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Any Kid Will Love

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TV Host Samantha Pynn's Stylish City Retreat

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P. 18

GEAR UP

Sizzling Grill-Buying Guide

JULY/AUGUST 2024

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Yes, It's All Fun and Games

With summer underway, playing outside isn't only an option—it's the best thing you can possibly do



If you were to tell 7-year-old me that in my middle age I would be spending time in a humongous treehouse, I wouldn't have believed you. I mean, sure, I've heard of "she sheds"—those backyard havens where you can escape with a book and a glass of wine. But a treehouse? Nah. Never.

Still, from the moment I moved into my home, fully equipped with a hand-built treehouse in a massive oak tree, I knew that I was going to be regularly hanging out there, *Swiss Family Robinson*-style. And so would my two teenage boys.

We are lured there for the same reason: There's a certain magic in climbing to a secluded perch in the midst of budding leaves with a far-reaching bird's-eye view. And, you better believe, it truly is a great place for bird-watching!

My point is simple: You're never too old to play, seek adventure and see life from a different angle. Our cover story project, an A-frame

playhouse, illustrates this perfectly. It's a dream for an ambitious DIYer—who wouldn't want to bask in the glory of building and then enjoying a play space with floor-to-ceiling views of the sun and stars?

But even if you don't plan on doing this project, we hope it sparks your sense of discovery and imagination. If you're on the hunt for quicker, easier projects, we've got those in this issue too. Check out our guide to building classic swings, from disk to plank to tire varieties.

Is throwing a party more your way to play? Look no further than our Mini Makeovers section featuring outdoor entertaining must-haves and tips for making a casual party look fancy in moments. (Of course, you're always welcome to break out the beanbags.)

As summer starts to cast its glow, I hope you make the most of it. Take in the sunshine and give yourself the time you need to tackle projects on your to-do list. Most of all, I hope you find time to kick back, take in some gorgeous views and simply play.

Kelly Aiglon, Deputy Editor



Must-Have Book

We've taken all the expert information we've gathered in over 70 years of publishing *Family Handyman* magazine and condensed it into one essential book: *850 Things Every Homeowner Should Know*. Packed with tips for every room of your home and outside, it's a must-have. Get it now for \$10—shipping is free. Order at familyhandyman.com/SP22.



Send Us Your Handy Hints

Our most popular section of the magazine needs you! Do you have hints, hacks or tips related to home office spaces? Share them with us and they may be published with your name. Just go to familyhandyman.com/submissions and send us a photo if you have one.

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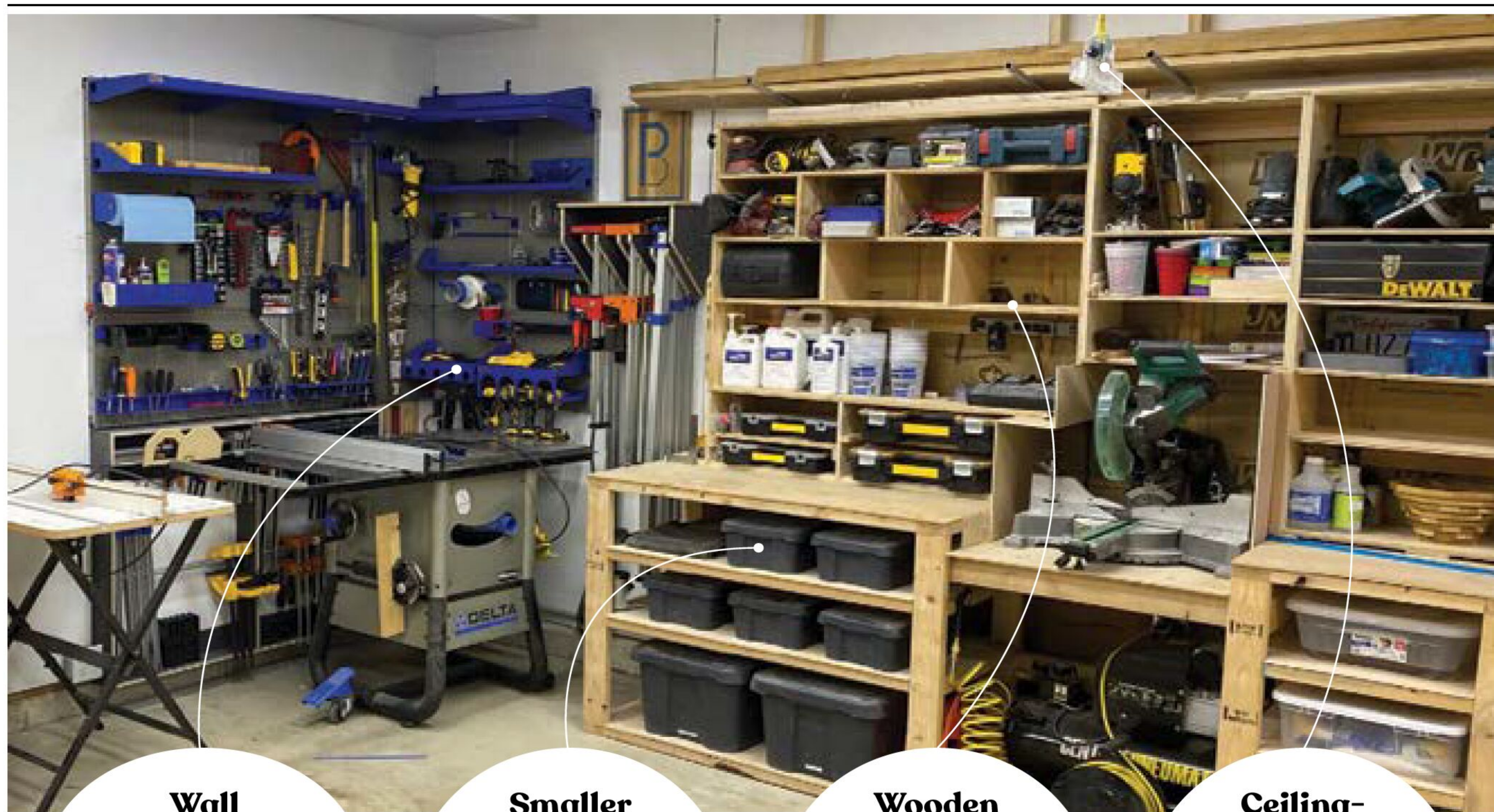
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A Multifunctional Garage Workshop

Brad Allred, host of *Workshop It*, created an organized space where both cars and DIY essentials can coexist

When Brad Allred set out to create his garage workshop, there was one stipulation: “My wife said we still had to fit two cars in it.” A challenge? Yes. Impossible? No, as proved by Allred’s creative use of every corner and wall. He created wooden storage units

to fit tools of all shapes and sizes. To avoid circuit breaker issues, he installed 120V circuits to run multiple tools at a time. Most importantly, he made many elements of the shop mobile to wheel out of hiding when needed. Here are a few main takeaways from the project. —Kelly Aiglon



Wall Hangers

“A new, improved version of pegboard made of steel allows me to organize and access my tools. Any wall organizational system is a way to maximize space.”

Smaller Tools

“Items I use most often like hand tools, drills and fasteners are out in the open. Other smaller items are in bins, which can be picked up and carried over to the workbench.”

Wooden Storage Shelves

“I like open storage space. Cabinet doors may look nicer, but being able to see the tools and supplies I have makes being creative and problem-solving much easier.”

Ceiling-Mounted Extension Cord

“A ceiling-mounted extension cord was a critical addition. I placed it in the middle of the shop to allow for easy access to power anywhere in the space, not just near a wall.”



Discover more creative shop builds on Allred’s show, *Workshop It*, by streaming the *At Home with Family Handyman* channel on Samsung TV Plus, The Roku Channel and more. Programming information is available at FamilyHandyman.com/tv.

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TIME IS PRECIOUS

Nutritious Shake Can Help

Being a trainer, bodybuilder, and nutrition expert means that companies frequently send me their products and ask for my stamp of approval. Most of the time I dive into research, test the product out, and send the company honest feedback. Sometimes, however, I refuse to give the product a try, because frankly, the ingredients inside aren't real food. And I'd rather drink diesel fuel than torture my body with a chemical concoction.

Like my father always said, "What you put inside your body always shows up on the outside."

One protein shake that I received, that will remain nameless, was touted as 'the next big shake' but really had a list of gut destroying ingredients. Everywhere I read I saw harmful artificial ingredients, added sugars, synthetic dyes, preservatives and cheap proteins; the kind of proteins that keep you fat no matter how hard you hit the gym, sap your energy and do nothing for your muscles.

Disappointed after reviewing this "new" shake, I hit the gym and bumped into my favorite bodybuilding coach. This guy is pushing 50, has the energy of a college kid, and is ripped. So are his clients.

While I firmly believe that the gym is a no-talk focus zone, I had to ask, "Hey Zee, what protein shake are you recommending to your clients these days?"

Zee looked at me, and shook his head. "Protein shakes are old news and loaded

with junk. I don't recommend protein shakes, I tell my clients to drink INVIGOR8 Superfood Shake because it's the only all natural meal replacement that works and has a taste so good that it's addicting."

Being skeptical of what Zee told me, I decided to investigate this superfood shake called INVIGOR8.

Turns out INVIGOR8 Superfood Shake has a near 5-star rating on Amazon. The creators are actual scientists and personal trainers who set out to create a complete meal replacement shake chocked full of superfoods that—get this—actually accelerate how quickly and easily you lose belly fat and builds even more lean, calorie burning muscle.

We all know that the more muscle you build, the more calories you burn. The more fat you melt away the more definition you get in your arms, pecs, and abs.

The makers of INVIGOR8 were determined to make the first complete, natural, non-GMO superfood shake that helps you lose fat and build lean muscle. The result is a shake that contains 100% grass-fed whey that has a superior nutrient profile to the grain-fed whey found in most shakes, metabolism boosting raw coconut oil, hormone free colostrum to promote a healthy immune system, Omega 3, 6, 9-rich chia and flaxseeds, superfood greens like kale, spinach, broccoli, alfalfa, and chlorella, and clinically tested cognitive enhancers for improved mood and brain function.

The company even went a step further by including a balance of pre and probiotics for regularity in optimal digestive health, and digestive enzymes so your body absorbs the high-caliber nutrition you get from INVIGOR8.

While there are over 3500 testimonials on Amazon about how INVIGOR8 "gave me more energy and stamina" and "melts away abdominal fat like butter on a hot sidewalk", what really impressed me was how many customers raved about the taste. So I had to give it a try.

When it arrived I gave it the sniff test. Unlike most meal replacement shakes it smelled like whole food, not a chemical factory. So far so good. Still INVIGOR8 had to pass the most important test, the taste test.

And INVIGOR8 was good. Better than good. I could see what Zee meant when he said his clients found the taste addicting.

I also wanted to see if Invigor8 would help me burn that body fat I'd tried to shave off for years to achieve total definition.

Just a few weeks later I'm pleased to say, shaving that last abdominal fat from my midsection wasn't just easy. It was delicious.

Considering all the shakes I've tried I can honestly say that the results I've experienced from INVIGOR8 are nothing short of astonishing.

A company spokesperson confirmed an exclusive offer for our readers: if you order INVIGOR8 this month, you'll receive \$10 off your first order by using promo code "FH10" at checkout. If you're in a rush to burn fat, restore lean muscle and boost your stamina and energy you can order INVIGOR8 today at DrinkInvigor8.com or by calling 1-800-958-3392.

What's New

Now Trending • Gear Up • Mini Makeovers

The latest
we've heard,
seen, tested
and tried

NOW TRENDING

Take the Oven Outside

Brick and wood models are becoming stars of the yard, offering tantalizing focal points

They say the kitchen is the heart of the home. So why not spread the love outside? Much like fire pits, large-scale alfresco ovens are gathering places in their own right. To create flow with your landscape and up the cozy factor, use natural materials in your build. Wood-fired pizza night, anyone? —Kelly Aiglon



Adventure Awaits

Hiker, triathlete and van-lifer Amanda Capritto shares her road- and trail-tested favorites for outdoor explorers



A Cyclist's Best Friend

When I first started cycling and mountain biking, I balked at the prices of high-end bike racks and bought one for about \$200. That was a \$200 mistake: The rack was so finicky it made me dread going for a ride. When it promptly broke, I took the plunge and invested in the Kuat Sherpa 2.0. Three years later, I have no regrets.

The Sherpa is a popular model due to its middle-of-the-road price, durability and ease of use. If you show up to a triathlon race, you're likely to see more than a few in the parking lot. The tray-style, hitch-mounted rack carries up to two bikes weighing up to 40 lbs. each. The aluminum rack is surprisingly lightweight on its own, making it easy to install and remove from your hitch receiver. If you prefer to leave it on when not in use, it folds up for a lower profile, which I find particularly helpful in parking lots. Even with bikes loaded, the rack tilts down, allowing you access to your vehicle's trunk.



A number of other handy features help to keep your bikes safe and secure: The Sherpa's expanding cam system tightens the fit in the hitch receiver, making for a quiet, smooth ride; an adjustable ratchet arm locks the bike's front tire in place; and an included cable lock protects your bikes from theft. (A locking hitch pin that uses the same key protects the rack itself.) If you ride road, time-trial or mountain bikes with standard wheel and tire sizes, the Sherpa 2.0 is an easy choice.

Kuat Sherpa 2.0 Bike Rack, \$689; kuat.com, REI, Amazon

VIA KUAT

These Hiking Boots Go the Distance

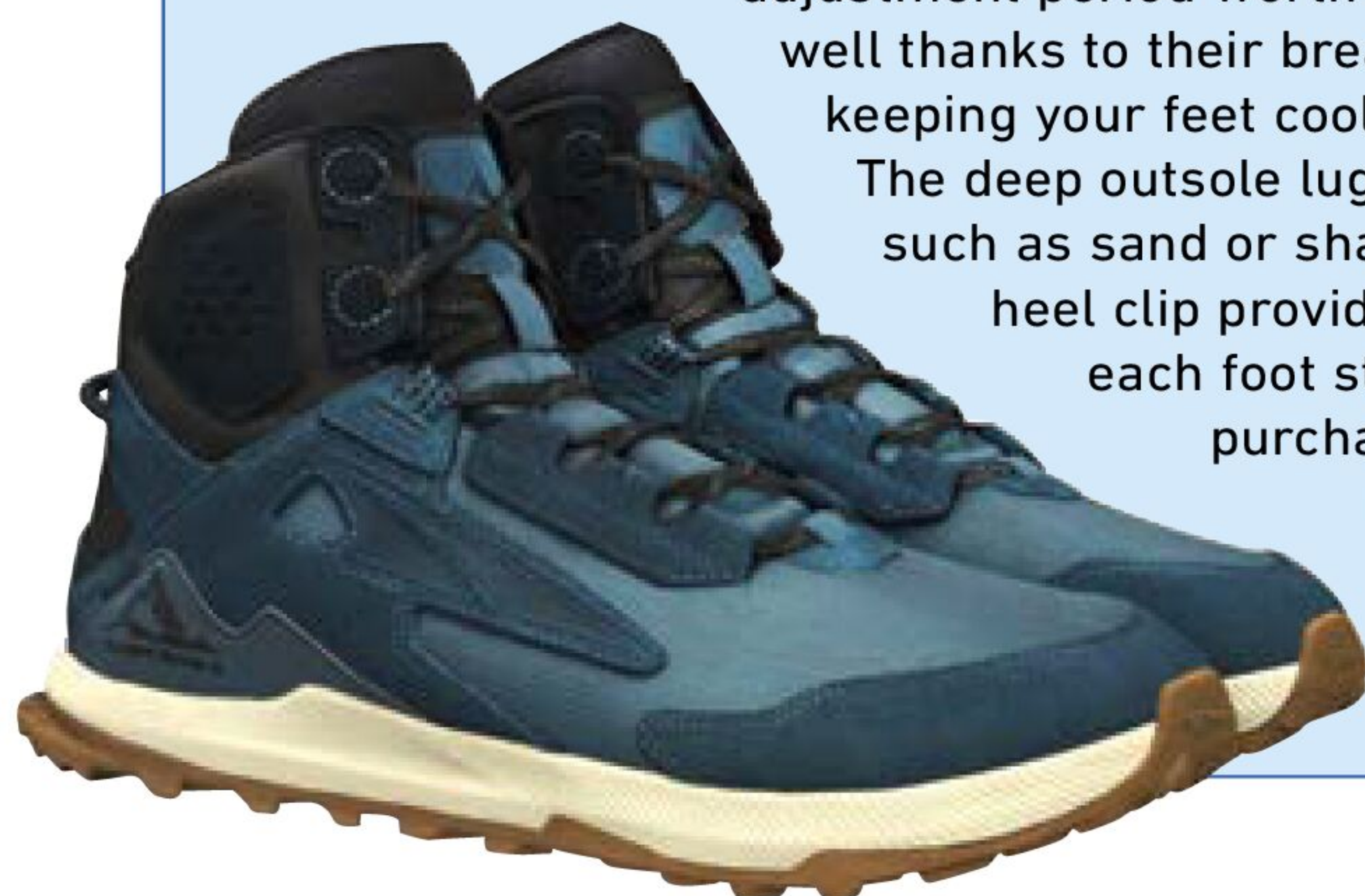
I've worn my Altra Lone Peak Hikers everywhere from South Florida scrub forests to 14,000-ft. peaks in Colorado. After more than 200 trail miles, they're still my go-to for almost every type of hike.

When I'm wearing them, as cheesy as it may sound, I feel closer to the ground and more connected with the trail. The boots' flexible soles move with your feet through each stride, and the ultrawide toe box and zero-drop design allow plenty of wiggle room for your toes to splay and grip naturally over uneven terrain. Be warned: If you're used to more cushioned shoes with a substantial heel-to-toe drop, take your time adjusting to the zero-drop style. Starting with a long trek may lead to some discomfort.

That said, there are plenty of other features that make the initial adjustment period worth it. Lone Peaks drain well thanks to their breathable mesh upper, keeping your feet cool and reasonably dry.

The deep outsole lugs grip slippery terrain such as sand or shale, and the extended heel clip provides extra stability with each foot strike. I will definitely be purchasing another pair when mine (finally) wear out.

Altra Lone Peak Hiker 2, \$150; Amazon, REI, altrarunning.com



Power Where You Need It

When I'm living on the road, off-grid power is precious. Thankfully, the Jackery Explorer 500 Portable Power Station makes it easy to keep my devices charged without risk of a drained van battery. With a 518-watt-hour capacity, 500-watt inverter and 1,000-watt surge, the Explorer 500 is on the lower end of Jackery's lineup, but it's plenty powerful for charging small devices such as cellphones, GPS watches, laptops and earbuds. This model supports multidevice charging (via three USB-A ports, two 6-mm DC outlets, one 120V AC outlet and one 12V DC outlet), is lightweight and portable, and comes with a built-in LED flashlight that's convenient for hike-in camping.

Depending on how many devices I'm charging, the Jackery lasts me anywhere from a few days to a week from a full charge. When it's time to recharge it, you can do so via an AC outlet, a 12V DC outlet or a compatible Jackery solar panel. The power station supports pass-through charging, meaning you can charge your devices as it recharges, and it maintains its charge while dormant, making it a reliable companion wherever the road takes me.

Jackery Explorer 500 Portable Power Station, \$499; Amazon, jackery.com •

Sturdy, Stackable Storage Box

Yeti describes its LoadOut GoBox as "virtually indestructible," and after using one for about two months, I tend to believe it. The ultradurable, multi-purpose storage box is made from Yeti's thick and hefty Defender material. The lockdown latch produces a satisfying seal, and prefab holes on either side of it are compatible with padlocks or one of Yeti's bear-proof locks. Better yet, dual IP65 and IP67 waterproof/dustproof ratings mean the box is completely submersible in water and entirely resistant to dust entry.

