set the face brick, marking where each course of face brick has to hit the firebrick to make the third course of face brick level with the firebrick.

10 SPLIT FACE BRICKS

Hold one face brick in your hand, keeping your fingers below the top edge of the brick. Give the brick a solid tap on the outside edge near the center hole. Avoid hitting your hand. Repeat with the remaining 79 face bricks for the outside wall.



11 LAY A MORTAR BED
To keep your mortar joints between courses a reasonable width, lay a 2-to-3-in.-thick bed of mortar right on top of the footing. Let it set up slightly (give it at least 15 minutes) and smooth out the top.

12 WORK IN SECTIONS
Working on one-third of the fire pit at a time, lay $\frac{3}{8}$ in. fresh mortar on each course of face brick into place, leaving a $\frac{1}{4}$ -in. gap between the firebrick and the face brick. Check the level of each course and tap down the bricks as necessary. Stagger the joints between courses for strength.

CHOOSE THE RIGHT FIREWOOD

Using the correct firewood for your fire pit will make the experience more enjoyable for the person maintaining the fire as well as those sitting around it. Choose a wood that's easy to ignite and burns as cleanly as possible. This often comes down to the wood's density and moisture levels.

In general, hardwoods are denser than softwoods, and they dry more easily. That means they will create a low-maintenance, steady fire that lasts for hours. Softwood is easier to light and usually more affordable, but it will burn quickly, so you'll need to buy more wood and tend to it more often.

THE BEST TYPES OF WOOD TO BURN IN YOUR FIRE PIT

Bradley Hite, owner of Nashville Firewood, and other experts recommend the following wood types for their ease of lighting, limited smoke production and low cost.



Ash: Good for a steady, long-lasting fire; easy to find; affordable; clean-burning



Pine: Inexpensive, easy to split, crackles when burned to add ambiance (quick-burning, so works best as kindling)



Oak: Easy to find, easy to split; burns long and slow if properly dried out; moderate smoke

THE WORST TYPES OF WOOD TO BURN IN YOUR FIRE PIT

Not all kinds of wood are safe to burn in a fire pit. Often, wood that you find at your campsite or around your home will light or burn poorly, produce excess smoke, or even be dangerous to your health.



Green (freshly cut) wood: Nearly impossible to light and burn steadily (hasn't had time to season or dry out)



Driftwood: Won't burn well if wet, especially if from the ocean; can create potentially hazardous toxins



Construction wood: Often treated with chemicals; may contain nails, glue and other finishes that pose additional risks

MACKENZIE EDWARDS

CLEAN A DIRTY FIRE PIT

If you already have a fire pit in your yard, chances are you've never thoroughly cleaned it. While you certainly aren't alone, routine cleanings are an important safety measure.