Popular uses for the GoBox include holding a camp kitchen setup or protecting essentials on kayak trips. I've been using the smallest of three sizes, the GoBox 15, as an electronics vault in my camper van. The 15-liter box holds (and organizes) my charging cables, extension cords, and battery packs, and sometimes delicate equipment like my camera and lenses as I travel along bumpy roads. The GoBox 15 comes with one removable organizational caddy, while the two larger sizes have room for additional caddies and include a divider and mesh pouch that offer more versatile storage.

Though there are similar models on the market without Yeti's eye-watering price tag, the GoBox lives up to its indestructible reputation and is a great choice if you're looking to splurge a bit on adventure gear.

Yeti LoadOut GoBox 15 Gear Case, \$125; yeti.com, REI



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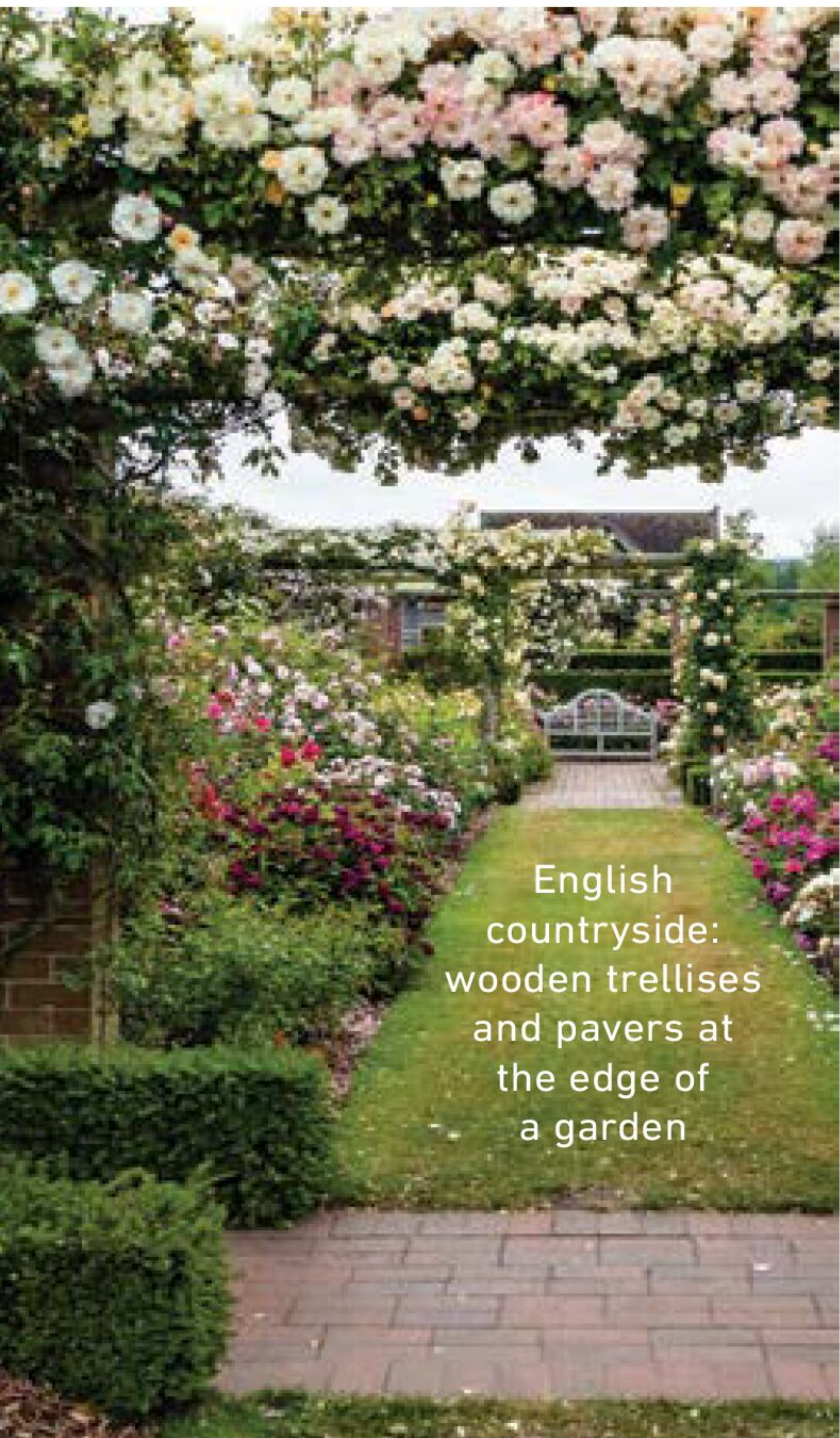
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Patio Pick-Me-Ups

Turn your backyard into a vacation destination, build an outdoor table, discover entertaining must-haves and more

BY KELLY AIGLON



English countryside: wooden trellises and pavers at the edge of a garden



Tropical island: bamboo, rattan and lush plants



Southwest: painted walls, terracotta decor and cacti

GET INSPIRED

Vacation Destination: Your Patio

Summer might have you dreaming of traveling, but you can get that fresh-new-place feeling right at home. Take a cue from these immersive environments that thoughtfully use botanicals, furniture and lighting to set a scene. Whether you use your patio as a private haven or entertaining oasis, it will feel like a getaway.

CLOCKWISE FROM TOP LEFT: TETIANA SOARES/GETTY IMAGES; MELANIMAYA/GETTY IMAGES; BORIS SV/GETTY IMAGES



GEAR UP

Outdoor Entertaining Must-Haves

Combine bold colors with innovative design and technology, and you've got yourself a party

1. Double-duty insulated cooler

For mimosa bars or taco bars, this is a go-to. Displayed beverages can be grabbed without digging through ice. Condiment trays keep their chill to take the heat off the food. *REVO Dubler Cooler*, \$160; revocoolers.com

2. Fade-resistant portable umbrella

These sturdy canopies

block UV rays, while resisting fading, dirt and mildew. Choose from 40-plus colors and patterns. *Round Outdoor Market Umbrella*, \$450; frontgate.com

3. Lantern speaker

Bring music and light to any corner of the party. Small but mighty, this has hi-fi surround sound and Bluetooth tech. *Uma Sound Lantern*, \$600; cantoni.com

4. Eco-friendly napkins

Skip the paper towel waste and try these reusable cloth napkins—what a perfect way to add a little color to the fun! *UNpaper Towels*, \$38 for a 12-pack; marleysmonsters.com

5. Umbrella drink markers

Keep tabs on your drink. Clip a cute 'brella on your glass to stake your

claim. Made of food-safe silicone. *My Tia Markers*, \$12 for a 6-pack; genuinefred.com

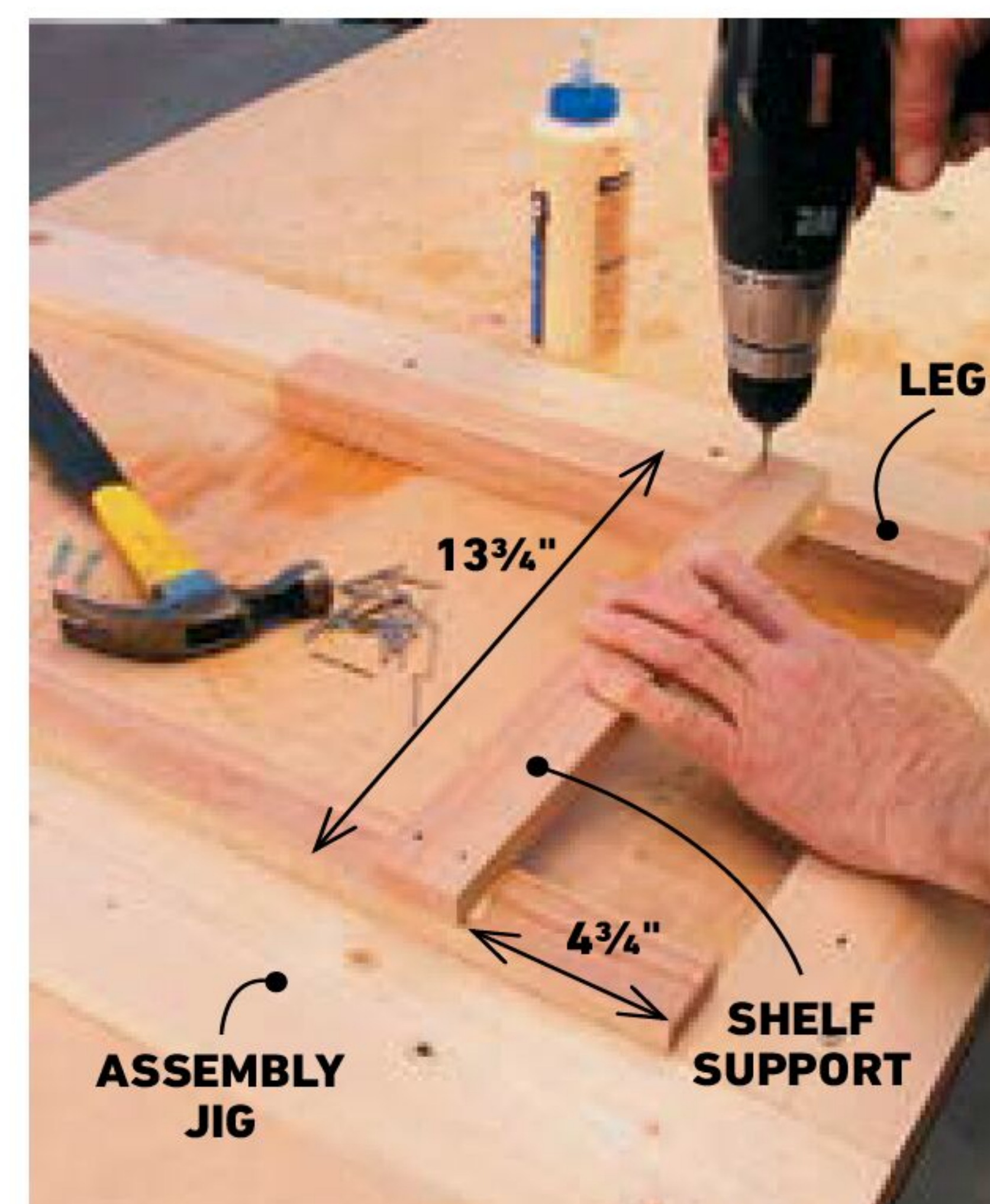
6. Foldable chair

This modern take on a classic is made from durable resin that's resistant to mildew, UV rays, water and rust. Unexpected guest? Set it up and store it away in a pinch. *Armo Outdoor Folding Side Chair*, \$124; allmodern.com

HOW-TO

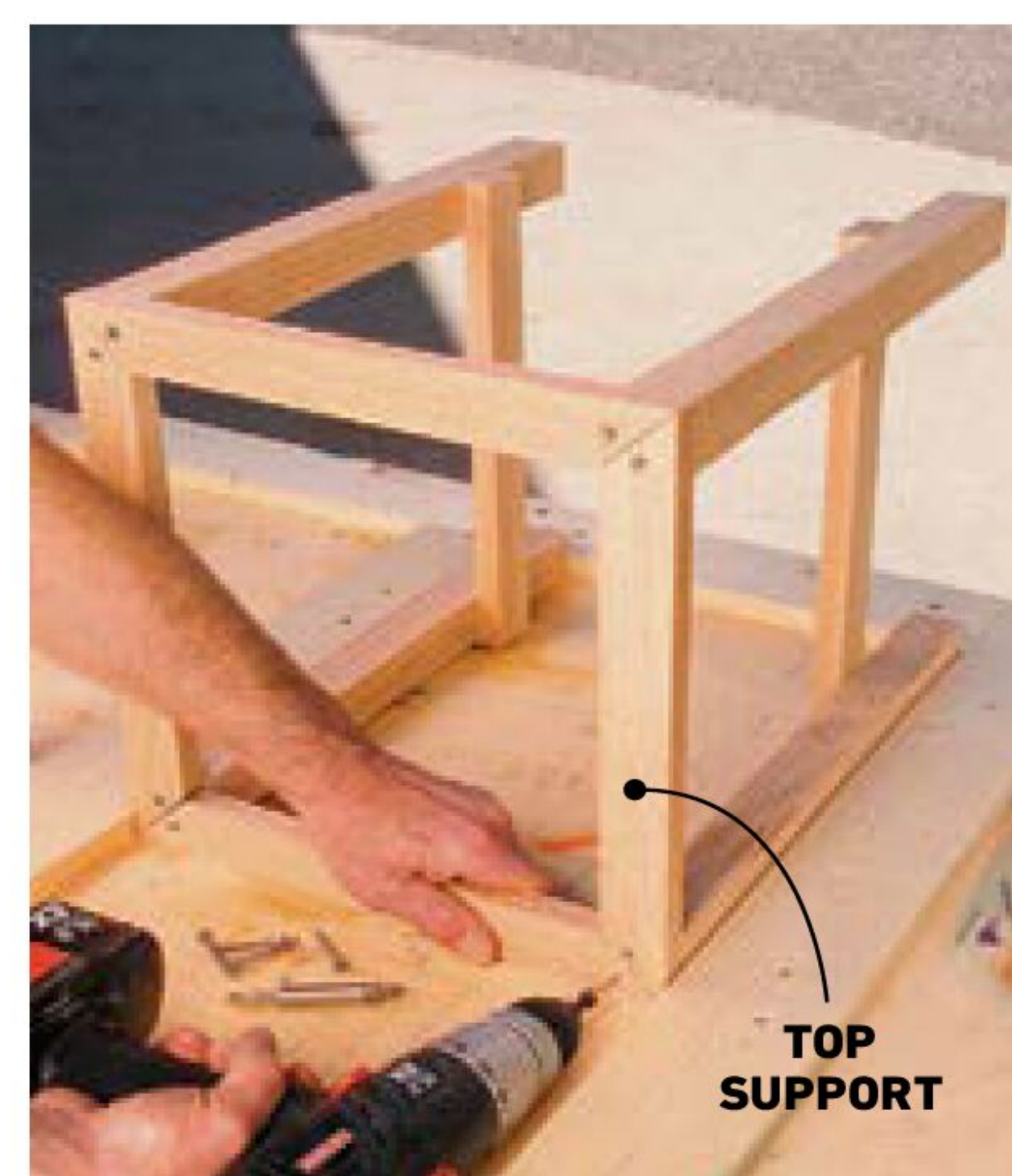
Build a Stone-Top Patio Table

Spruce up your patio with a custom table built from beautiful natural materials that won't break the bank



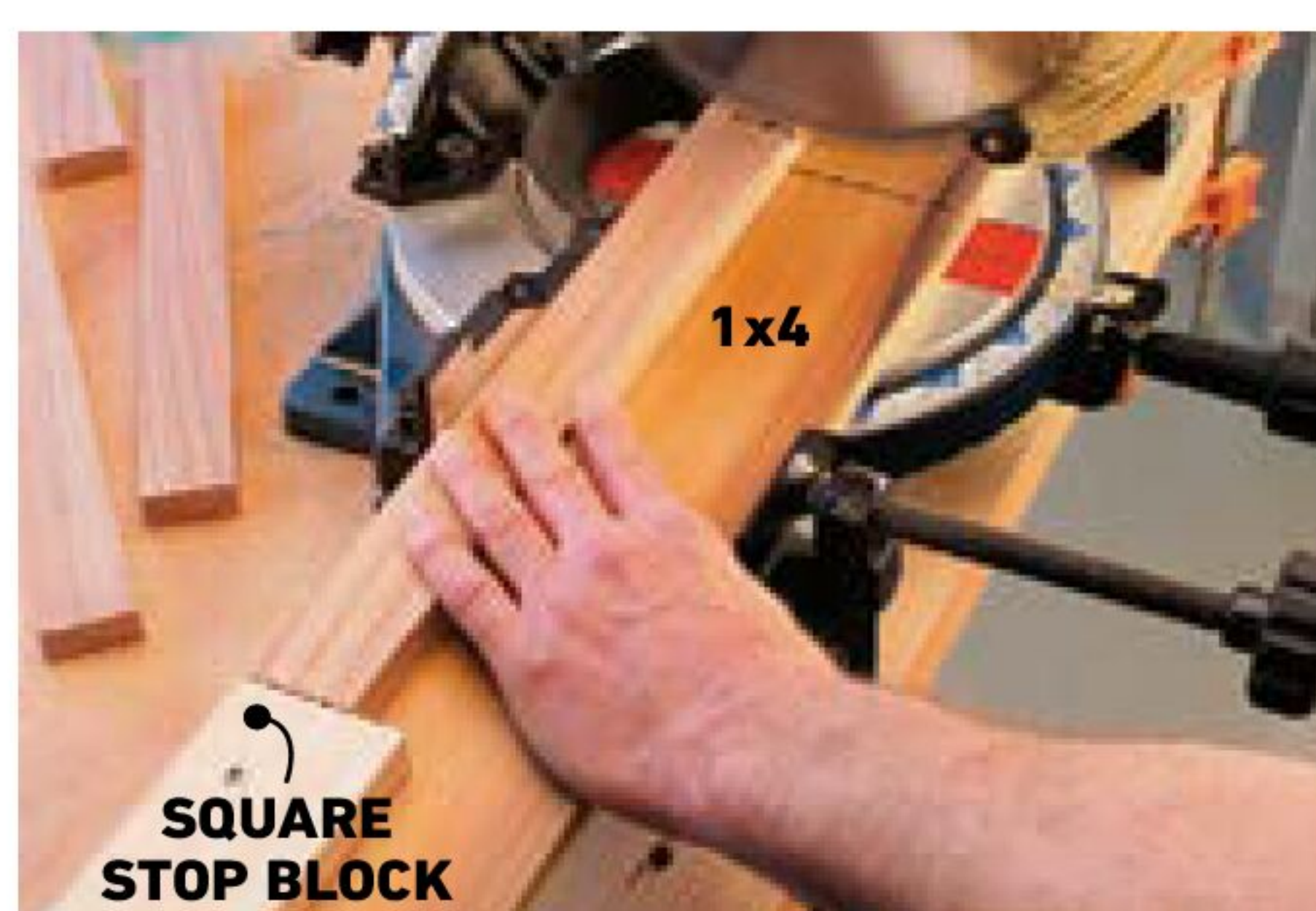
2 SCREW AND GLUE THE SHELF SUPPORTS TO THE LEGS

The shelf supports and legs must meet at 90 degrees. You can position them with a square, but if you're building more than one table, you can speed up the job by making an assembly jig. This jig is made from 1x4s screwed to plywood.