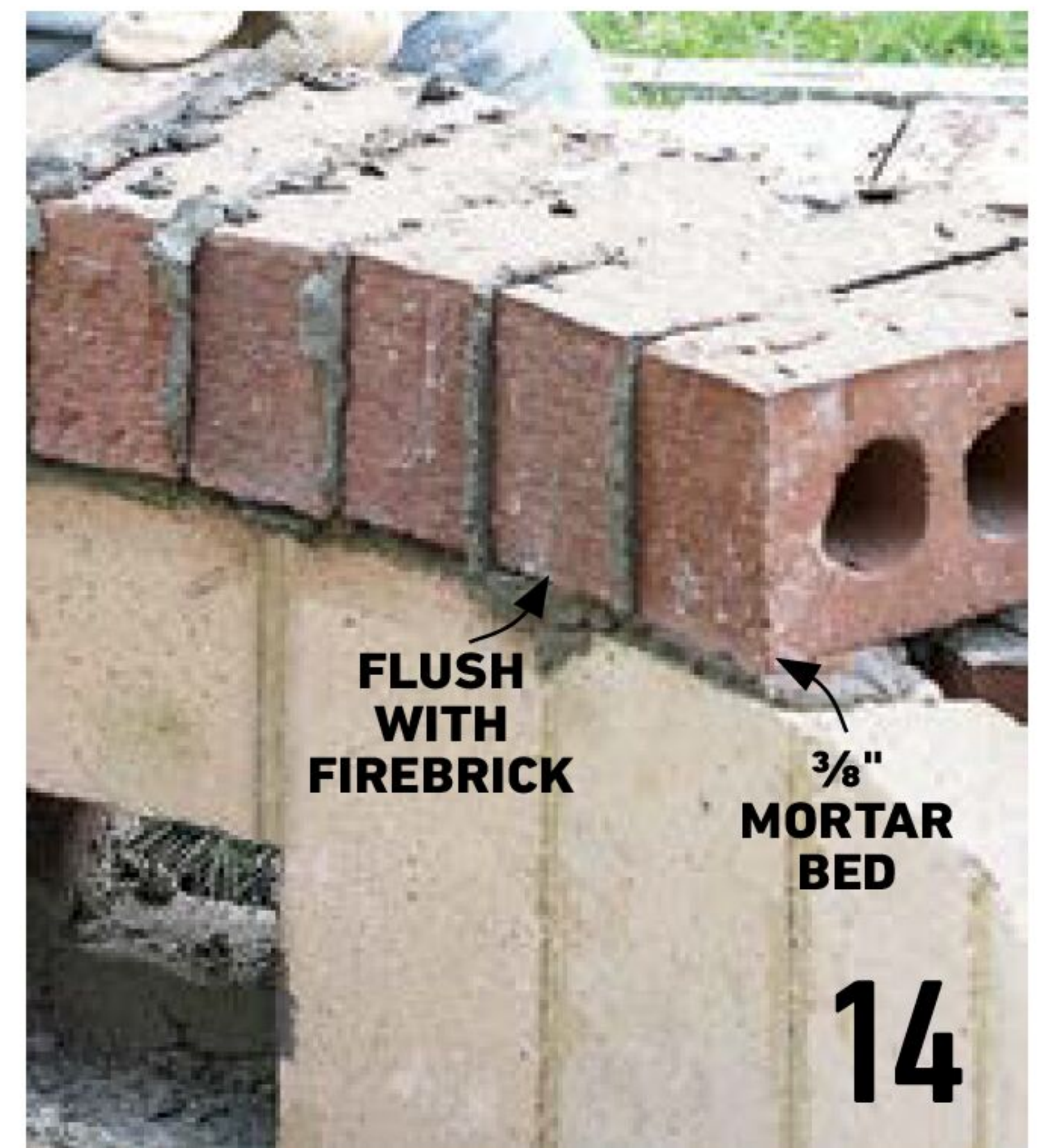
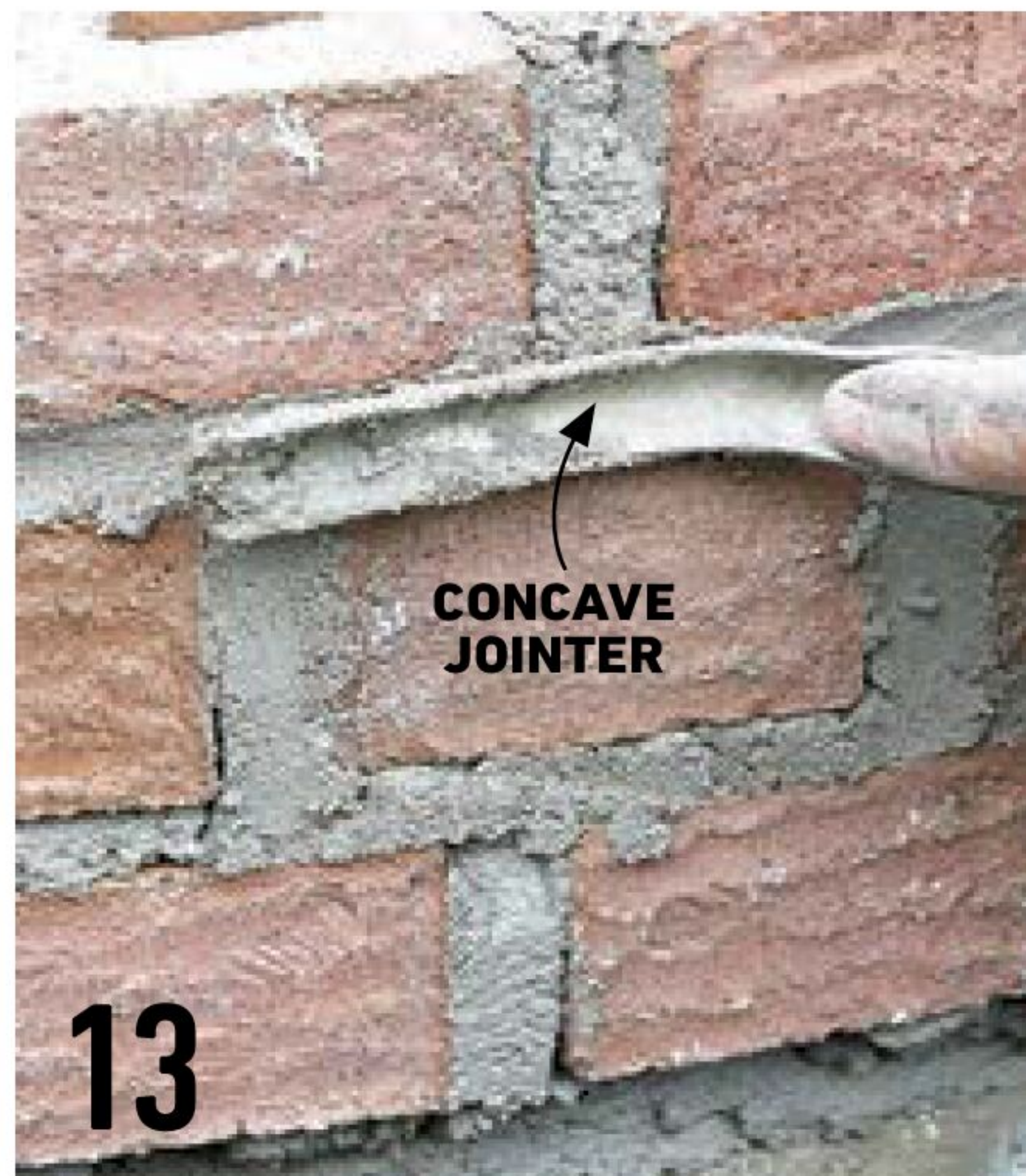
Tim Jankowski, president of Aladdin's Cleaning and Restoration in Lapeer, Michigan, who is an expert in fire prevention, says dirty fire pits harbor flammable debris that can build up over time. He suggests cleaning yours in the spring and again in the fall.

Before you start, make sure the fire has been out for at least a day. When it comes to cleaning products, Jankowski says, "dishwashing liquid is actually one of the best solvents" for tackling this job. For a brick or stone fire pit or fireplace, use a good strong bristle brush and follow up with a wet-dry vacuum to remove the debris and soapy water.

If you have a cast-iron fire pit or any other metal fire pit, in-ground or portable, follow this technique:

1. **Remove leaves and ashes.** Put on rubber or work gloves to protect your hands. Brush or sweep out leaves and bits of wood and sticks. Use a shovel to scoop out ashes. Compost or otherwise discard leaves and ashes.
2. **Fill a bucket.** Squirt some dish soap in your bucket. Fill bucket with hot water.
3. **Scrub.** Dunk a steel wool or stiff brush in soapy water. Scrub the inside of the fire pit to remove rust, dirt and soot. Scrub the cooking grate with a scouring cleanser such as Bar Keepers Friend.
4. **Rinse and dry.** Rinse fire pit with garden hose. Wipe down thoroughly to prevent rust.

ALLY CHILDRESS



13 STRIKE THE JOINTS
After you finish each section of face brick, use a jointer to smooth (strike or tool) the joints before the mortar dries too much.

Striking gives the wall a uniform, polished look; the mortar is ready to strike if you press your finger into it and the indentation remains.

Remember to leave the draft holes open as you mortar each section of face brick and smooth out the finished joints.

14 FINISH THE TOP LIP
Mortar the brick caps. Finish the pit with a matching "row-lock" cap using regular face brick set on edge (see page 49 for the final look).

You'll need about 40 face bricks for this cap, which will protect the wall joints from rain, contain sparks and give you a

nice ledge to warm your feet on.

Working with 10 to 12 bricks at a time, lay a $\frac{3}{8}$ -in. bed of mortar and lay the bricks on edge, then butter each brick on the outside edge as you go and press it into place.

15 FILL GAPS
Add a small amount of mortar to the joints to fill any gaps.

Check the level frequently and tap gently with a brick hammer to adjust the spacing.