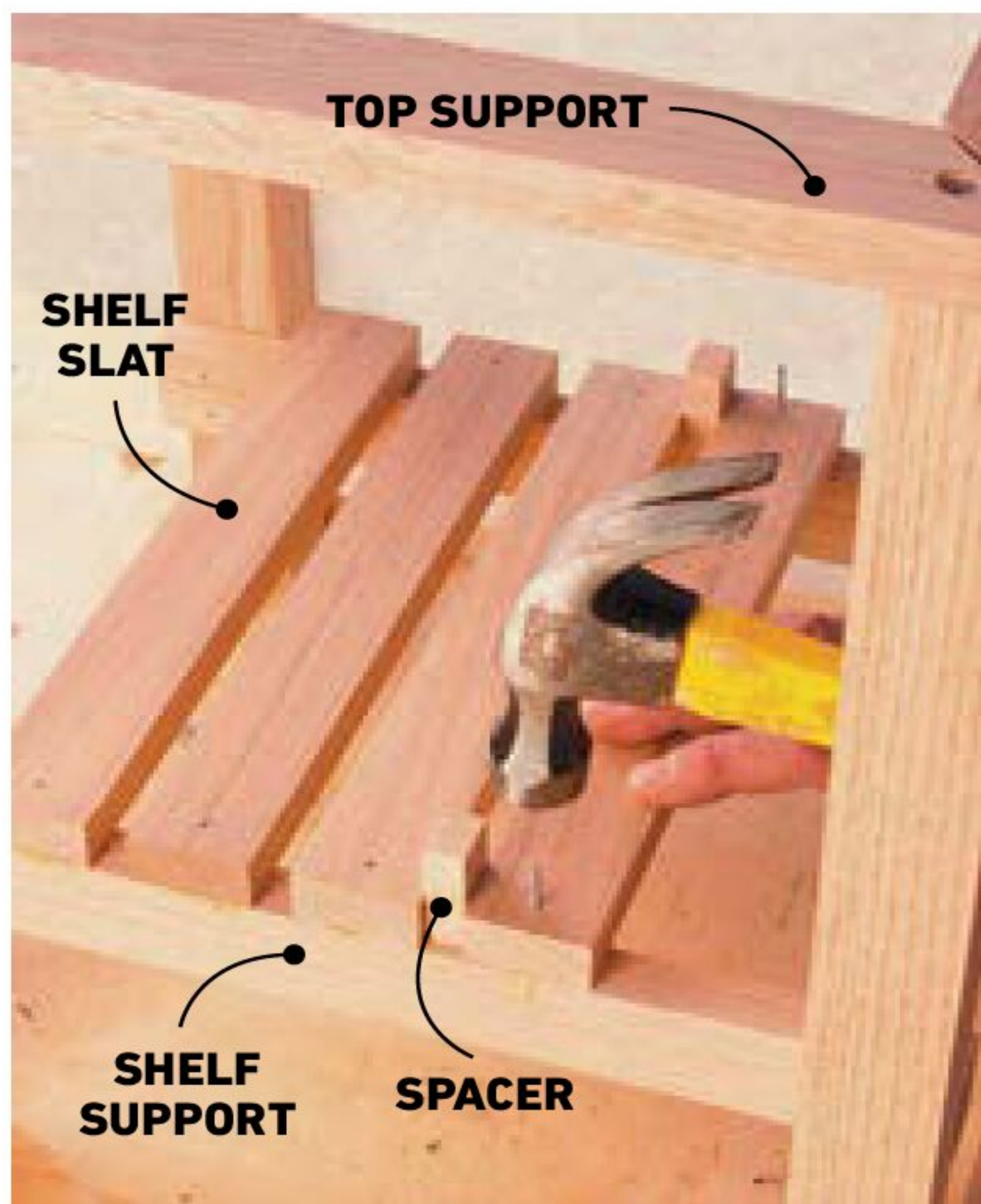
3 ATTACH THE TOP SUPPORTS

Screw the top supports to the legs. Be sure to countersink the screw heads so the tile top will rest directly on the supports.



1 CUT THE PARTS

To cut identical parts without measuring each one, screw a stop block to a 1x4 base. Position the base and clamp it in place. Use a miter saw to cut the top supports at 45 1/2 degrees. That way, they'll join tightly at the visible outside corners. Sand the parts before assembly.



4 INSTALL THE SLATS
Drill pilot holes, then fasten the slats using glue and nails or trim-head screws. Position the slats using ½-in. spacers.



5 GLUE ON THE STONE-TILE TOP
Center the table on the underside of the tile and trace its location. Then, apply construction adhesive and set the top in place. Set weight on the slats if needed. This table was finished with two coats of spar urethane.



More Online

Get the cut list of materials and supplies by scanning the QR code.

QUICK TIPS

7 Tricks to Make Your Next Outdoor Dinner Party Look Expensive

These easy, budget-friendly, surprising ideas will impress your guests

Improve the mood with lighting

Hanging lanterns or string lights will create a soft evening glow to create atmosphere as the sun sets.

Start neutral, then add pops of color

White, ivory or gray tables and chairs set a sophisticated scene. Then add bold touches, like pillows, dishes and napkins in vibrant colors.



Be creative with serving displays

Use your favorite vase as a stylish cupcake or cocktail display. Any dish will look gourmet if turned upside down and topped with a decorative vessel for the food.

Spruce up old furniture

Make your well-loved set of table and chairs look brand new by polishing them with a little WD-40 lubricant. You'll get a smooth, shiny refresh. More ambitious? Try sanding and spray-painting an old kitchen set.

Get crafty

Instead of buying the usual plastic tablecloth from the dollar store, try lining your table with brown craft paper. It looks fancier—and makes for an easy cleanup at the end of the night.

Skip elaborate centerpieces

Place floating peonies or other stemless flowers in small bowls of water for simple yet alluring focal points.

Go vintage

Repurpose glass jars as candleholders by wrapping the tops with metal wire and hanging them from tree branches. Use battery-operated candles—they create the same light without the messy wax. —Brooke Nelson Alexander





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PROTECTING YOUR TRAVEL TRAILER ADVENTURES

Embarking on the open road with your travel trailer is an exciting experience, filled with adventure and the promise of new discoveries. However, ensuring that your journey remains carefree involves more than just planning the perfect route and destination. It involves protecting your travel trailer with insurance customized for you. Here are a few reasons why having insurance for your travel trailer is not just a wise decision, but an essential one.

Peace of mind on the road

Traveling comes with its share of uncertainties, and having insurance for your travel trailer provides you with the peace of mind that you deserve. Whether you're cruising down the highway or parked at a scenic campsite, knowing that your investment is protected can make your travels even more enjoyable.

Protection against the unexpected

Damage to your travel trailer can happen when you least expect it. Comprehensive and collision travel trailer insurance can cover you in case of events that are out of your control, like a tree limb falling on your trailer. Optional Pest Damage ProtectionSM provides coverage for damage from pests such as rats, mice, insects, birds, or other nondomesticated animals.

Coverage for personal belongings

Your travel trailer is not just a mode of transportation; it's your home on wheels. Optional personal effects coverage can help cover the cost of personal belongings inside the trailer, providing financial assistance in case of theft or damage.

When auto insurance isn't enough

Auto insurance generally provides coverage for your travel trailer only when it is connected to your vehicle and may assist in cases where your trailer causes damage to another vehicle. However, it typically does not provide standalone coverage for repairing or replacing your trailer if it sustains damage or is totaled.

You can choose travel trailer insurance options that help cover those expenses and may even offer the benefit of total loss replacement coverage.

When homeowners insurance isn't enough

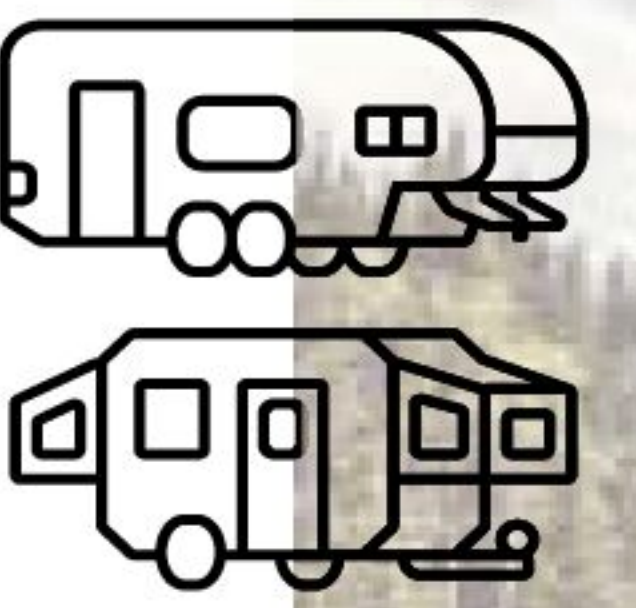
Homeowners insurance may provide some coverage for your belongings, but often has limitations when the trailer is off your property. A customized travel trailer insurance policy can ensure that your trailer and belongings are adequately covered.

Liability protection

Accidents involving your travel trailer can also lead to liability issues. Insurance can provide protection against third-party claims, covering medical expenses or property damage that may arise from an incident involving your trailer.

Insuring your travel trailer is not just a precaution; it's a commitment to a worry-free travel experience. Safeguard your investment, enjoy the journey, and make every moment on the road a memory worth cherishing. Start your adventure with the confidence that comes from knowing your travel trailer is protected against life's unexpected twists and turns.

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What It Takes

Time

3-4 days

Cost

\$850

Skill Level

Beginner

Tools

- Assorted drill bits
- Circular saw
- Drill/driver
- Level
- Miter saw
- Painting/staining supplies
- Sanding block
- Speed or framing square
- Stepladder

POLYCARBONATE
ROOF LETS THE
LIGHT IN





The Power of Play

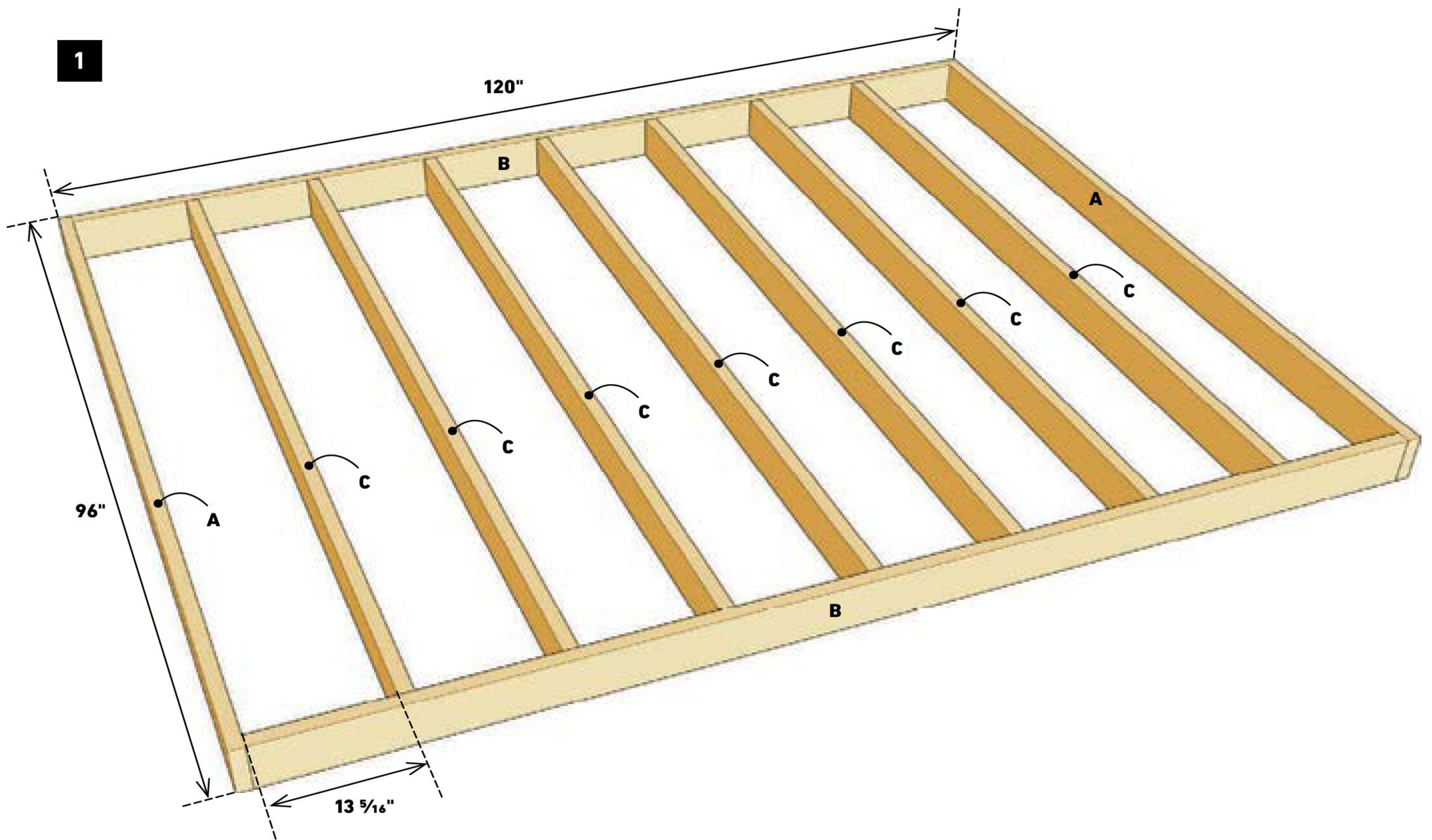
From crafting to game night to dreaming under the stars, the sky's the limit in this versatile A-frame playhouse

BY NINA BRICKO

With its 8 x 10-ft. base and open A-frame, this roomy playhouse is designed to grow alongside the kid in your life and still leave room for all their biggest, boldest ideas. And despite its size, the build is surprisingly manageable. We call for common lumber sizes readily available at home centers, saving you the fuss of complex cuts; two novice DIYers with basic circular and miter saw skills can tackle this project, painting included, in just a couple of weekends.

While I'll guide you step-by-step through the base build and painting, at the end of the day this project is all about creativity. You can easily adjust the dimensions to be 8x8 or 8x6, depending on your space constraints, and once the paint has dried, outfitting the playhouse is up to you. Today, this playhouse might be a home art studio. Tomorrow, it's a relaxing spot to read, the stage for a one-kid show or a secret clubhouse. And here's an added bonus: Helping it come to life may just make you feel like a kid again too.





Materials

Item	Qty.
#10 x 2" galvanized roofing screws with washers	
3/8" x 4' x 8' beaded plywood panel siding	2
3/4" x 4' x 8' exterior-grade/marine plywood	3
1 1/4" deck screws	
2" deck screws	
2x4 x 8'	18
2x6 x 8'	9
2x6 x 10'	2
2' x 8' corrugated polycarbonate roof panels	8
3" deck screws	
3 1/2" deck screws	
Exterior deck finish	
Exterior paint	
Polycarbonate roof panel ridge caps	2

Cuts

Key	Qty.	Dimensions	Part
A	2	2x6 x 96"	Short rim joist
B	2	2x6 x 117"	Long rim joist
C	7	2x6 x 93"	Interior joist
D	10	2x4 x 96"	Wall stud
E	24	2x4 x 22 1/8"	Wall brace
F	2	2x4 x 96"	Wall base plate
G	1	2x4 x 88"*	Back wall base plate
H	1	2x4 x 29"	Center mullion
J	1	2x4 x 52 3/4"*	Under-window support
K	2	2x4 x 18"	Window upright
L	1	2x4 x 28"*	Over-window support

*Cut to fit

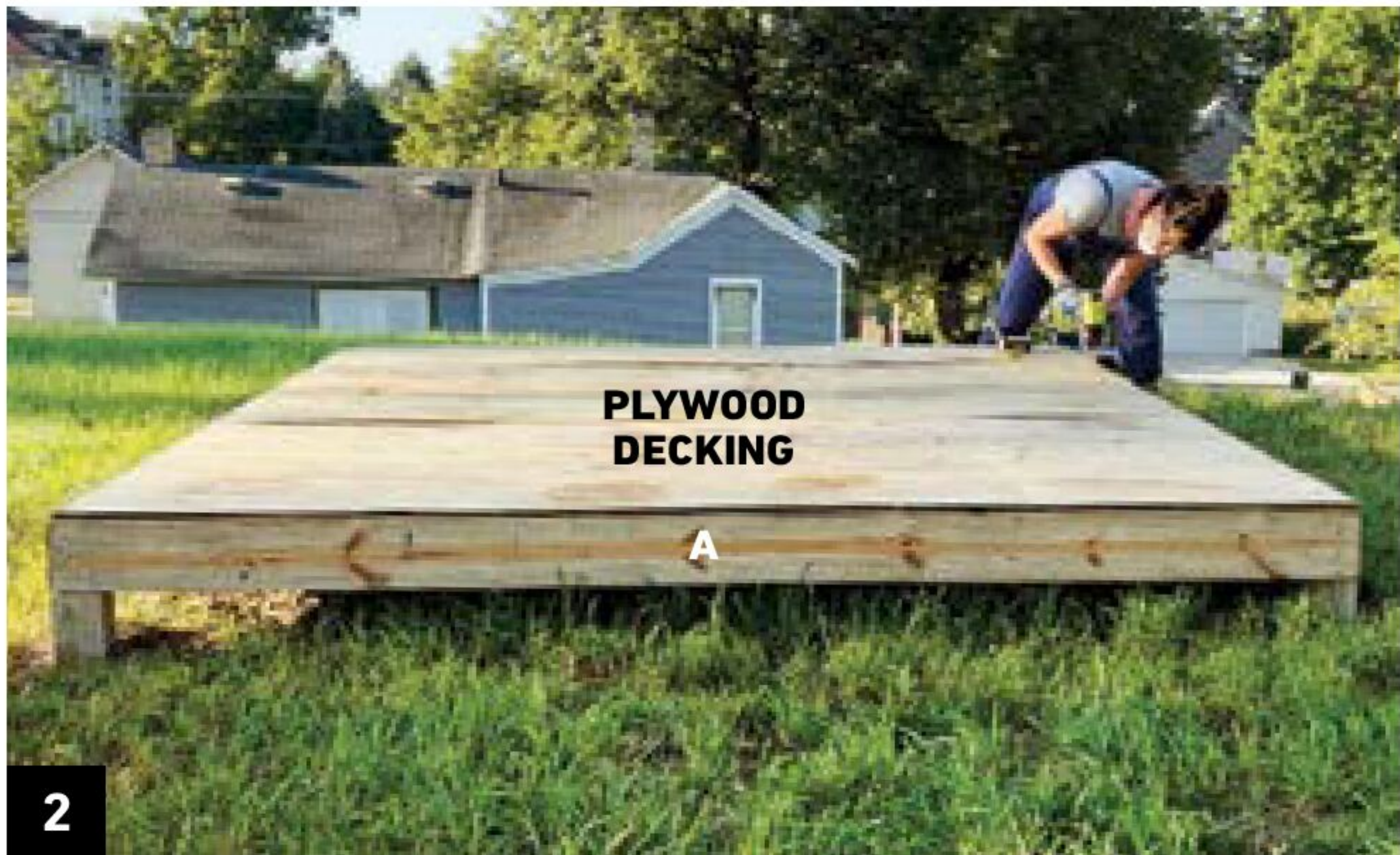
1 BUILD THE PLAYHOUSE BASE

Because the base of the playhouse will be constructed from lumber, it's important to ensure that it won't be sitting in wet soil. I elevated the base on posts, but you could also use cinder blocks or dig out a pad underneath and fill it with gravel for drainage. The platform must be level so that the A-frame sits

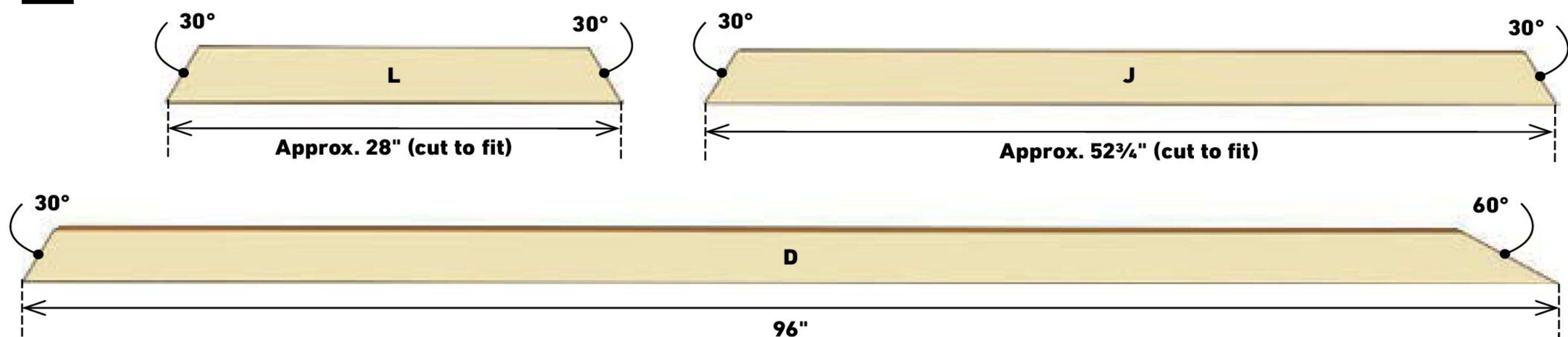
plumb and square as you're assembling the playhouse.