Leave a 1-in. overhang on the outside to allow rain to drip off.

Once all the bricks have been mortared in place, strike the joints with a concave jointer.

Give the cement and mortar a week to cure completely before lighting a fire in your pit.

Pour a few inches of gravel on the pit's floor for drainage, and you're ready for a wienie roast.

Style Your Solo Stove

THEY'RE HOT, AND THEY'RE HERE TO STAY. HERE'S HOW TO CREATE THE PERFECT BACKYARD SCENE WITH THIS SMOKELESS FIRE.

BY NINA BRICKO

For a bonfire with benefits, look to the Solo Stove. This popular portable fire pit doesn't produce smoke, which makes it great for a backyard gathering. Follow these tips to wow your guests and make your night a flame-crackling success.

CHOOSE A SPOT

Put your fire by your garden for a romantic evening, or place it on the patio when hosting a party. Remember: It's portable! Interior designer Stephanie Fitch suggests keeping the Solo Stove in your everyday flow; if the pit is on your patio, close to doors, or visible from a window, you'll be more likely to use it.

KEEP YOUR DISTANCE

Be sure to check city codes to see how far away a wood-burning stove needs to be from your house. Avoid areas with low ceilings or overhead branches, and if you're placing the pit on a deck or in the grass, use a Solo Stove stand.

The stove's double walls, which help to manage smoke output, can become extremely hot, posing a potential risk to kids and pets. One option, suggested by landscape designer Joe Pendergast of LandWorks Landscape Services, is to install a traditional stone fire ring to keep small hands at bay. Solo Stove also sells Surround, a table and enclosure that is heat resistant and can hold your drinks.



DAZZLE WITH LIGHTING

Outdoor all-weather string lights are not only pretty but also save you from having to turn on floodlights and ruin the atmosphere of the fire. For safety's sake, don't hang them directly above the stove.

MAKE IT COZIER

Small offerings of hospitality, such as a waterproof bin filled with outdoor blankets or family games, turn a regular fire into a party. Landscape architect Chris Miracle of LandWorks suggests using a wheelbarrow filled with ice as an easy way to deliver drinks to your guests. Also consider using stackable trays for snacks and s'more accoutrements.

PULL UP A SEAT

Chairs that are comfy and surround the fire are also essential. Their orientation won't matter, since

smoke isn't blowing in faces and disrupting conversation. However, Fitch says that using stumps or benches that can be pulled up for more seating is a must, especially if you want all guests to feel included—not just the ones who arrived early.

LIGHT YOUR FIRE

For starting a fire, Solo Stove recommends the "log cabin" method: Place small pieces of wood (about 8 x 1 in.) parallel to each other and 4 in. apart. Take two more pieces and stack them perpendicularly on top. Keep stacking until you have four to five layers and what appears to be a log cabin. Place a fire starter in the middle of the structure, and light it.

Once the fire has gone and there's only embers left, put the lid on to help it cool down completely. If you need a faster solution, never use water to put out fire from a Solo Stove; instead, use sand. 

BEST PRO TIPS

fh EXPERT ADVICE FROM THE JOB SITE

DOG-FRIENDLY LANDSCAPE DESIGN

4 “PETSCAPING” PRINCIPLES TO HELP YOU LIVE
IN HARMONY WITH YOUR FURRY FAMILY MEMBERS

BY CHRISTINE CAMPBELL

As you drag out your patio chairs and examine the state of your lawn this spring, you may find yourself joined by a four-legged friend ready for more time in the sun. With more than 80 million dogs living in U.S. households, many homeowners are eager to meet their pups’ needs for outdoor exercise and play—while managing behaviors such as digging, plant destruction and more. This is where petscaping comes in.

Veteran landscape designer Scott Cohen often works with clients to design harmonious spaces for both hound and human. His book *Petscaping: Training and Landscaping with Your Pet in Mind*, co-authored with animal trainer Carolyn Doherty, helps homeowners do the same. Here are Cohen’s top tips for getting started.

MEET THE PRO



SCOTT COHEN IS PRESIDENT
OF THE GREEN SCENE
LANDSCAPING AND POOLS IN
CHATSWORTH, CALIFORNIA.



CHOOSE RUFF-AND-TUMBLE TURF

If your pooch puts your lawn through its paces, consider a traffic-tolerant grass that thrives under your site conditions. Among Cohen’s preferred options for pets are hybrid Bermuda and zoysia (warm-season grasses), and tall fescue and Kentucky bluegrass (cool-season grasses). Another option is to establish a dedicated dog run with sand, pea gravel or artificial turf. Monitor your property’s sun exposure throughout the day before selecting a location—“the hot, sunny side of the house is probably not the best place for a dog, especially in the summer months,” Cohen says.

When it comes to those dreaded pee spots, one foolproof option is laying down artificial turf in a trained relief zone. But if your dog roams freely, watering affected areas right after your dog urinates helps dilute the excess nitrogen and salt before it can settle in the grass’s root zone.

COURTESY OF SCOTT COHEN, THE GREEN SCENE LANDSCAPING AND SWIMMING POOLS



TREAT YOUR PETS LIKE FAMILY

Petscaping allows you to dream up new ways for you and your pet to enjoy the outdoors together. Cohen worked with one client to design a side yard for their family bull mastiff, Broamy. The project, cheekily titled “A Homey for Broamy,” involved establishing a sand dog run outfitted with agility obstacles—and a dog bone-shaped bench for less-agile humans. If your dog prefers to lounge, consider a raised bed that keeps them off a hot deck or patio surface. Some options come with awnings. Other worthy upgrades include outdoor grooming stations, custom dog houses and even decorative fire hydrants. It’s a dog’s life, after all. “If there’s any truth to reincarnation,” Cohen says, “I’d like to come back as a dog.”



WORK WITH YOUR PETS, NOT AGAINST THEM

Certain behaviors are core to your dog’s identity: terriers dig, retrievers swim. “You don’t want to create an environment that counters what they naturally want to do,” Cohen says, as this can lead to even more behavioral problems. Instead, strike a balance between their needs and yours.

If your pooch loves to dig, for example, choose a shady spot you can easily monitor and set up a dig pit. This might be a sand-filled kiddie pool or a hard-scape feature lined with landscaping fabric and bordered with pavers. The key is to provide a visual border that shows your dog the “dig here” zone. Next, hide treats or toys under the top layer of sand and encourage your dog to root them out. They’ll soon learn to contain their digging—and you won’t trip unexpectedly en route to the shed.

To address grass wear from constant fence line patrolling, consider a brick- or flagstone-lined path that will look more finished and be easier to maintain. (If you opt for a mulched path, avoid cocoa bean mulch, which is toxic to dogs.)

And for water-loving pups with pool access, Cohen says, “you have to make sure there’s an entry-exit point that allows the pet to get out of the water safely.” Particularly poor swimmers, such as pugs and bulldogs, may benefit from the added safety of a fully fenced-off pool area. 



PLANT WISELY (AND SAFELY)

While many common backyard plants will cause only mild digestive upset if your pet takes a bite, some, like sago palms and wisteria vines, can cause more serious side effects, particularly in puppies. If you’re working with a landscaper, be sure to raise any concerns in your initial consultation. You can also check aspc.org for a detailed list of toxic plants.

Once you’ve narrowed down your options, line garden borders with grasses, ground covers and shrubs, which can withstand more abuse than delicate flowers and plants that have large, damage-prone leaves. If you do want to grow flowers or veggies, consider raised beds or containers. And when it comes time to fertilize or treat for pests, be sure to heed any package warnings and store the chemicals well out of your pup’s reach.



HOME CARE

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OPERATION: ORGANIZATION

REAL-LIFE IDEAS
FOR CLEVER
AND PRACTICAL
STORAGE
SOLUTIONS
THROUGHOUT
YOUR HOUSE

BY NINA BRICKO

Whether you have a tiny apartment or an enormous house, finding a spot for everything can be a challenge. And purchasing all the premade solutions you can find at a store can be overwhelming—and costly. The good news is that there are lots of little hacks you can do with leftover materials you might already have at your house. Have some PVC? Let's make curling iron holsters. Old closet rod? Create handy clothing storage in your laundry room. These simple solutions and easy builds will help you minimize clutter and make what you need more accessible.

BATHROOM

My bathroom tends to be a travesty, with damp towels on the floor, curling iron cords dangling and just waiting to be stepped on, crumpled tissues strewn about and all-consuming bath toys. These ideas helped me change things.