Start by fastening the two short rim joists (A) to the long rim joists (B) with 3 1/2-in. deck screws. You could also use carriage bolts or lag screws if the platform is larger.

Evenly space the seven interior joists (C) inside the rim joists, leaving about 13 5/16 in. between each interior



3



joist. Affix them with deck screws flush with the rim joists' top edges.

2 ADD THE PLYWOOD DECKING

Attach two 4 x 8-ft. full sheets of exterior-grade or marine plywood to the top of the joists with 2-in. deck screws. Use the square sides of the plywood to keep the joists square as you attach them. Use a circular saw to rip the final sheet to cover the remaining exposed platform framing, then secure it.

Ensure the finished platform is square and level before proceeding. Coat the platform with an exterior deck finish and let it dry.

3 CUT THE FRAMING AND PAINT THE A-FRAME STUDS

Cut the remaining parts to size using a circular or miter saw, following the cuts list on p. 20. Note the A-frame wall studs (D), over-window support (L) and under-window support (J) will need angled cuts as detailed above.

Painting the A-frame once it's fully assembled can be tricky, so paint the wall studs, braces (E) and anything else

you'd like to have some color ahead of time. I opted for a vibrant blue paint to make the wall studs stand out from the polycarbonate, but the A-frame could also be finished with a deck stain to protect it from the weather.

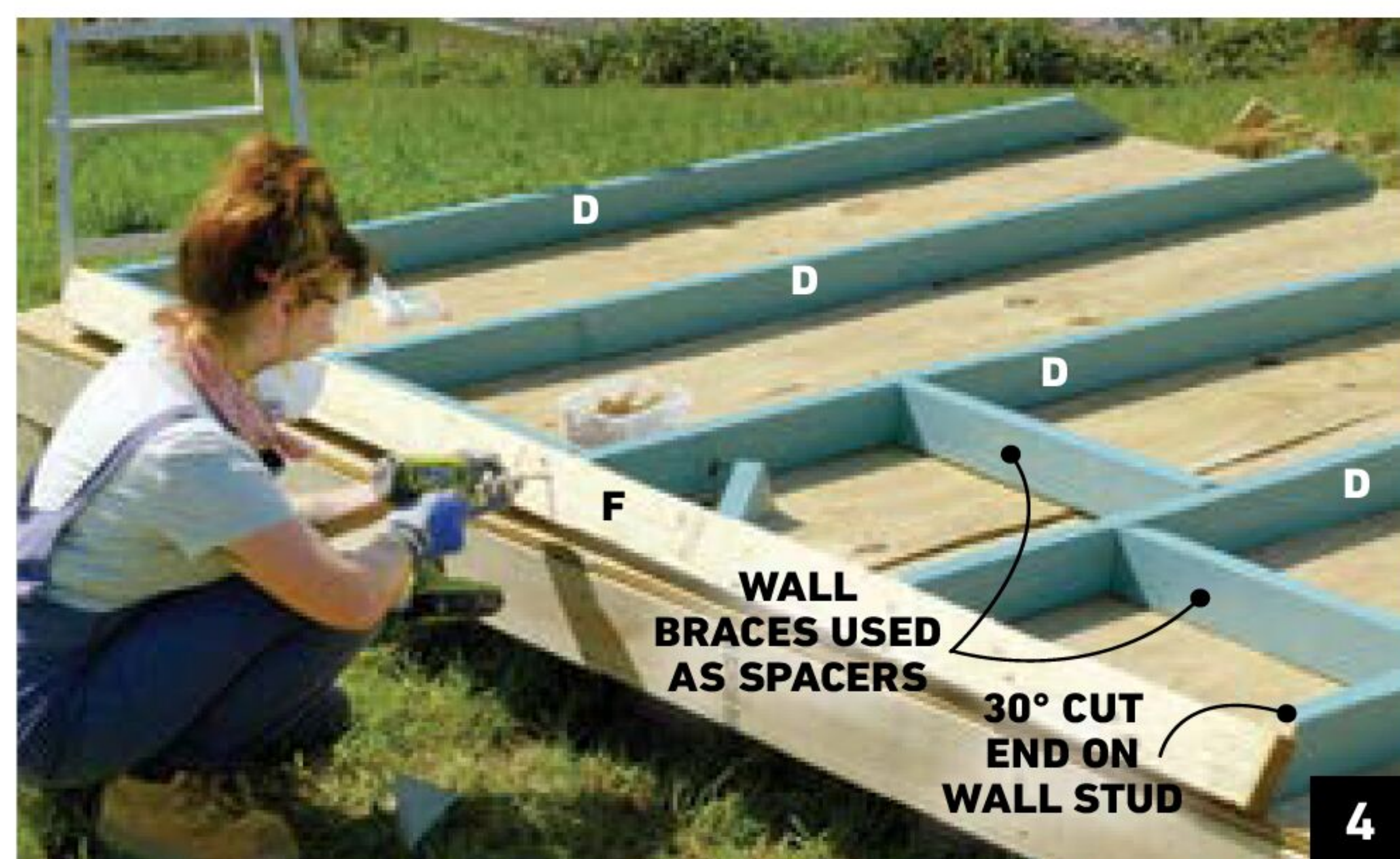
4 ASSEMBLE THE A-FRAME WALLS

Attach the 30-degree cut ends of the wall studs (D) to the wall base plate (F) using 3-in. screws. Install one stud flush with the outside edge of each end of the base plate; use wall braces (E) to space the middle three wall studs evenly.

Next, secure the wall braces between the wall studs. There should be three braces per section—one just below the 60-degree angled top, and the others evenly spaced in the cavity. Stagger them cavity to cavity so you can screw each wall brace to the stud without interference (see Photo 5).

5 SECURE THE FRAMING TO THE PLATFORM

Using 3-in. deck screws, attach the wall base plates (F) to the outside edges of the platform, flush to one end.

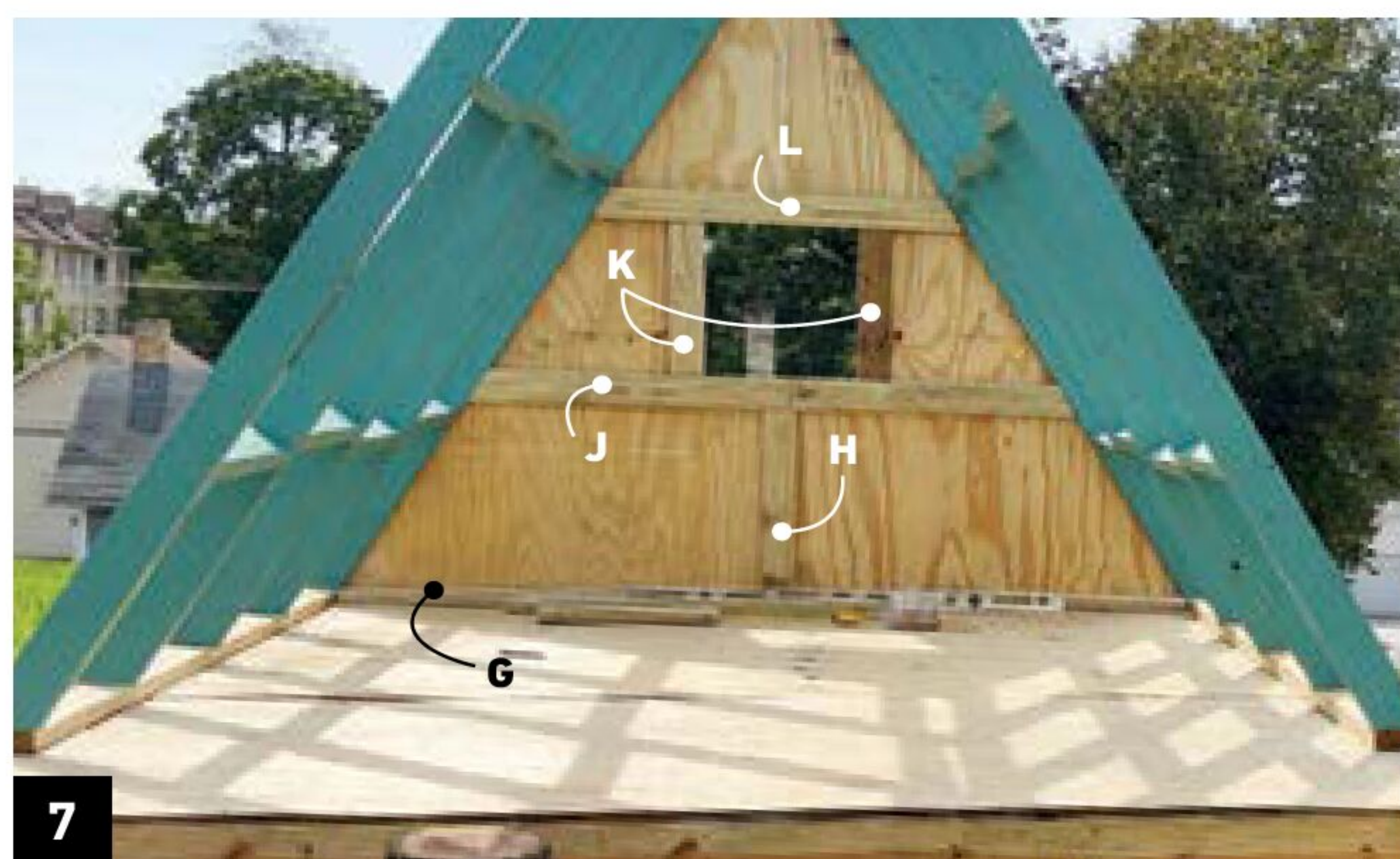
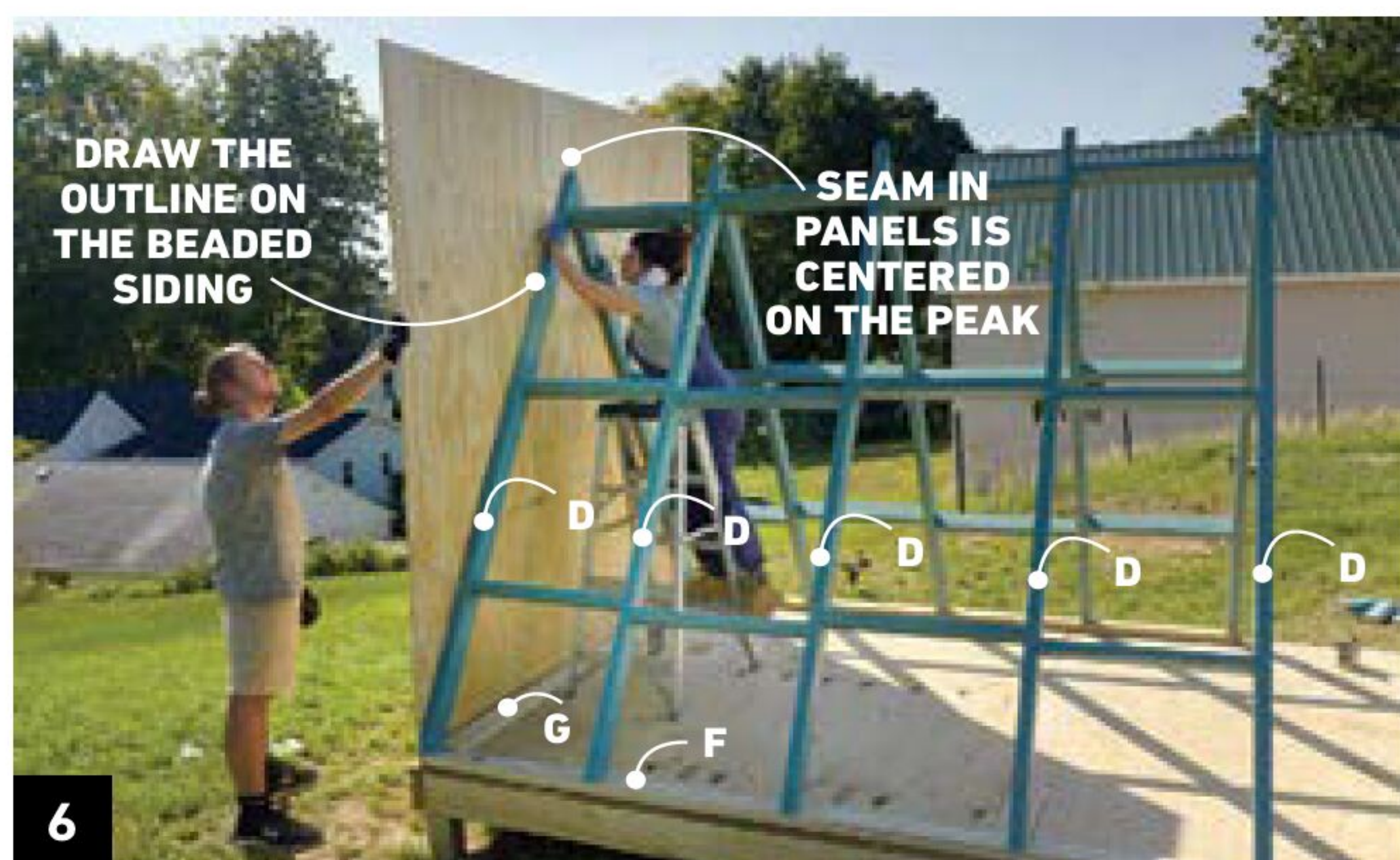


At first, secure the base plates with only a few screws in case the walls need to be shifted to align the 60-degree peaks of the A-frame wall studs (D). Once the peaks are aligned, screw the wall base plates to the platform and screw the peaks of the A-frame wall studs together.

If you're working alone, cut the wall base plates into sections so

Safety Precautions

Wear eye protection and a dust mask when screwing into or cutting pressure-treated wood. Wear hearing protection when using the saw, and work gloves to protect your hands.



you can lift the wall pieces individually and assemble them piece by piece. I had helpers on-site, so we constructed both walls and lifted them into place.

6 ENCLOSE THE BACK WALL

Screw the back wall base plate (G) along the back edge of the platform so it nests between the side wall base plates (F).

Hold or clamp two 4 x 8-ft. sheets of beaded plywood siding against the back framing of the A-frame so the seam in the panels is centered on the peak. Trace the outside of the A-frame shape onto the siding. Cut the outline with a circular saw.

Screw the cut siding panels to the end of the A-frame using 1 1/4-in. deck screws every 16 in. along the

outside wall studs (D) and the back wall base plate.

7 ADD THE BACK WALL FRAMING AND WINDOW

To stiffen the back wall and provide support around the window, add the back wall framing. As noted in the cuts list, I suggest cutting some of these boards to fit—not all A-frame roof pitches are identical.

Attach the center mullion (H) to the plywood siding so it's centered on the seam between the plywood siding pieces and sitting on top of the back wall base plate (G). Use a level to make sure it's plumb and attach it from the outside using 1 1/4-in. exterior-rated screws.

Secure the under-window support (J) with its 30-degree end cuts so it sits on top of the center mullion (H) and is level. Attach it to the plywood siding in the same manner as the center mullion. Toe screw it to the outside wall studs (D) using 2-in. screws.

On top of the under-window support (J), attach the two window uprights (K). Make sure they're plumb and centered on the wall before securing them. Space them as far apart as you want your window to be wide; I chose a square 18-in. window.

Secure the over-window support (L) so that it rests on top of the window uprights (K). As with the under-window support, attach

it to the front using 1 1/4-in. screws. Toe screw the 30-degree cut ends into the outside wall studs using 2-in. screws.

Cut the window opening out of the plywood siding with a circular saw, jigsaw or router with a flush trim bit. Sand any sharp or jagged edges around the opening.

8 INSTALL THE ROOF

Attach the first polycarbonate panel so it overlaps the edge of the plywood siding by 1 1/2 in. Using 2-in. roofing screws with washers (which provide a watertight seal), secure the panel to the wall braces (E) and the bottom of the wall studs (D). Overlap the panels as you go.

Install the ridge cap using the same 2-in. roofing screws. Screw it into the uppermost wall braces and near the top of the wall studs. Again, be sure that it overlaps the edge of the beaded plywood siding to protect it from moisture.

9 FINISH AND DECORATE

Sand any sharp edges, and add more color or paint details to the interior if you like. From here, your playhouse is ready to decorate! •



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BUILD A CUSTOM Epoxy River Bench

Learn the ins and outs of the viral technique—and enjoy breathtaking results

BY SAM ROSENMAYER

What It Takes

Time	Cost	Skill Level
About 1 week	\$350+	Intermediate

Tools

6" orbital polisher with pads, air compressor, angle grinder with wire wheel, brad nailer, caulk gun, chip brush, chisel, clamps, drill and drill bits, drill mixer attachment, foam brush, framing square, handheld torch (or heat gun), large and small plastic buckets with measurements, level, mallet, miter saw, orbital sander with sanding discs, palm router, planer/sander, plastic scraper, plunge router, router bits (45-degree chamfer, 1/4" round-over), sawhorses, shop vac, spray bottle, squeegee, table saw, tape measure, tarp, track saw, wire brush

You may have seen some impressive epoxy resin projects on social media sites lately. But what tends not to be highlighted is all the careful prep work needed to achieve those amazing results. Here, I'll walk you through the full process, leaving room for personal touches like custom-dyed epoxy, routed edges and modern legs. No matter your style, the gleaming epoxy river is sure to have people asking, "How did you make that?"

1 CUT THE SLAB

For a 48-in. bench top, cut the live edge slab to 50 in. using a circular, miter, table or track saw, depending on the tools you have and the width of the slab. Note: For an outdoor bench, choose a durable wood such as white oak.

2 PREPARE THE LIVE EDGES

Use a chisel and a mallet to remove the softwood and bark from the slab. Use a



wire brush to get into any small crevices. Next, clamp the slab to the bench and use an angle grinder with a wire wheel to rough up the edges and remove any remaining bark.

3 RIP THE SLAB Rip the slab down the middle using a track saw. Use a piece of sacrificial rigid foam insulation under the slab to protect the table.

Arrange the two slab pieces ripped-edge out. Adjust the gap between them to set the desired width for the epoxy river, then note the distance from ripped edge to ripped edge.

4 BUILD THE MOLD For the mold bottom, cut a piece of $\frac{3}{4}$ -in. melamine $1\frac{1}{2}$ in. larger than the bench top in both directions.

For the mold walls, cut $\frac{3}{4}$ -in. melamine strips as wide as the wood slab thickness plus 2 in. Using a miter saw, cut these to length so that they rest flush against the outside edge of the mold bottom.

Apply a bead of silicone caulk to the underside of the four side walls and clamp them

to the mold bottom, ensuring that they are flush with the bottom's outside edge and that there are no gaps. Brad-nail the side walls to the mold bottom.

Seal each seam inside and outside the mold with a bead of caulk and let it dry overnight.

5 SEAL THE LIVE EDGES

As the mold dries, seal any holes in the wood surface and/or the live edges. This helps prevent air bubbles from forming during your epoxy pour. Wearing nitrile gloves, prepare a small batch of fast-drying epoxy resin (follow the manufacturer's instructions). If you plan to dye the epoxy, dye this batch as well. Note: If you're new to epoxy, choose a lighter color. Darker dyes can highlight imperfections.

With a chip brush, apply two coats of the epoxy to the live edges and any hairline cracks or knots. Use a 10cc syringe to fill in small, deep holes in the wood. For very small holes, use CA glue and super glue accelerator. Smooth the surface with a scraper after

the epoxy has dried.

6 SAND THE EDGES Once the epoxied edges and holes have fully dried, gently sand them with 320-grit sandpaper. Remove the sanding dust using a shop vac or air compressor, and clean the sanded surface with a microfiber cloth and 90% isopropyl alcohol.

7 PREPARE THE MOLD Lay down a tarp or plastic sheet on the floor to protect it from any drips or spills, then place the mold on a stable surface such as a worktable or sturdy sawhorses. Use a level to confirm the mold is level and apply shims if needed. If the mold is not level, the epoxy will not cure evenly.