BATHTUB TOY ORGANIZER

Taking a shower in a sea of bath toys is something every parent has experienced. It's time to get creative at the dollar store. Grab a tension rod, shower curtain rings and open-mesh bins. Hang the mesh bins on the rod and you have an easy system for cleanup that will also dry the toys for next time.



SWINGING TRASH

The trash can is never in a good spot and, well ... it's ugly. Plus, it takes up precious floor space or is tucked oddly next to the toilet—gross. Under the sink and attached to the door, it's accessible and leaves some under-the-sink room for more storage! Screw wire shelf anchor clips to the inside of the door and hook the lip of a small wastebasket right on the hooks. Done and done.



TOOTHBRUSH MOUNT

Toothbrushes take up a lot of counter space. Here's a clever storage idea: Make a holder for them using large grip-type clips. Mount the clips on your medicine cabinet or on a piece of wood that you can hang on the wall. The clips work great to keep your toothbrushes secure! Now, if only we could get the kids to hang their wet towels.

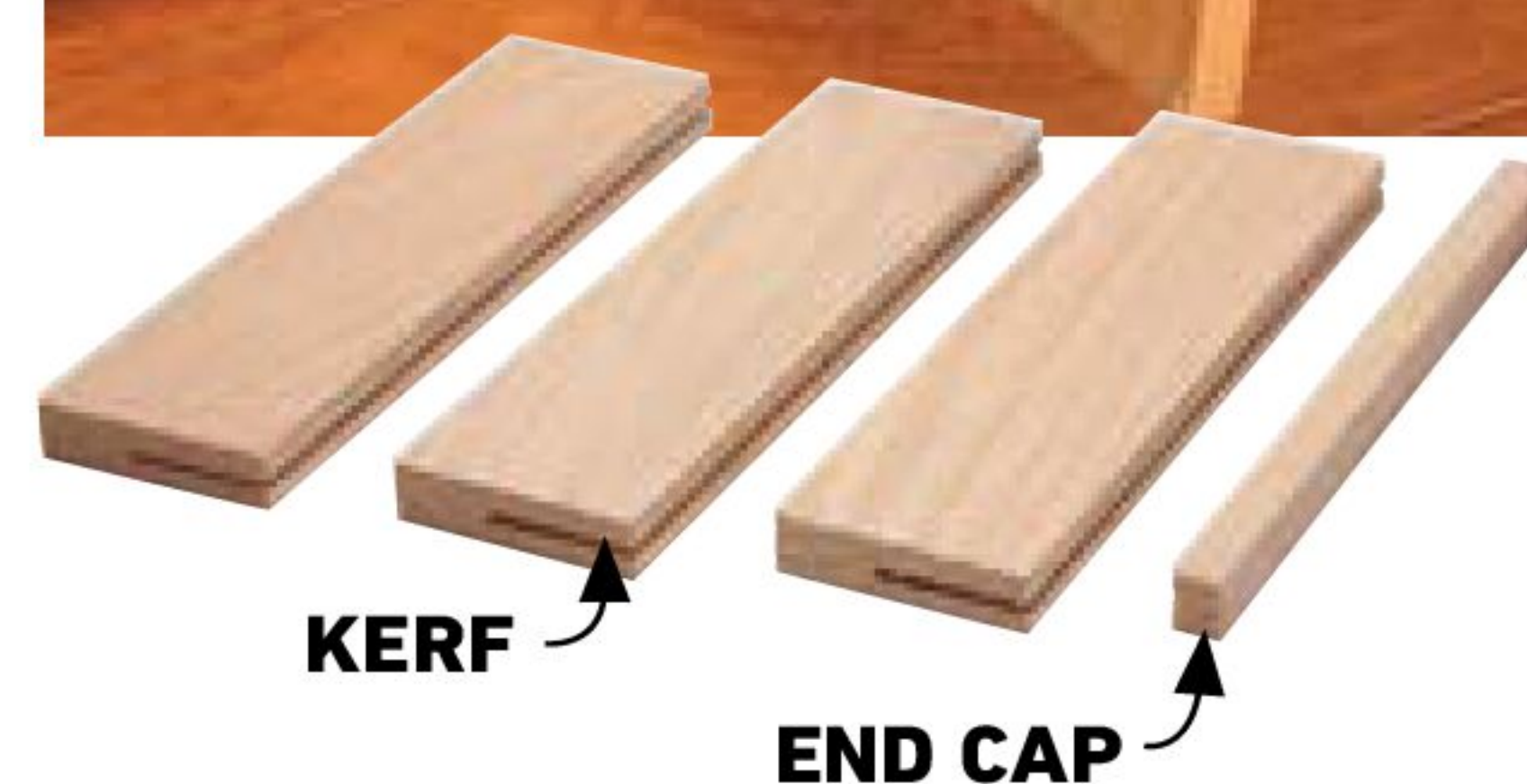
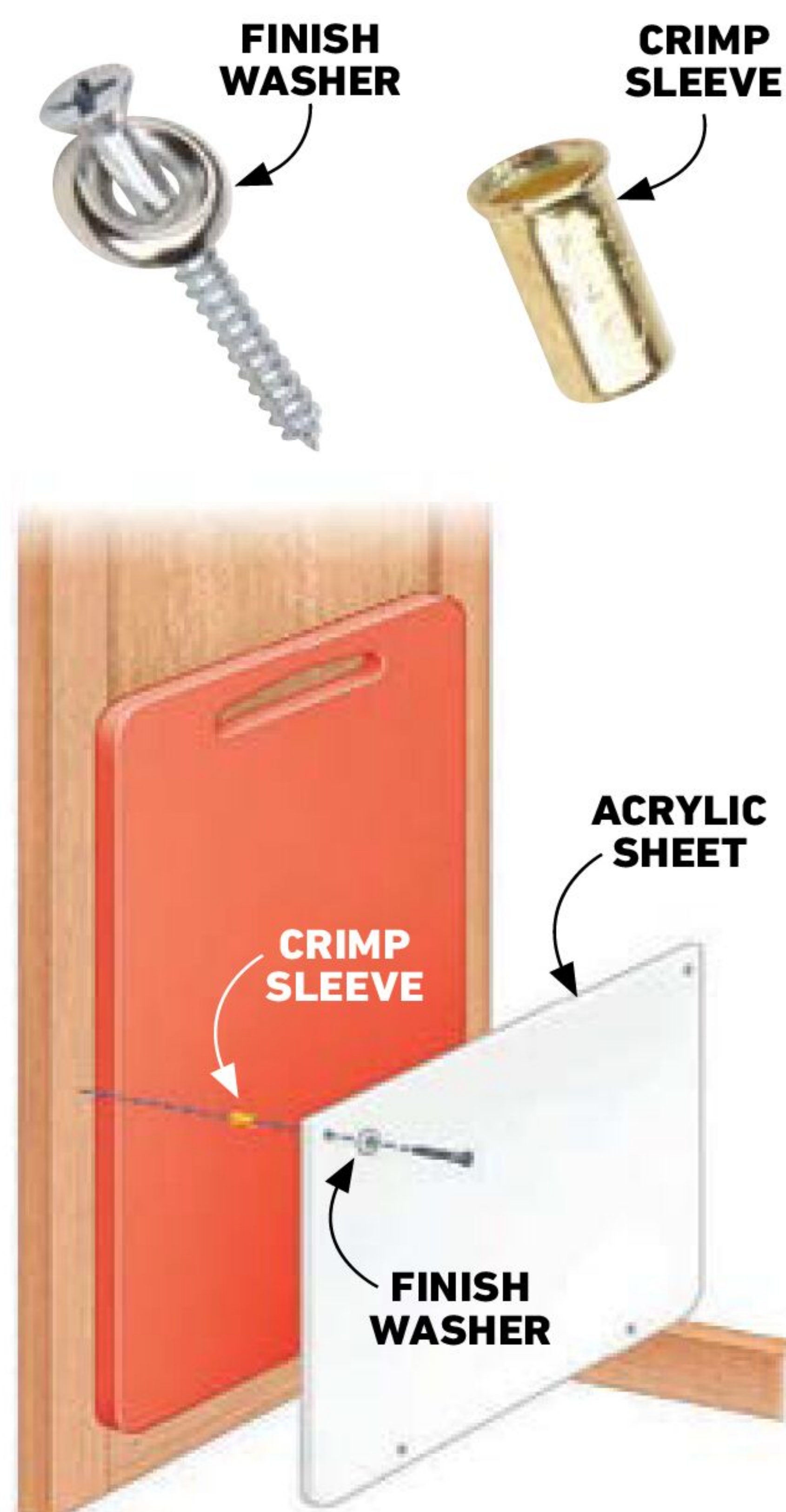