Remove any dust or dirt from the mold using a shop vac and cheesecloth, then put on a mask and spray the inside of the mold with a silicone lubricant. The spray will act as a releasing agent once the epoxy resin has cured. After spraying, use a clean microfiber cloth to rub the lubricant into the surface of the mold.

Safety Precautions

Before starting, make sure that you have a dust mask, respirator, gloves, safety glasses and a well-ventilated area available.

Materials

- 1 $\frac{1}{4}$ " brad nails
- 10cc syringes
- $\frac{3}{4}$ " x 4x8 melamine
- 320-grit sandpaper
- 3M Perfect-It Polishing Kit
- 90% isopropyl alcohol
- CA glue
- Cheesecloths
- Clean microfiber cloths
- Deep-pour epoxy resin
- Denatured alcohol
- Epoxy sealer kit
- Fast-drying epoxy resin
- Liquid pigment dye
- Live-edge slab (approx. 2" thick)
- Metal bench legs and installation hardware
- Nitrile gloves
- Painter's tape
- Penetrating epoxy sealer kit
- Plastic sheet
- Rigid foam insulation
- Shims
- Silicone caulk
- Silicone lubricant spray
- Stir sticks
- Super glue accelerator
- Water-based marine varnish
- Wizards Shine Master Polish & Sealant



8 FIT THE WOOD INTO THE MOLD
Place the wood pieces in the mold, making adjustment cuts for fit if needed. Remove any debris in the mold with a cheesecloth. Clamp both wood pieces tight to the bottom of the mold to prevent epoxy from seeping under them. Note: To clamp the wood securely, I used scrap 2×4 pieces that were taller than the walls of the mold. In hindsight, covering the scraps with packing tape or plastic wrap would have helped to keep the epoxy from sticking to the scraps.

9 MIX THE EPOXY
To avoid wasting epoxy resin, calculate the required amount using an online epoxy resin calculator or the following formula:

[River length (in.) × Average river width (in.) × River height (in.)] ÷ 1.805 = Amount of epoxy resin needed (fl. oz.)

My bench required 240 oz. of epoxy; I rounded up to 256 oz. (2 gal.).

Mix in a well-ventilated area and wear a respirator mask and nitrile gloves. Follow the label—my epoxy called for a 2:1 mixing ratio.

Slowly pour the base resin and curing agent into a clean, dry plastic measuring bucket. Mix using a drill mixer attachment on a low setting, focusing on the edges and bottom of the bucket. Stir for 3 minutes while scraping the edges with a stir stick.

If you aren't dyeing your epoxy, stir it for another 2 minutes. If you are, add just a few drops to the epoxy (a little goes

a long way) and stir for 2 to 3 minutes.

10 POUR THE EPOXY
Slowly pour the epoxy into the river channel. Slow your pour further as the epoxy rises. Pour until the epoxy just slightly overflows the channel. If you find any tiny holes or cracks in the wood, use a chip brush to fill them in with epoxy. Avoid scraping the bucket edges (where unmixed epoxy might be)—let gravity do its job while pouring.

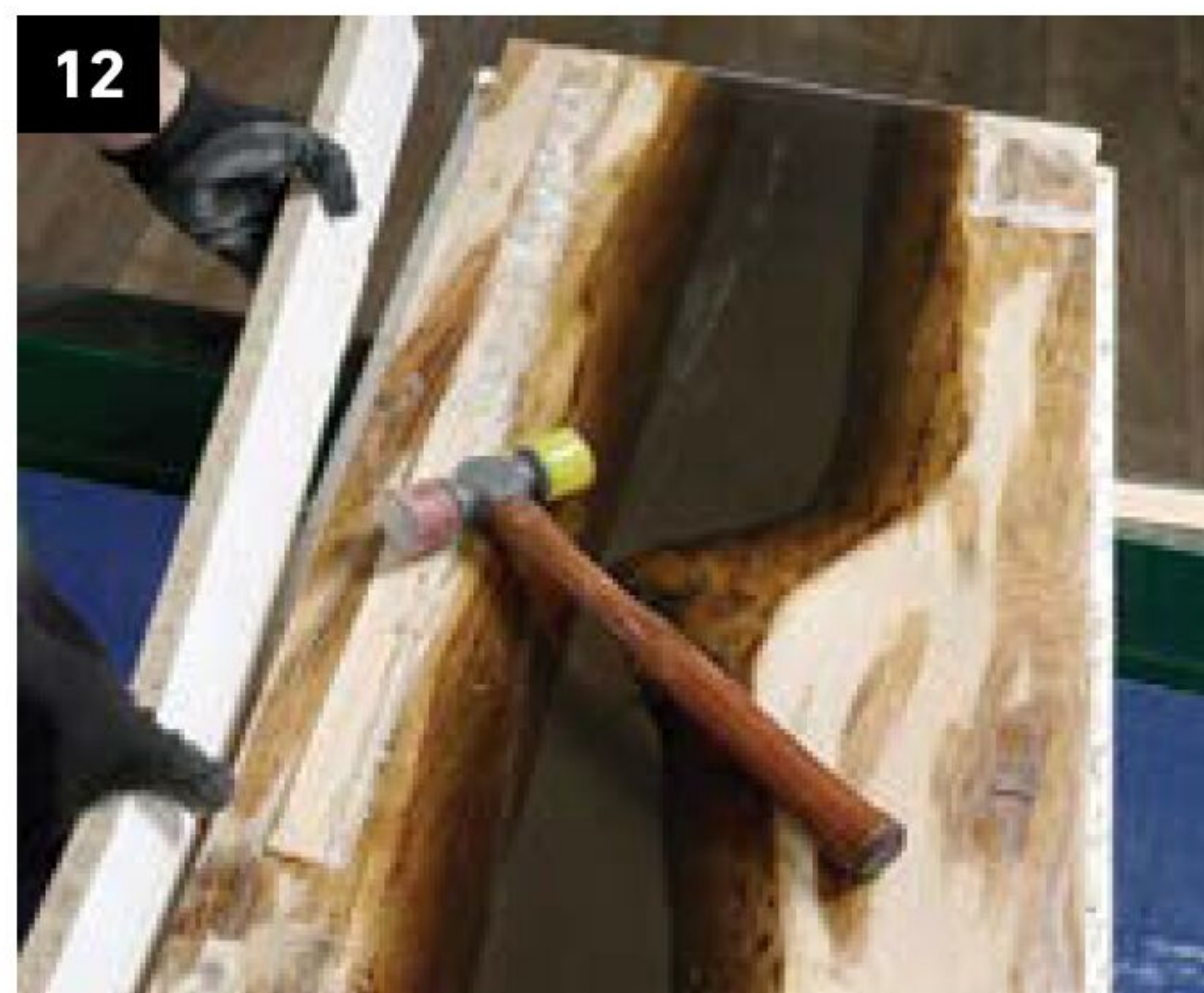
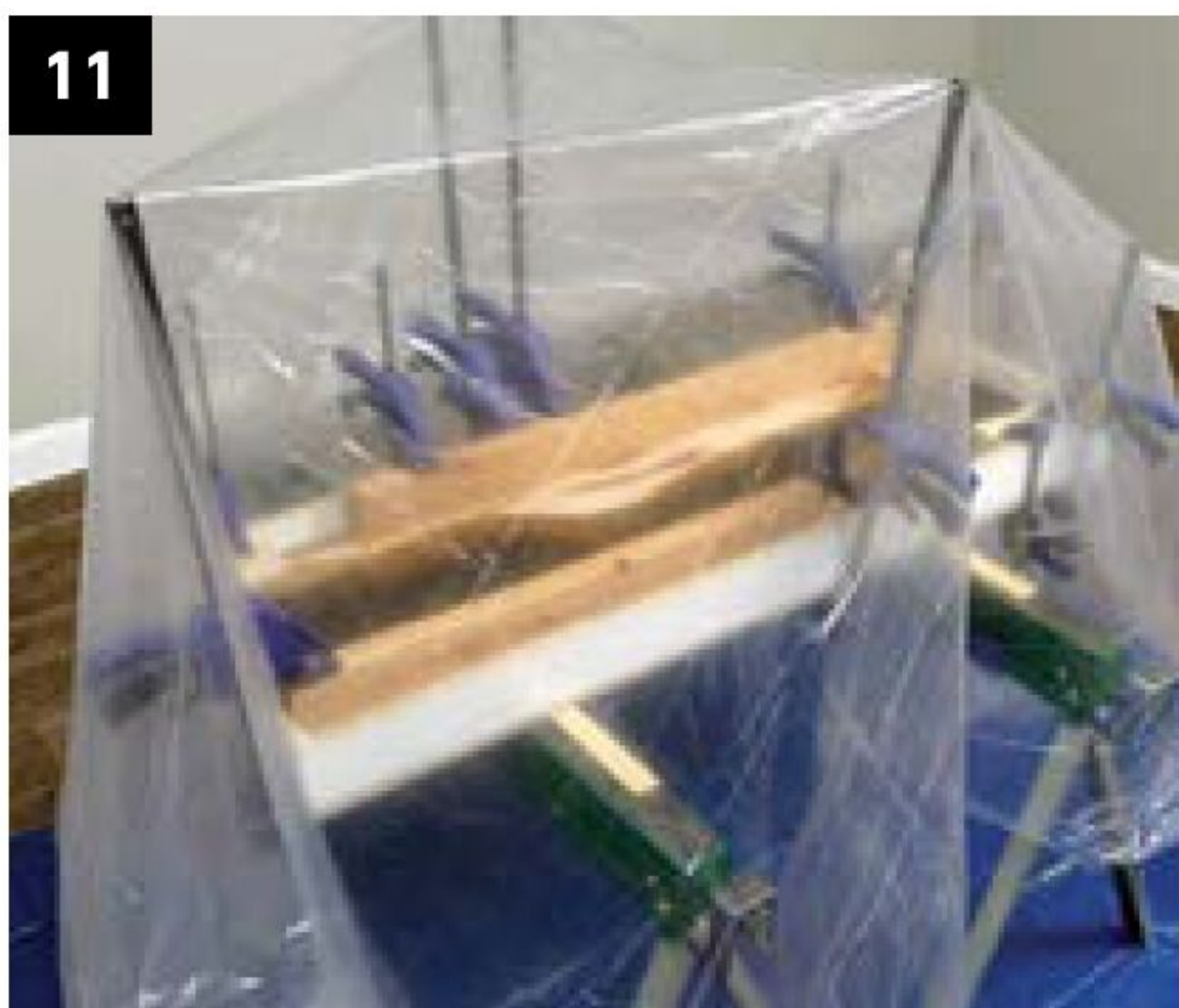
Using a handheld torch or heat gun, eliminate any bubbles that rise to the surface of the epoxy. Keeping a safe distance of about 5 in., move the torch in a quick sweeping motion over the epoxy. (Holding the torch still for too long can damage your project.) Remove

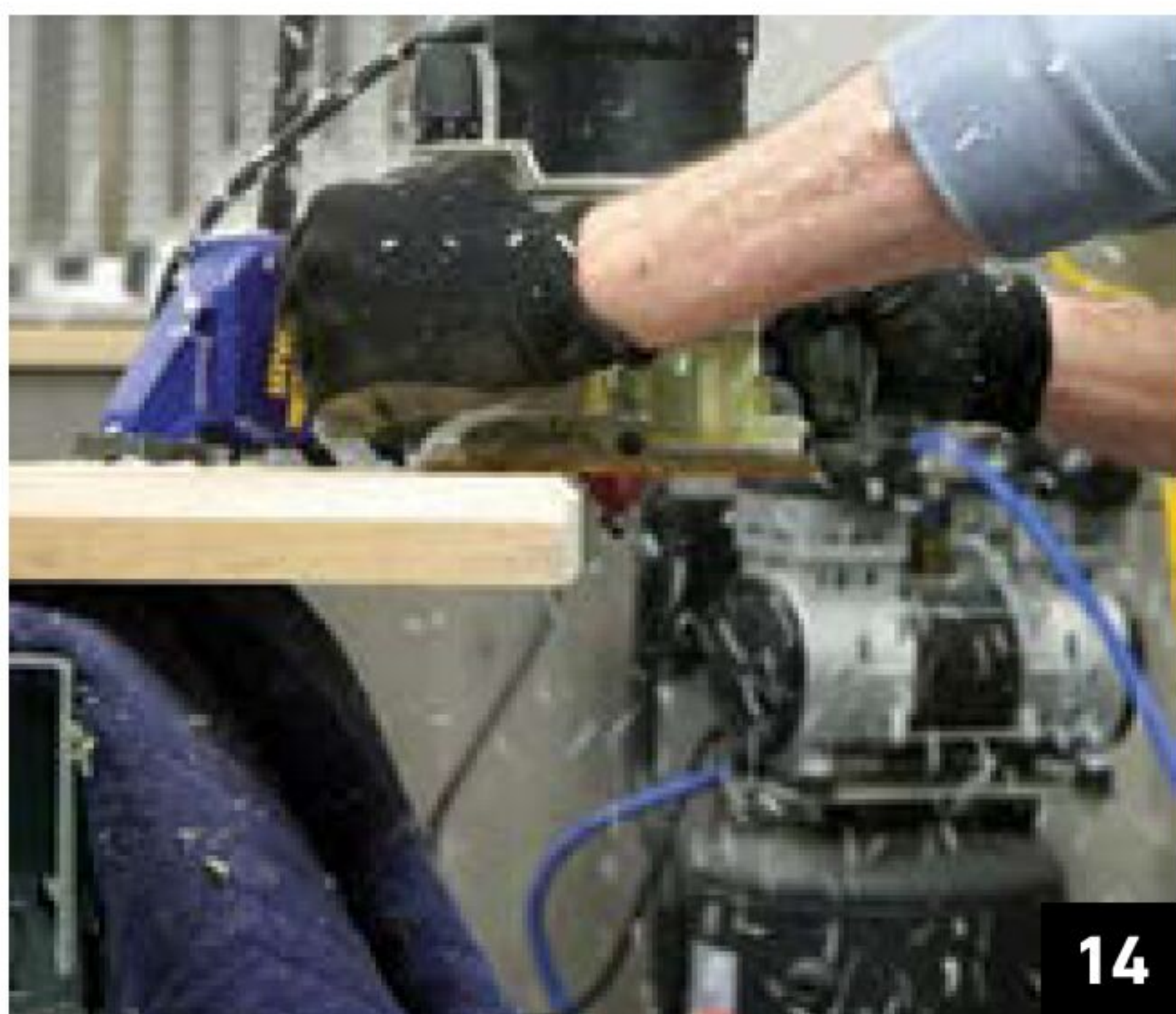
dust or wood specks from the epoxy surface with a small stir stick. For 2 hours, monitor the epoxy and remove any new air bubbles.

11 LET THE EPOXY CURE
If the area isn't entirely dust-free, drape a plastic sheet over the mold, making sure that the sheet does not touch the epoxy and that it isn't secured in a way that prevents airflow. Let the epoxy cure for 72 hours.

12 UNMOLD THE BENCH
Gently knock off the mold walls with a mallet. Use wooden wedges or a chisel to separate the bench top from the mold bottom if it sticks.

13 PLANE AND SAND THE BENCH TOP
Because most DIYers





14



17



18

do not own a planer or sander large enough to smooth out a bench top of this size, I suggest seeking out a local wood shop that offers large slab sanding and planing services. For this project, a large drum or wide belt sander will be best for a smooth, even finish.

14 SQUARE UP THE BENCH TOP AND ROUT THE EDGES

Trim the bench top to 48 in. using a track saw or a table saw. If your bench top has any residual epoxy or chips in the front or back wood edges, trim those too. Various router bits can be used to add edge detail to your bench. I used a 45-degree chamfer bit to rout the edges on the underside of the bench and finished the top edge with a ¼-in. round-over bit.

15 SAND THE BENCH

Using an orbital sander with a 100-grit sanding disc and starting with the underside, sand all surfaces of the bench. Repeat with 120-, 180-, 220-, 320-, 400-, 600-, 800-, 1200-, 1500- and 2000-grit discs.

Use an air compressor to blow off sanding

dust that builds up on the sandpaper as you go, and wipe any dust from the bench with a clean microfiber cloth. Use a cross-hatch sanding pattern to avoid missing any areas.

When you reach 320-grit, begin spraying water onto the wood as you sand. For even sanding, keep the sander moving continuously.

16 BUFF AND POLISH THE EPOXY

Use an air compressor, clean microfiber cloths and cheesecloths to remove dust from the bench. Use denatured alcohol to clean off the epoxy river. To avoid polish penetrating the wood, cover a wide swath of wood along the epoxy river with painter's tape.

To polish the epoxy river, I used the 3M Perfect-It Polishing Kit—a three-step system. To begin, use an orbital polisher fitted with a coarse foam pad and the included rubbing compound. Spread the compound evenly with the pad before starting the polisher on a slow setting (a little goes a long way). Increase the speed gradually while monitoring the

temperature to prevent overheating the epoxy.

Repeat the process with the medium pad and machine polishing compound, and again with the ultrafine compound and pad, wiping the epoxy with a microfiber cloth between each polish. Afterward, use a separate finishing pad to apply two coats of Wizards Shine Master Polish & Sealant.

Repeat on the other side of the river.

17 APPLY PENETRATING EPOXY AND VARNISH

Place a tarp or plastic sheet under the bench to catch any drips. Using a penetrating epoxy (such as TotalBoat), pour and mix the resin with the hardener inside a plastic measuring cup. Apply a thin layer to the entire bench, pouring on a small amount and spreading it evenly with a squeegee or plastic scraper. Spread it over the bench's edges with a foam brush. Repeat on the other side once the penetrating epoxy has cured for 2 days (cover the bench with a plastic sheet as it cures).

Once the penetrating epoxy has cured, apply a marine varnish to the

bench to protect it from the elements. Apply small amounts and spread it with a foam brush or rag. Allow at least 1 hour between coats. Repeat the process on the opposite side of the bench.

18 INSTALL THE LEGS

Choose legs that are 16½ -to-18½-in. tall so that the bench is between 18 and 20 in. tall including the slab. Predrill pilot holes and attach the legs to the bench (the style of your particular bench legs will determine the best placement).

My bench legs had an opening for a cross-beam, so I milled a 2½ × 2½-in. beam, cut it to 44 in. and sanded it with an orbital sander down to 320-grit. After finishing it with the same top coat as the bench top, I slid it into the opening and secured it with a set screw. ●



Video Online

Scan the code to watch a video of the build.

A romantic color palette softens the bold look of the velvety, coral pink sofa in the dining area.



A Painterly Perspective

DIY show host Samantha Pynn uses her newly rehabbed home as a canvas for color and florals

BY KELLY AIGLON

When Samantha Pynn decided it was time to look for a new condo, she strolled around her downtown Toronto neighborhood, eyeing up real estate. When she found “the one,” it wasn’t the unit that drew her in. It was the garden.

“When I saw hydrangea and dogwood blooms, I knew it was for me,” she says.

Her new 1,200-square-foot condo in a 1950s art deco building reflects the luxe-on-a-budget style she advocates as co-host of the show *Save My Reno*, which originated on HGTV Canada and now streams on the At Home with Family Handyman channel. With neutral and timeless furniture, cabinetry and paint, she expresses herself through an ever-changing array of colorful botanical and decorative elements. “I’m really accessory driven,” she asserts. “I’ll swap in new throw pillows, blankets and art, depending on the palette I’m gravitating toward.”

It goes back to Pynn’s belief that small changes can make a big difference. And you don’t need to go overboard to make an impact. Her lifestyle is reflective of that, being largely centered on slowing down and simplicity; she is a regular yoga practitioner,



passionately follows a plant-based diet and spends much of her free time reading quietly in the company of her cat, Blueberry Muffin.

Meaningful changes

Pynn decided some renovations were in order once she moved into her condo. She avoided tearing down any walls but painstakingly gutted the kitchen

Samantha Pynn and her cat, Blueberry Muffin, have found their happy place in a condo full of rehabbed and thrifted finds, like this console.



Samantha Pynn's Flower Arranging Tips

The bloom aficionado's advice may surprise you

These real-life examples from Pynn's condo look freshly clipped from the garden. To pull together a nice bouquet of your own, each of her tips comes down to this: Don't overthink things!

- **Don't mix ... match**

Group like-minded flowers—all one type of bloom or color—together in one vessel for a mod look.

- **Skip the vase**

Pitchers are a great go-to because the tops are wide enough to allow the flowers to splay but not fall over.

- **Play with shades**

Try going tonal with various shades of one color. For example, use a darker plum

color and then lighter lilac and lavender.

- **Make a solid choice**

Opaque vessels keep focus on the flowers, not ratty stems.

- **Widen your natural scope**

If you are not a fan of floral decor, blossoming branches or greenery will add a sculptural element to your space.

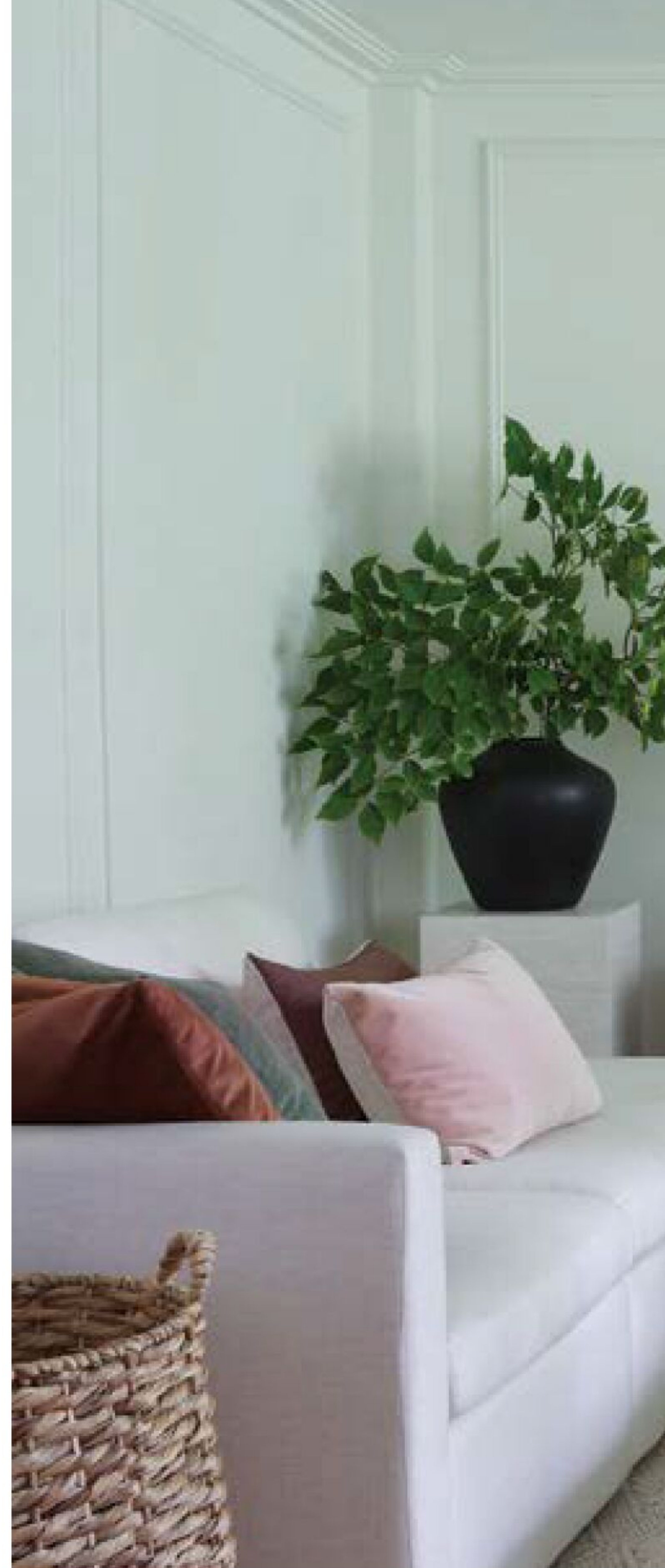
- **Substitute with decor**

A floral tea towel or piece of art will add a touch of romance.

and two bathrooms. "I did what you're not supposed to do ... renovate your place piecemeal," she says with a laugh. "If you can do it all at once, it's much more cost effective and you don't need to live in a dust bowl for too long."

Her focus was making each room more functional for the long term. In the small kitchen, Pynn made everything feel less cramped by replacing appliances with smaller models and moving them around for better flow. She also got new cabinets and changed the parquet floors.

More discreet changes in the living room, like adding crown molding, served to create an aesthetic atmosphere. "There





Stacked crown molding in the living room is a small addition that makes a big impact.

used to be old dentil molding. It didn't feel in line with the history of building," says Pynn. "So I went over it with MDF, and now it's got that deco vibe."

Blooming beauty

"My colors are florals, shades of pink, lavender and peach," says Pynn. "There's a certain romance to it, and I'm also so drawn to nature."

It's no surprise that Pynn is a member of her building's gardening committee. Along with keeping the landscape flourishing, she periodically cuts fresh blooms to put in vases in the lobby. She snips a few for her own condo as well. When the bloom enthusiast does go

"My colors are florals, shades of pink, lavender and peach. There's a certain romance to it."

shopping, she tries to buy local. "I have a big flower budget. My accountant says it's next level," she says.

Her love of flowers, she says, is inspired by her mom. But Pynn picked up another passion all on her own: thrifting. "I love it when you can give an old piece of furniture new life," she says. Case in point: a console in her living room, which she had replated in antique brass before spray-painting the top. And then there's the mid-mod table, IKEA vanity and mirror that she repainted.

Giving back

Pynn donates her gently used accessories every time she

Big Ideas for Small Kitchens

Not much space? No matter. Creative thinking and appealing colors can give big-character energy. Here are takeaways from Samantha Pynn's home.

Prioritize Paint

Lighter upper cabinets keep the space looking airy, while darker lower cabinets read like pieces of furniture.

Keep Materials Consistent

Wrapping the same porcelain from the counters all the way up the wall provides a clean, minimal feel and keeps the energy flowing.

Contain Clutter

Store tea, coffee, cereal, etc. in the pantry or cabinets. Less is more when it comes to where to rest your eyes.

Do Detail Work

A $\frac{3}{4}$ -inch rail on cabinets instead of traditional shaker doors adds interest without overwhelming.

Home In on Hardware

Choose a metal that picks up on other decorative elements in your home. It's okay to mix metals!

switches up her cushions or decides on a new throw blanket. Many of the elements in her home are from her own home furniture and accessories line, Samantha Pynn Home, which she launched in 2016.

“I’m a big believer in democratic design, the idea that everyone can have a beautiful home,” she says. “It’s all about the small things, like having a jacket hook in the right spot. Keeping your robe behind the door. Making sure there’s always a cozy throw to curl up with.”

And sometimes, she says, a home can look like-new simply by clearing away the clutter. “There’s a power in tidying up and giving things away,” she says. “Anyone can do it. You don’t need to have a palatial home.” ●



More Online
Scan the code to explore the At Home with Family Handyman channel.



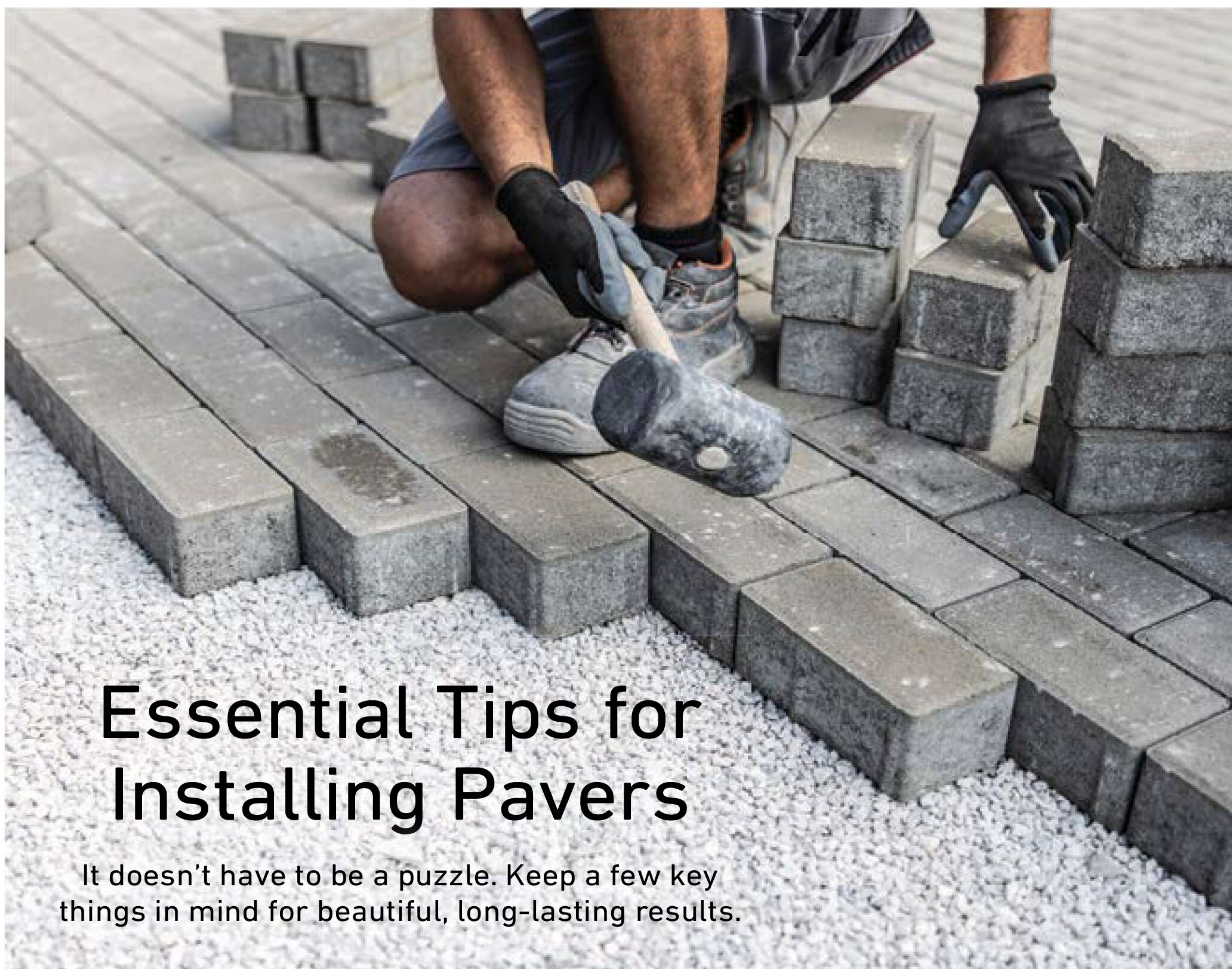
VIRGINIA MACDONALD PHOTOGRAPHER INC.

ULTIMATE GUIDE TO **Pavers**

How would you rate your home's curb appeal? Good? Great? Needs improvement? If it's the latter, you could benefit from a crash course in paver projects. New pavers instantly up your home's curb appeal. Paver patios, walkways and even driveways are practical DIY projects that bring in more money when it's time to sell. To help you hit the ground running, we've got design inspiration and installation tips.

BY ALLY CHILDRESS





Essential Tips for Installing Pavers

It doesn't have to be a puzzle. Keep a few key things in mind for beautiful, long-lasting results.

Installing pavers is one of the most DIY-friendly projects out there, but there's still a lot to keep in mind from a safety and quality workmanship perspective. Here's some guidance to get you started.

Buy extra pavers

For some patterns and stone types, placing pavers is a bit like working a jigsaw puzzle. In this case, it's OK to have extra pieces. In fact, it's helpful. Buy 10% to 15% more than you need so you can pick and choose the stones that fit and have extra for cutting around corners.

Prepare the base

It may be a lot of work, but don't

skimp on the paver base. It should be 4 to 10 in. of Class V aggregate, or an equivalent angular fill that's $\frac{3}{4}$ in. or less in size. Compact the aggregate with a plate compactor in multiple layers to eliminate air pockets and allow for drainage. Then, add an inch of paver sand and compact again.

Slope it slightly

Direct water where you want it to go by sloping your paver project $\frac{1}{8}$ -to- $\frac{1}{4}$ -in. per foot away from structures and low spots in your yard. Stake the outline of your patio or walkway, and pull a string line to be a guide as you dig out dirt, compact the base and set your pavers.

Snap chalk lines

For running bond, basket weave and other geometric paver patterns, it's important to have reference lines to keep your initial courses straight. Start by marking a baseline, then use two tape measures to find and mark a center line perpendicular to the baseline.

Lock in the pavers

Dry sand traditionally keeps pavers locked tightly together, but heavy rains and time can loosen them. To prevent this, try polymeric sand. Pour the sand over the pavers and use a push broom to pack it into the seams. Activate the polymer with water to bind the pavers into place.

Materials Matter

No matter your paver budget or design aesthetic, there's an option for you

Concrete

Durable and versatile, concrete pavers come in many colors and sizes and are widely available. Use small squares to line a path or larger slabs to cover more ground. Since it is easy to work with, concrete is a perfect choice for a rookie DIYer.



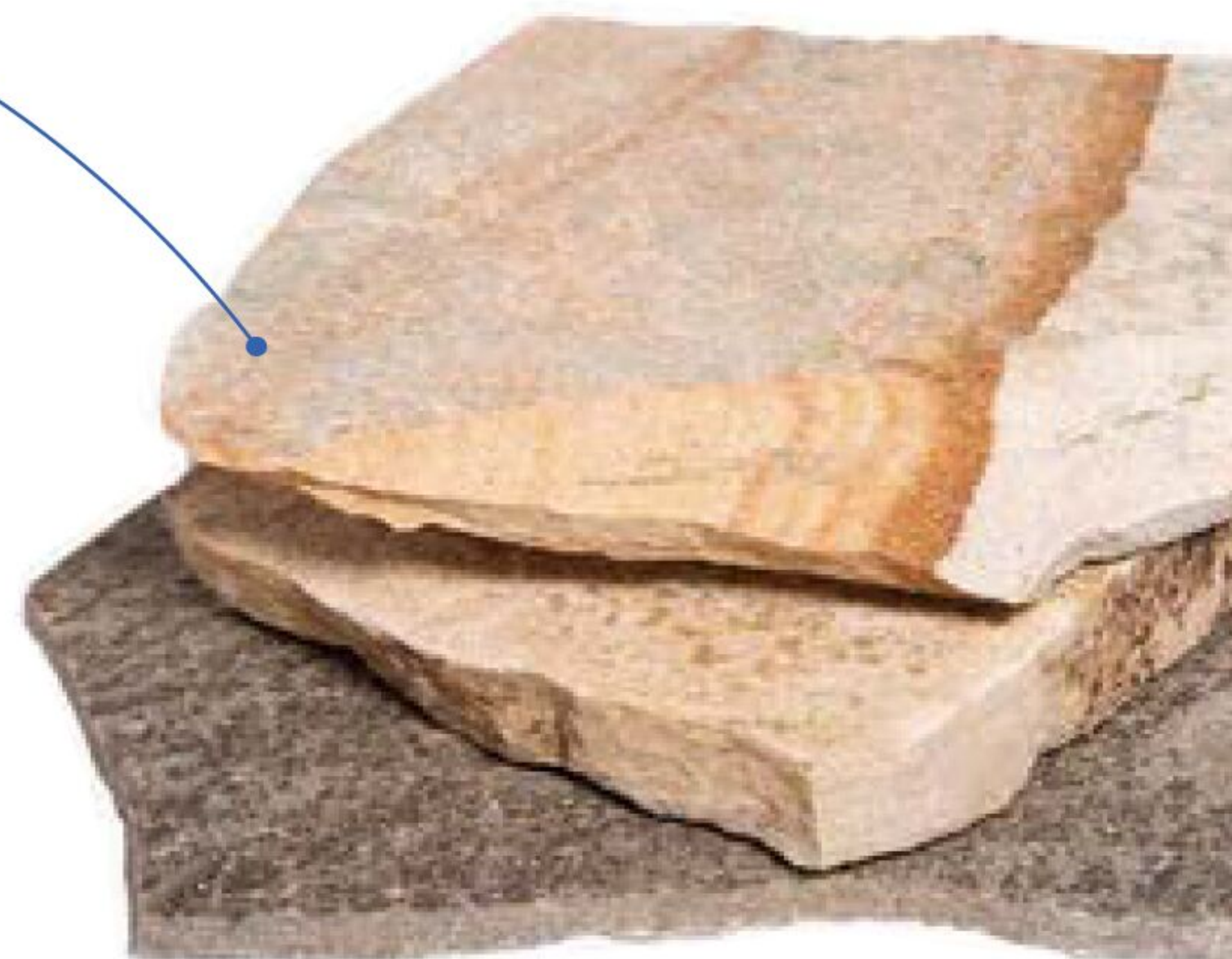
Rubber

Looking for a durable, sustainable and low-maintenance option? Rubber pavers, such as these bone-shaped tiles from Playsafer, have plenty of give in case someone takes a spill—perfect for families with small children. They're less expensive than other paver options, and they're made from recycled rubber, so you can feel good about keeping old tires out of a landfill.



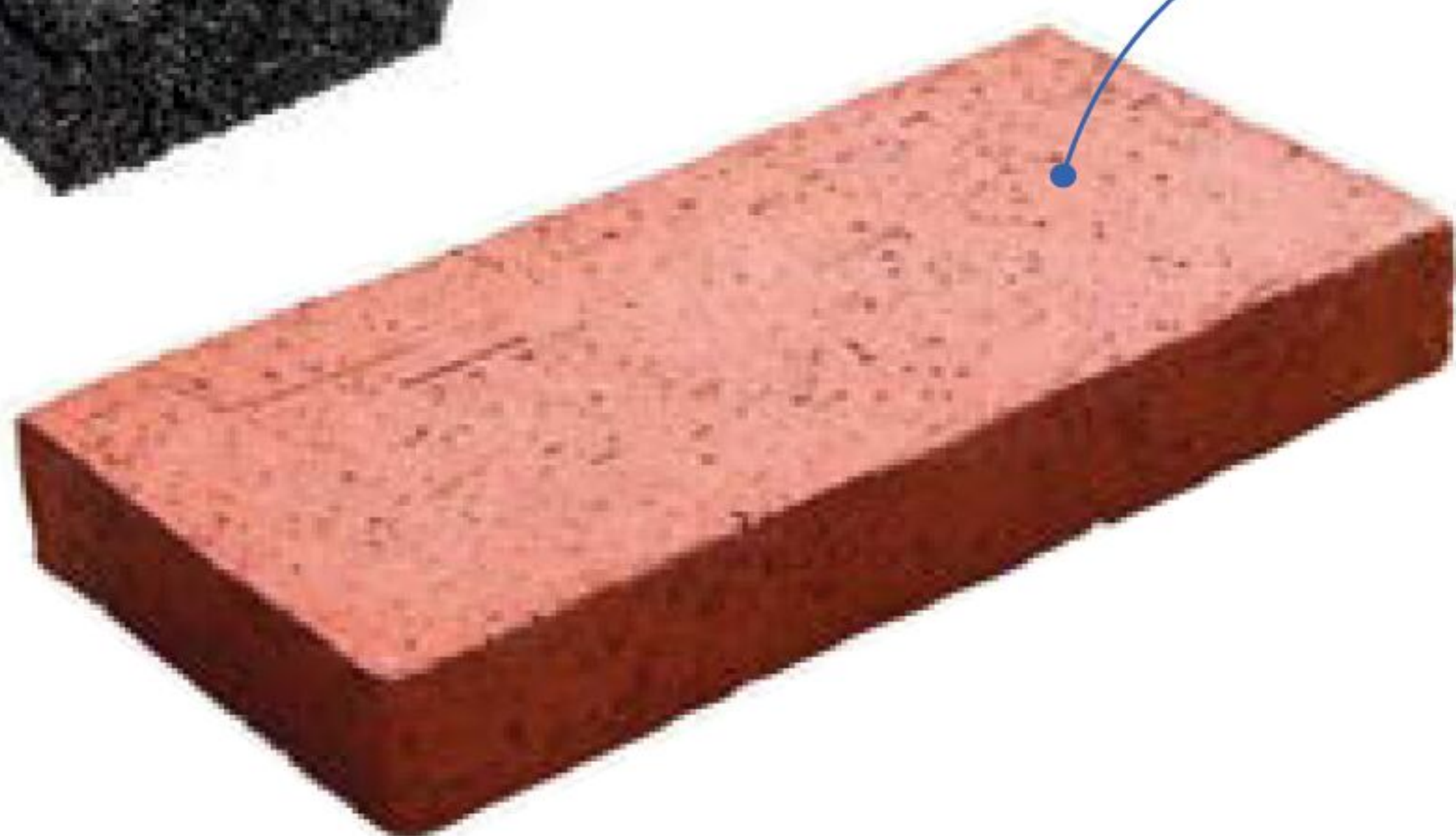
Stone

Flat, irregular-shaped stones, such as Southwest Boulder & Stone's Gold Quartzite Flagstones, lend a rustic vibe to backyard gardens, but stone paver choices don't stop there. Granite, slate, sandstone and travertine up the glamour and formality *and* can be laid in geometric patterns just like brick or concrete. Stone, particularly travertine, tends to be cooler underfoot than concrete or brick, so it's fantastic around swimming pools. Stone isn't cheap, but it lasts forever with very little maintenance.