PVC CURLING IRON HOLSTERS

First, you'll need to get those curling iron cords off the floor and wrapped up neatly. Then use hook-and-loop tape to attach 5-in. lengths of 2-in.-dia. PVC pipe to the vanity door to hold the barrels. Repeat with 3-in. pieces of 1½-in.-dia. pipe to hold the cords. Just measure your curling irons to see how long your "holsters" need to be.

KITCHEN

My husband has uttered a few unsavory words in our kitchen as he pulled out piles of bowls and dishes to find the one small thing he needed. Use these tips to get your space organized enough for anyone to roll in, grab what they need and get cooking.



CABINET DOOR CUTTING BOARD STORAGE

Cutting boards are often too long or too clunky to fit on shelves or in cabinets, so where are you supposed to store them? I nearly squealed with joy when I found this hack. Essentially, you are mounting a cutting board rack on a cabinet door. Use a sheet of 1/4-in.-thick acrylic plastic; plywood would also work. Cut the acrylic with a table saw or circular saw (be sure to cut slowly). Knock off the sharp edges with sandpaper and round the lower corners with a belt sander. Affix the acrylic to the cabinet door with four screws and finish washers; No. 14-8 crimp sleeves (sold in the electrical aisle at home centers) make good spacers, but any type of tube or even blocks of wood would work.

CABINET DOOR KNIFE RACK

Sharp knives hanging about with your other cutlery just waiting to cause an accident? Use your cabinet door. (The higher the better if there are kids in the house.) To build this cutting board turned knife rack, you just need a table saw and wood scraps. Run the scraps across the saw on edge to cut kerfs. Adjust the blade height to suit the width of the knife blades. You have to remove the saw's blade guard for these cuts, so be extra careful. Also cut a thin strip to act as an end cap. Glue and clamp the kerfed scraps together and sand the knife rack until the joints are flush. To mount it, use two 1 1/4-in. screws and finish washers.



MOLDING TO HANG WINE GLASSES

Stemware doesn't sit well in a cabinet. Using T-molding designed for wood floor transitions, I've made the perfect rack for stemware. Just cut it to length, predrill screw holes and screw it to the underside of a shelf. For a neater look, use brass screws and finish washers. Prefinished T-molding is available wherever wood flooring is sold.



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KITCHEN TIPS (CONTINUED)



SHELF SMARTS

Small plates go on big plates, and then bowls go on the top. This is how my cabinet is organized. It's fine until you need a small plate. Most cabinets just have one or two shelves. But wait! Why not add another shelf—why not two? All it takes is $\frac{3}{4}$ -in. plywood and a bag of shelf supports. I wish I would have thought of it sooner.

Note: The supports come in two diameters, so take an existing one to the store to make sure you get the right size.



MEASURING CUP STORAGE RACK

Make sure you can always find those pesky measuring cups and spoons. Hang them on a cabinet door. Position and mount a wood strip so that the cups will hang between the shelves and allow the door to close completely. Mount a second strip for your measuring spoons, then screw in cup hooks on both strips.

LAUNDRY ROOM

The dreaded laundry room with its soaps, baskets and iron. The cabinet above the washer and dryer is too high for a shorty like myself, so I tend to leave the necessities on top of the machines, which can be a problem when doing multiple loads. What I need is a simple solution that I can reach.



CLOSET ROD AND SHELF COMBO

The obvious solution is to add a shelf that you can reach with or without a stool, but if you are going that route, you might as well purchase shelf brackets that include a hook for a clothing rod. Now you can hang up your shirts and jackets as soon as they're out of the dryer—no more wrinkled shirts at the bottom of the laundry basket.



HIDDEN SHELVES

A cabinet above the washer is fine to store things for later, but what most shorties need is a shelf that's accessible. When you've got a small laundry room, it can be challenging. That's why a set of shallow shelves behind a door is the perfect remedy. This space is often overlooked and is just aching to be used. Just make sure to screw the shelves into studs and put a rubber bumper on the frame to protect the door. Voila! 

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