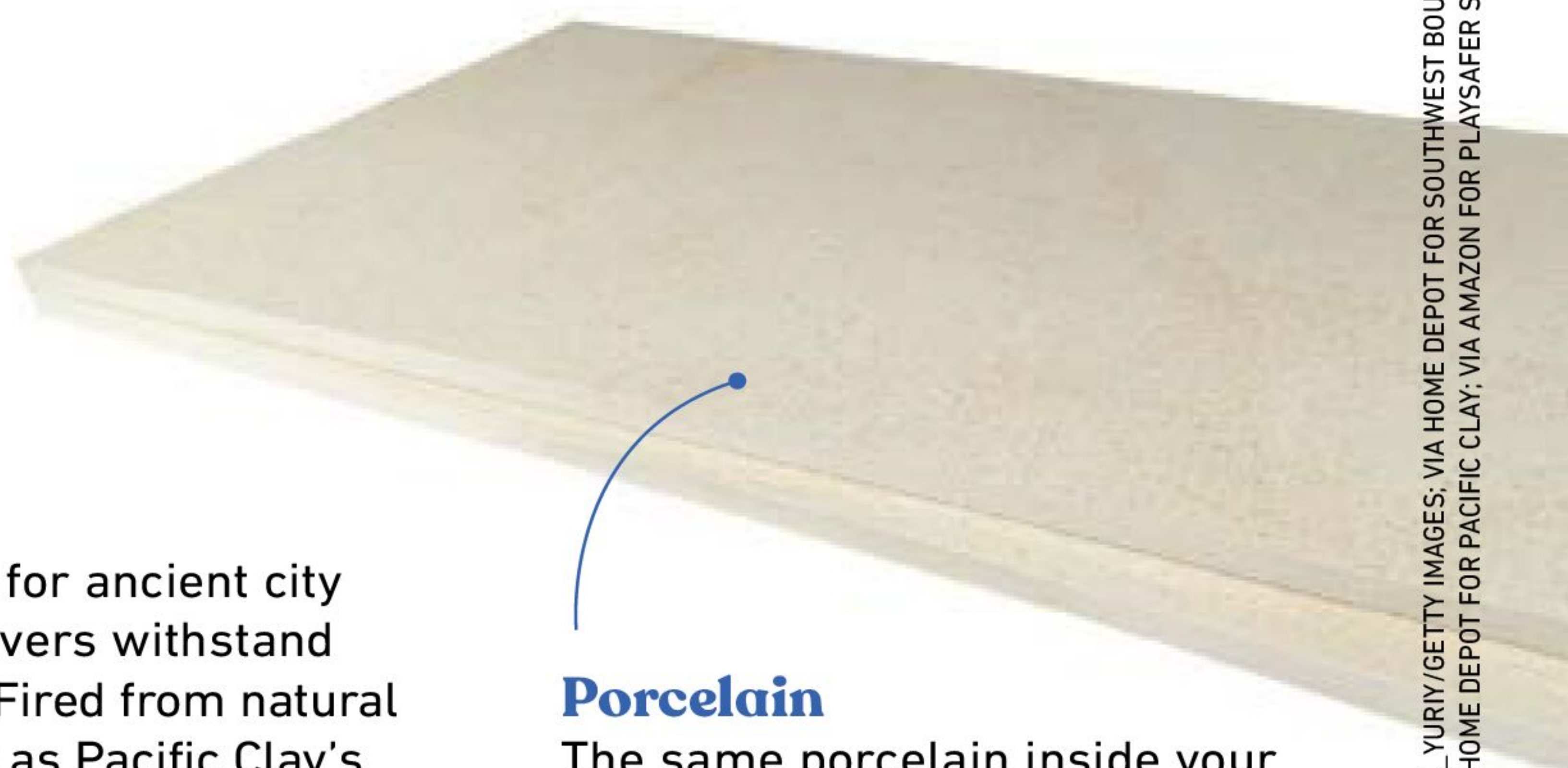
Brick

A classic choice for ancient city streets, brick pavers withstand the test of time. Fired from natural clay, bricks such as Pacific Clay's Travelers cost a bit more than concrete pavers but make a beautiful, durable paving option that will stay put for generations. You don't have to be a mason to install brick pavers either. They go in with sand and gravel just like other pavers.



Porcelain

The same porcelain inside your home also makes for a gorgeous, low-maintenance patio paver. Despite the light-colored tiles, as seen with MSI's Livingstyle Cream Arterra Pavers, porcelain is easy to clean because it's nearly impenetrable to water. (Don't worry, it's also nonskid.)



CLOCKWISE FROM TOP RIGHT: AFONKIN_YURIY/GETTY IMAGES; VIA HOME DEPOT FOR SOUTHWEST BOULDER & STONE; VIA VILLOHOME FOR MSI; VIA HOME DEPOT FOR PACIFIC CLAY; VIA AMAZON FOR PLAYSAFER STORE

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but he still
looks up
to me.

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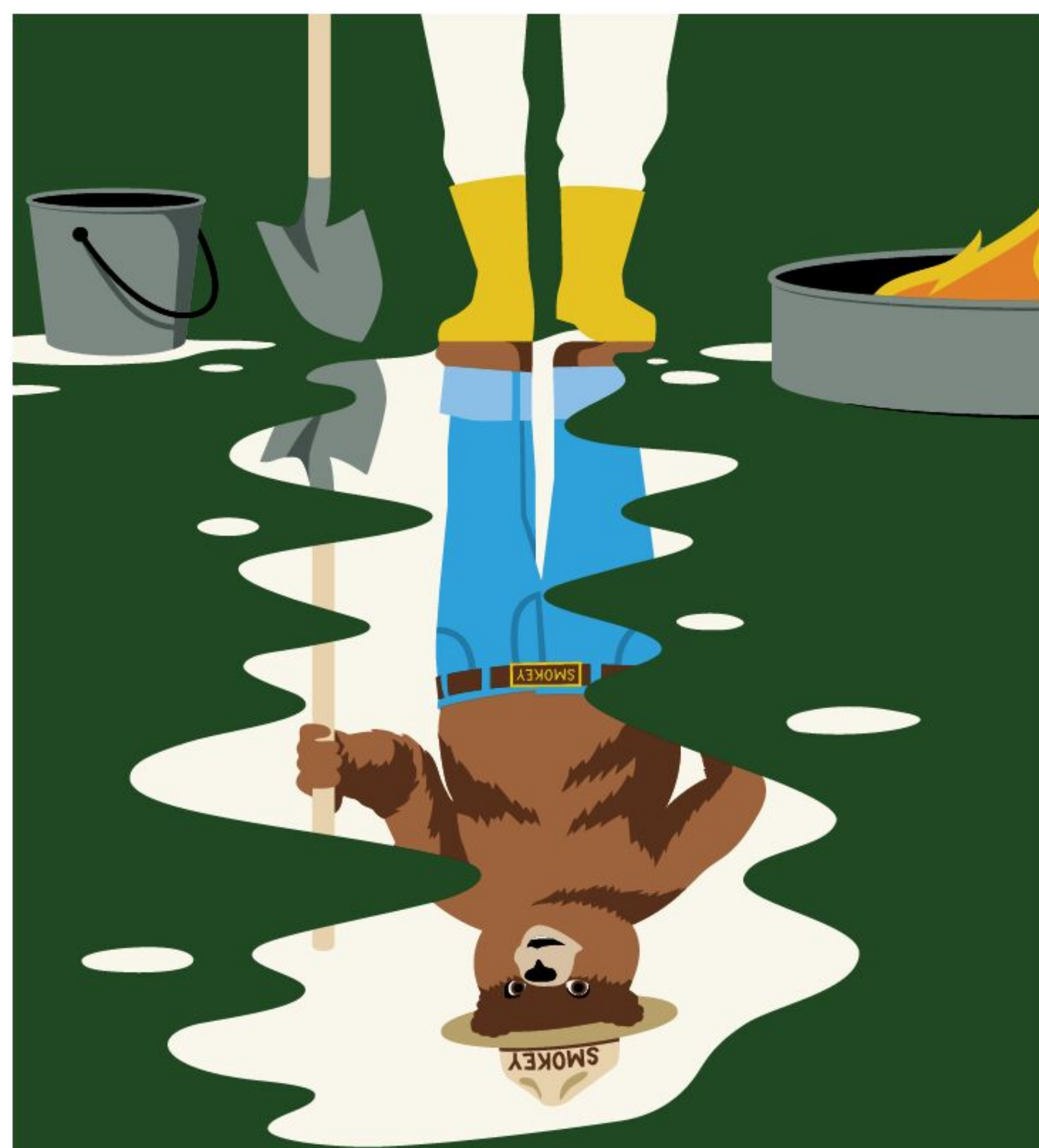
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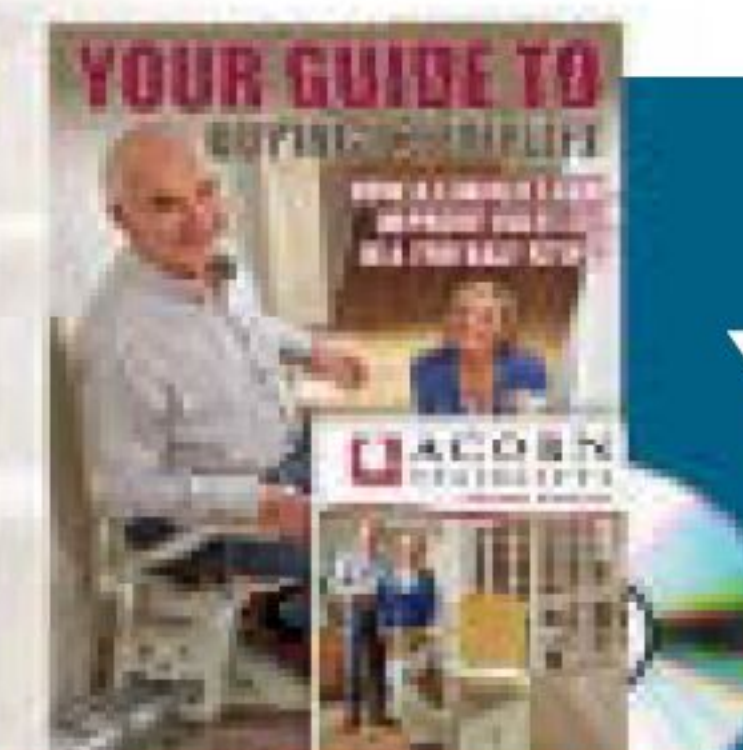
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Get Design-Minded

The look of pavers isn't cut-and-dried. Here are patterns, textures and colors to inspire you.



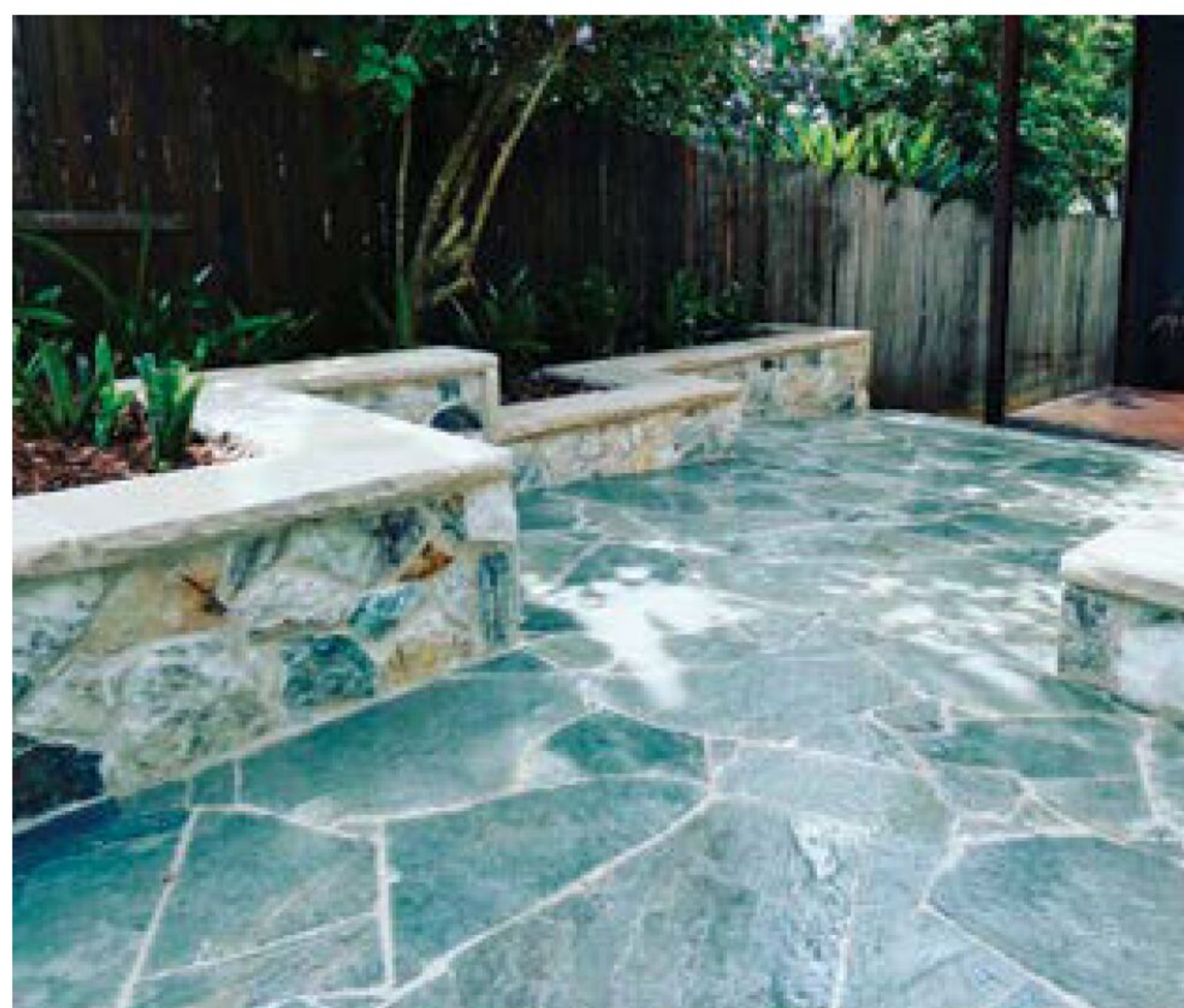
Circular Whorl

Soften your square-paver hardscape with a round design. Start in the center of your project and arrange pavers in a circle as you move outward. *Romanstone Hardscapes Circle Paver Kit in Timberwood Blend; romanstone.com*



Herringbone

Named for its resemblance to fish bones, the herringbone pattern offers a timeless yet versatile look. The pavers can be laid at 90- or 45-degree angles. *Unilock Copthorne; unilock.com*



Freeform Stone Slabs

Slate and flagstone's irregular shapes can be sleek and elegant or rough and rustic. Complete your preferred look with landscaping to enhance the effect. *Aussietecture Kimba Crazy Paving; aussietecture.com.au*

CLOCKWISE FROM TOP: VIA ROMANSTONE; VIA AUSSIECTECTURE; VIA UNILOCK



Basket Weave

The long-side faces of pavers are called sailors or shiners, depending on their orientation. Alternate stacks of sailors and shiners for a basket weave effect.



Running Bond

This classic design is a breeze to install. Lay one course in a straight line, then stagger the next course by half a brick. *Belgard Cortez Slab; belgard.com*



Paver Care & Maintenance

Low spots? Weed invasion? Loose areas? Here's what to do when your paver project has seen better days.

- **Seal the deal**

Sealants keep paver patios and walkways protected against rain, snow, salt and de-icing chemicals. Top off paver joints with sand yearly to keep them locked in tight.

- **Keep them clean**

Periodically sweep away leaves, sticks and acorns so they don't break down your pavers or become tripping hazards. Yearly washing with a gentle cleaner, such as dish soap or vinegar, and a deck brush can keep moss and mildew from piling up.

- **Replace cracked pavers**

Pop out a single paver with a flat screwdriver, then tamp a new one into place with a rubber mallet. You may need to scoop out a little paver sand, or remove more than one paver, to get the new one settled in. Repack the sand into the seams.

- **Prevent weeds**

Landscape fabric under the Class V aggregate helps. Polymeric sand also shields seal joints against weed intrusion. ●



Stacked Bond

Stacked bond paver designs offer a clean, streamlined look and are even easier to achieve than running bond designs. Simply lay the pavers side by side and stacked one on top of the other—no offset necessary. *Belgard Quarziti 2.0; belgard.com*

In Full Swing

Create memorable moments and
explore new techniques with handcrafted tree swings



Disk Swing Using a Lathe

Ever wanted to try your hand at a lathe? With foundational skills, making this swing is wood-turning 101.

BY CARMEN DE LA PAZ

When people ask me what my favorite shop tool is, I always give the same answer: a wood-turning lathe. Unfortunately, lathes are intimidating for many DIYers—they have a steep learning curve and can require a hefty investment upfront. But here's the good news: There are several ways to work with a lathe without purchasing one. Woodworking stores often give lessons and offer open studio time, and many wood-turning clubs have lathes available to members. Try it! I promise: Once you start wood turning, you will want to do more.

1 MARK THE CIRCLE Locate the center of your slab and pencil out a circle using a large-scale compass.

2 TRIM THE SLAB With a miter saw, make 45-degree cuts close to the pencil line to eliminate as much wood outside the circle as possible, creating an octagonal shape. This will help you achieve a balanced circle faster once you start cutting with the chisels on the lathe.

3 INSERT THE SPUR DRIVE With a wood mallet, hammer the spur drive into the center point, ensuring all four teeth

Tools

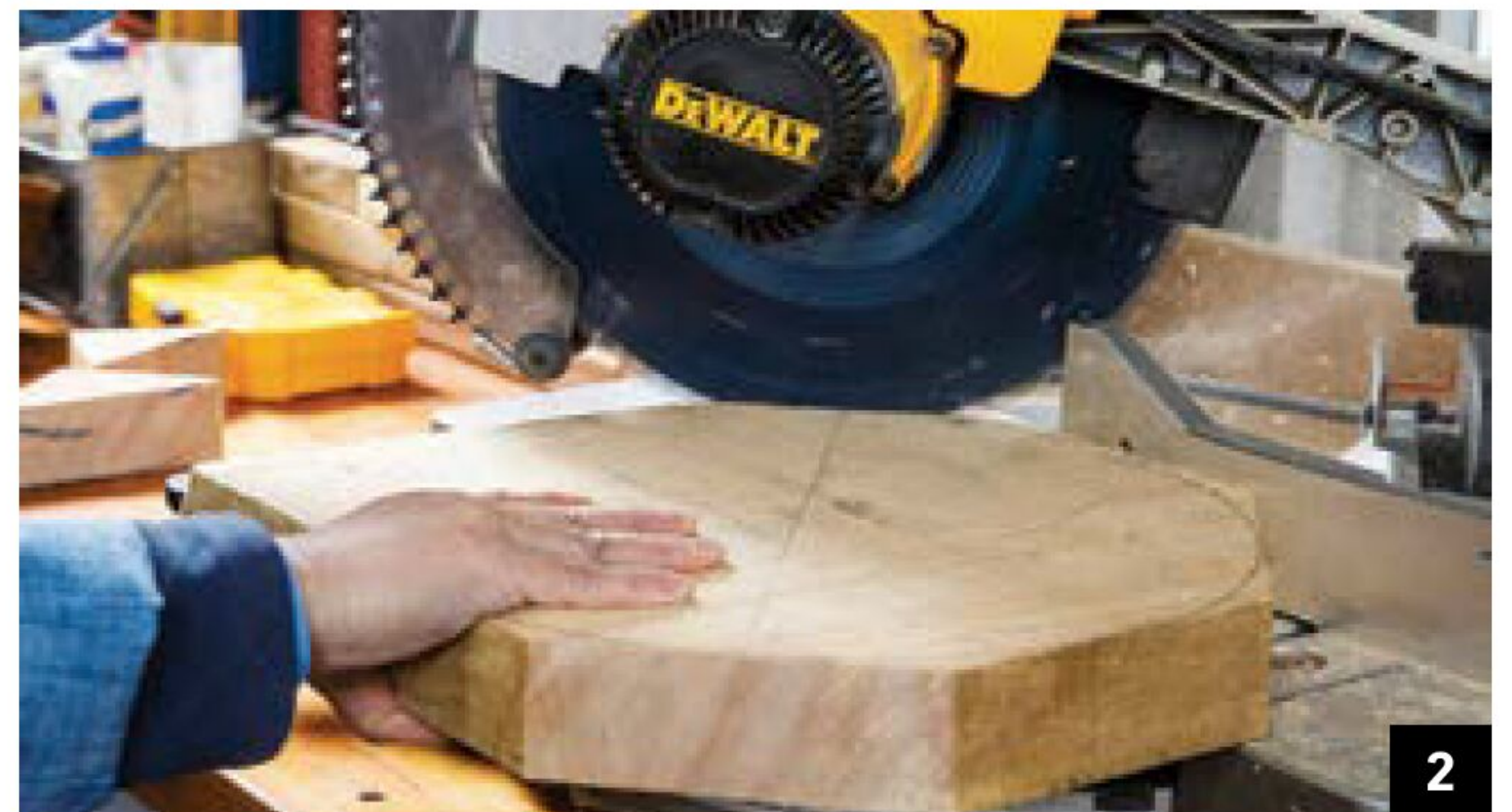
- 4-jaw chuck
- 5/8" Forstner bit
- Acid-free permanent markers
- Angled skew
- Burning wire
- Cole jaw chuck
- Jacobs chuck
- Large-scale compass
- Miter saw
- Paintbrush (for varnish)
- Parting tool
- Spindle gouge
- Spur drive
- Tailstock drive
- Wood-turning lathe
- Wood mallet

Materials

- 180-, 220-, 320- and 400-grit sandpaper
- 2"x13"x13" maple slab
- Candle wax
- Clean cloth
- Exterior-grade spar varnish
- Paper towels
- Walnut oil

have seeded and made full contact with the wood.

4 MOUNT THE WOOD ON THE LATHE Secure the wood on the lathe by



pinching between centers with the spur drive and the tailstock drive. Make sure the disk is perpendicular to the lathe for optimal balance. Lock the tail drive in place.

5 ROUND THE EDGES

Start at a low speed (800 rpm) and use a spindle gouge to round out and balance the disk, going side to side, front and back.

6 MAKE A FOOT FOR THE CHUCK

With a parting tool and spindle gouge, create a foot to transfer the disk into a 4-jaw chuck. Be sure to create a foot (tenon) with or without a dove tail based on your chuck's design.

7 MOUNT AND REBALANCE THE DISK

Secure the chuck on the lathe and mount the disk in the chuck, ensuring a snug fit between the chuck and the foot you created. With the wood transitioned to the chuck, rebalance the sides, front and back to make sure it's balanced and running true.

8 CREATE RIM DETAILS

Use a wire to burn three lines along the outer rim of the disk. To help seed the wire in place, cut a small groove where you want to burn.

9 CREATE FACE DETAILS

Retract the tail drive and add design details on the front face

of the disk with a spindle gouge and parting tool. This can be any combination of beads and coves.

10 DRILL A CENTER HOLE

Using a $\frac{5}{8}$ -in. Forstner bit in a Jacobs chuck inserted in the tail drive, lower the speed and drill a hole through the center of the disk, using the tail drive like a horizontal drill press. Lubricate the Forstner bit with wax to prevent the bit from overheating and getting caught in the wood.

11 SAND THE FRONT FACE

Sand the front face of the disk, starting with 120-grit sandpaper and then working your way up through 180-, 220-, 320- and 400-grit.



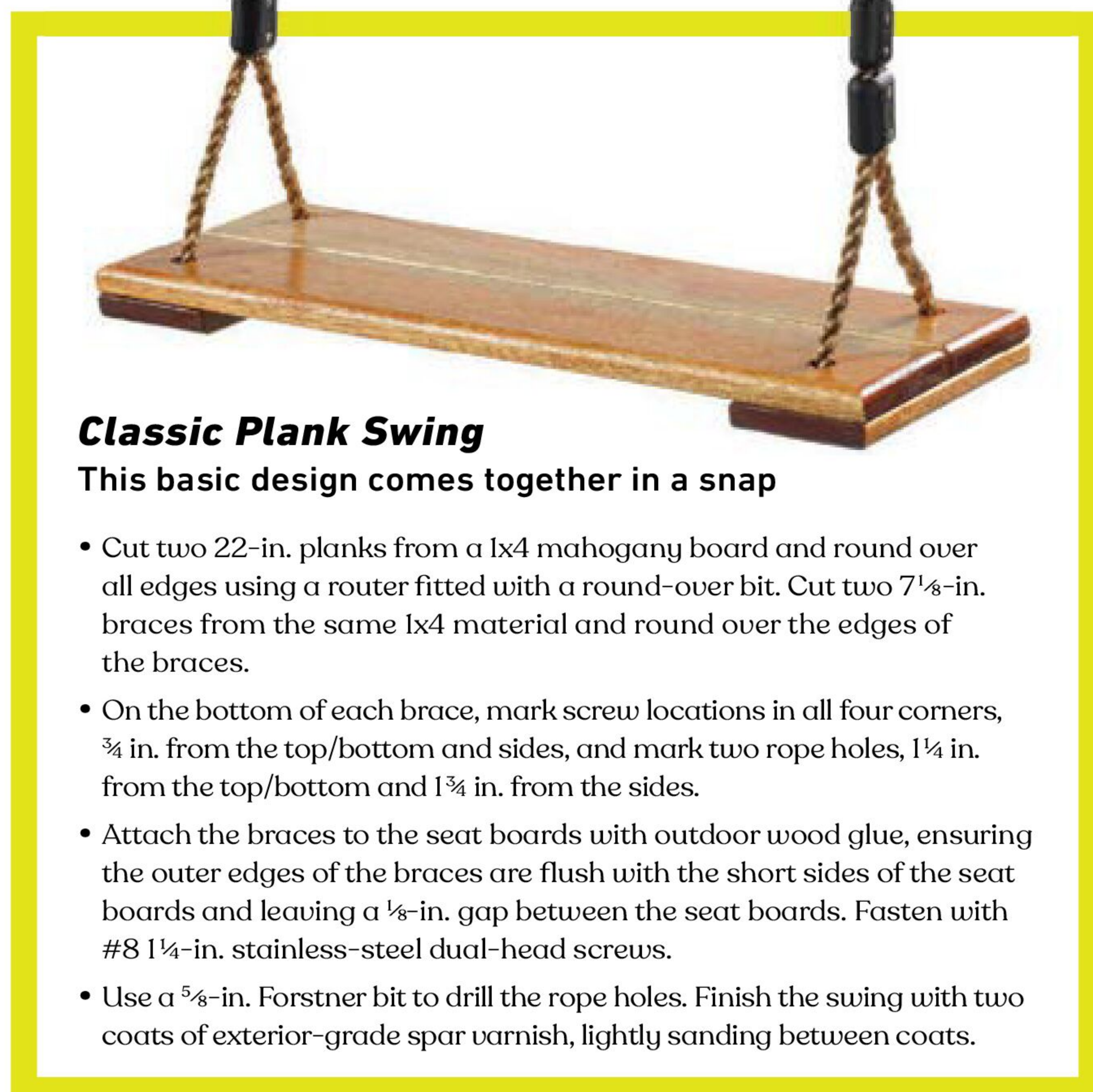
12 ADD COLOR TO THE COVES Using acid-free permanent markers, fill in the coves with color. Use the tool rest as a guide.

13 OIL THE FRONT FACE Using a clean cloth, generously apply walnut oil to the front face.

14 MOUNT THE DISK IN THE COLE JAW CHUCK Use a tail drive to recenter and mount the disk into a Cole jaw chuck with the front of the disk facing inside. Use the center of your foot to center the piece with the tail drive. Place a paper towel between the front face and the Cole jaws to prevent metal marks from transferring onto the wood.

15 REMOVE THE FOOT With the tail drive in place, use the spindle gouge to remove the foot and make a flat, smooth bottom. Once most of the foot is gone, remove the tail drive to clean up and access the area around the center hole.

16 SAND AND OIL THE BACK SIDE Starting with 120-grit sandpaper and again working your way to 400-grit, sand the back face of the disk. Apply walnut oil to the back side and remove the disk from the lathe.



Classic Plank Swing

This basic design comes together in a snap

- Cut two 22-in. planks from a 1x4 mahogany board and round over all edges using a router fitted with a round-over bit. Cut two 7½-in. braces from the same 1x4 material and round over the edges of the braces.
- On the bottom of each brace, mark screw locations in all four corners, ¾ in. from the top/bottom and sides, and mark two rope holes, 1¼ in. from the top/bottom and 1¼ in. from the sides.
- Attach the braces to the seat boards with outdoor wood glue, ensuring the outer edges of the braces are flush with the short sides of the seat boards and leaving a ⅛-in. gap between the seat boards. Fasten with #8 1¼-in. stainless-steel dual-head screws.
- Use a ⅝-in. Forstner bit to drill the rope holes. Finish the swing with two coats of exterior-grade spar varnish, lightly sanding between coats.

17 APPLY VARNISH Once the oil has dried, seal with exterior-grade spar varnish, either by brushing it on or by spraying it on from a spray can. Apply the varnish to one side, let it dry and then apply it to the other side. If after it has dried you notice the grain

is raised, use 320-grit sandpaper or steel wool to knock down the grain, then re-apply varnish.



Video Online

Scan the code to watch a video of the build.



12



17



Disk Swing Using a Router

No lathe? No problem. Laminate boards for a solid-wood look and let your router do the rest.

BY CARMEN DE LA PAZ

1 CUT AND GLUE BOARDS

Using exterior-grade wood glue, laminate three $\frac{3}{4}$ x $11\frac{1}{4}$ x $11\frac{1}{4}$ -in. square boards, alternating the orientation of the wood grain to create strength. Use clamps to tightly squeeze the layers together. Let the glue dry for 24 hours.

2 MARK THE CIRCLE

Draw an 11-in. circle using a large-scale compass or two-point trammel.

3 CUT THE CIRCLE WITH ROUTER ON TRAMMEL ARM

With a router attached to a trammel arm, cut the circle. Depending on the depth capacity

of your router and the length of the router bit, you may have to cut with a regular straight router bit from both the top and bottom, and then change to a straight router bit with a bearing on the end to continue the same size of circle and remove the wood in the middle of the boards. It is critical to find

Materials

- 150- and 220-grit sandpaper
- Exterior-grade spar varnish
- Exterior-grade wood glue
- Three $\frac{3}{4}$ x $11\frac{1}{4}$ x $11\frac{1}{4}$ " boards

Tools

- $\frac{5}{8}$ " Forstner bit
- Clamps
- Drill or drill press
- Large-scale compass (optional)
- Paintbrush (for varnish)
- Round-over bit with bearing
- Router with straight bit
- Trammel arm for router
- Two-point trammel



1

the exact center when working from the top and bottom of the laminated boards so that the trammel arm lines up.

4 ROUND OVER THE EDGES
Using a router fitted with a round-over bit with a bearing, round over the edges on the top and bottom of the disk.

5 DRILL THE CENTER HOLE
Using a drill or drill press, drill a 5/8-in. hole in the center of the seat. This hole is an appropriate size for a 1/2-in. rope. If the hole is too small, the rope may fray with use.

6 SAND AND SEAL
Sand all surfaces to clean up any tear-out in the wood. Start with 150-grit sandpaper and then proceed to 220-grit. Seal with exterior-grade spar varnish, either by brushing it on or by spraying it on from a spray can.



Video Online
Scan the QR code to watch a video of the build.



Backyard Tire Swing

With 4 billion waste tires sitting in landfills around the world, it's nice to find a great use for one while providing your children (and your neighbors' children) hours of old-fashioned outdoor delight.

While it's a pretty simple job, most tire swings aren't installed optimally. Our approach ensures that your swing will last practically forever and won't hurt the tree that it's tied to. ●



Project Plan Online

Scan the QR code for a step-by-step guide.



Grilling, Well Done

Ignite your passion for backyard BBQ with gas and charcoal grills that get the job done right. From cutting-edge models to reliable favorites, these editors' picks have the features you need to make your meal a sizzling success.

BY FAMILY HANDYMAN EDITORS

Gas Grills



TAILGATING FAVORITE

Weber Q 1200 Gas Grill

\$259 • Grilling Area: 189 sq. in.
If you need a grill for tailgating or camping, Weber's versatile Q 1200 has you covered. Carry it to your cooking spot or buy a rolling stand that lifts it to waist level while you cook. Fuel the grill with a small disposable liquid-propane cylinder (sold separately) or use an adapter hose to attach a standard 20-lb. canister.



COOK FOR A CROWD

Weber Spirit II E-310 Gas Grill

\$569 • Grilling Area: 424 sq. in. (plus 105-sq.-in. warming rack)

Weber made its name in charcoal grilling, but its gas grills also have much to offer outdoor cooks. The three-burner Spirit II features an open cart with two side tables and six tool hooks, a push-button ignition, a built-in thermometer and a convenient fuel gauge. The cast-iron cooking racks are porcelain-enameled to prevent rust and keep maintenance simple.



PREMIUM FEATURES

Napoleon Prestige 500 RSIB

\$1,499 • Grilling Area: 500 sq. in. (plus 260-sq.-in. warming rack and 140-sq.-in. side burner)
This backyard monster will rival the oven in your gourmet kitchen. The knobs glow blue or red so you can tell if they're on, even in the dark, and there are tons of other features to love. Highlights include the rotisserie kit, built-in infrared rotisserie burner and side burner for searing that can reach 1,800 degrees in less than a minute.



GREAT FOR SMALL SPACES

Char-Broil Patio Bistro TRU-Infrared Gas Grill

\$199 • Grilling Area: 240 sq. in. (plus removable warming rack)
Even if you have only a small balcony or patio, cooking outdoors is possible! This compact gas grill from Char-Broil (also available in electric for renters with lease restrictions) easily holds about six burgers. The wheeled cart is light enough to move around, and a ring underneath keeps the propane canister tucked out of the way.



HALF GRILL, HALF GRIDDLE

Royal Gourmet 4-Burner Gas Grill and Griddle Combo with Cover

\$350 • Grilling Area: 292 sq. in. (plus 314-sq.-in. griddle)
Whether you're craving pancakes or a porterhouse, this grill-griddle hybrid is up to the task. Tool hooks and two roomy side tables make juggling multiple dishes a breeze. Locking casters, foldable legs and a soft cover make assembly and storage just as easy.

CLOCKWISE FROM TOP LEFT: VIA WEBER; VIA ROYAL GOURMET; VIA CHAR-BROIL GRILLS; VIA NAPOLEON



Pick Your Plank

In plank grilling, food is placed on a wooden board set over indirect heat on a grill, infusing the dish with a deep, wood-smoked flavor. Here's what to look for in precut planks at the store:

- **Material:** Cedar, hickory and maple are all common plank materials. Think of your favorite proteins, such as hickory-smoked salmon or applewood-smoked bacon. Which flavors do you gravitate toward? If you're unsure, invest in a variety pack.
- **Dimensions:** You'll need a larger plank for a full side of salmon than for one fillet. Make sure the plank is large enough to fully contain your food. A plank that's at least ½ in. thick will withstand a grill's heat without warping or scorching too quickly.
- **Safety:** Choose planks labeled for food use (avoid treated lumber). Be sure to sand away any surface splinters before grilling, and soak planks in water for at least 1 hour to ensure the wood doesn't catch fire. The grill should be the only thing ablaze!

Charcoal Grills



UPDATED CLASSIC

Weber Original Kettle Premium Charcoal Grill

\$239 • Grilling Area: 363 sq. in. This premium 22-in. model offers several advantages over the original Weber, including a handy in-lid thermometer and an enclosed high-capacity ash container that provides a hassle-free cleaning experience. The grill can fit about 13 burgers at a time.



HIGH CAPACITY ON A BUDGET

Royal Gourmet 30-Inch Charcoal Barrel Grill with Offset Smoker

\$140 • Grilling Area: 443 sq. in. (plus 184-sq.-in. warming rack and 184-sq.-in. offset smoker) This spacious grill offers the versatility of an offset smoker, so you can grill and smoke meat at the same time—and feed a crowd. It's also easy to assemble and clean.



PORTABLE

Fire Sense Black Notebook Charcoal Grill

\$60 • Grilling Area: 205 sq. in. Looking to bring the heat to a tailgate or picnic? This portable model comes with charcoal and grill racks and is made of high-heat-resistant painted steel. When you're done cooking, fold it flat in seconds and carry the now-1-in.-thick grill away.



WORTH THE SPLURGE

Kamado Joe Classic Joe Grill-Series II

\$1,299 • Grilling Area: 250 sq. in. This grill/smoker combo includes a thick-walled shell that locks in smoke and moisture at any temperature (and can be lifted with a single finger). The two-tier grill system lets you cook with precise temperature control, and Kamado Joe's many grilling accessories take things over the top.



Grill Accessories

PRECISE AND FAST

ThermoWorks Thermopen ONE

\$109 • *Battery:* AAA

How instant is the Thermopen ONE instant meat thermometer? Glad you asked. It takes less than one second to get an accurate reading. One second! Simply take hold of the handle and fold out the metal thermometer. Insert the needle into the protein you are preparing, and voila! You have a lightning-fast (and accurate) internal temperature reading.

SAFER CLEANING

GrillArt Bristle-Free Grill Brush

\$20 • *Material:* Stainless steel

If you're concerned about the wear and tear or potential safety risks of traditional metal-bristle grill cleaners, GrillArt's Bristle-Free Grill Brush is a great alternative. The sturdy design features three rows of coils, boasting triple the cleaning action of standard brushes. For best results, dip this tool in water repeatedly and watch the grime disappear from your grill.

LIFETIME WARRANTY

Kitchen Perfection Silicone Smoker Gloves

\$30 • *Max. Temperature:* 500°

With an insulated cotton interior and a double-dipped silicone outer layer, these grippy gloves are perfect for grilling and smoking. Available in 11 bright colors, one size fits almost all, but there's an extra-large option available for bigger hands too. Cleaning is easy—simply keep the gloves on and wash your hands with soap and hot water. ●

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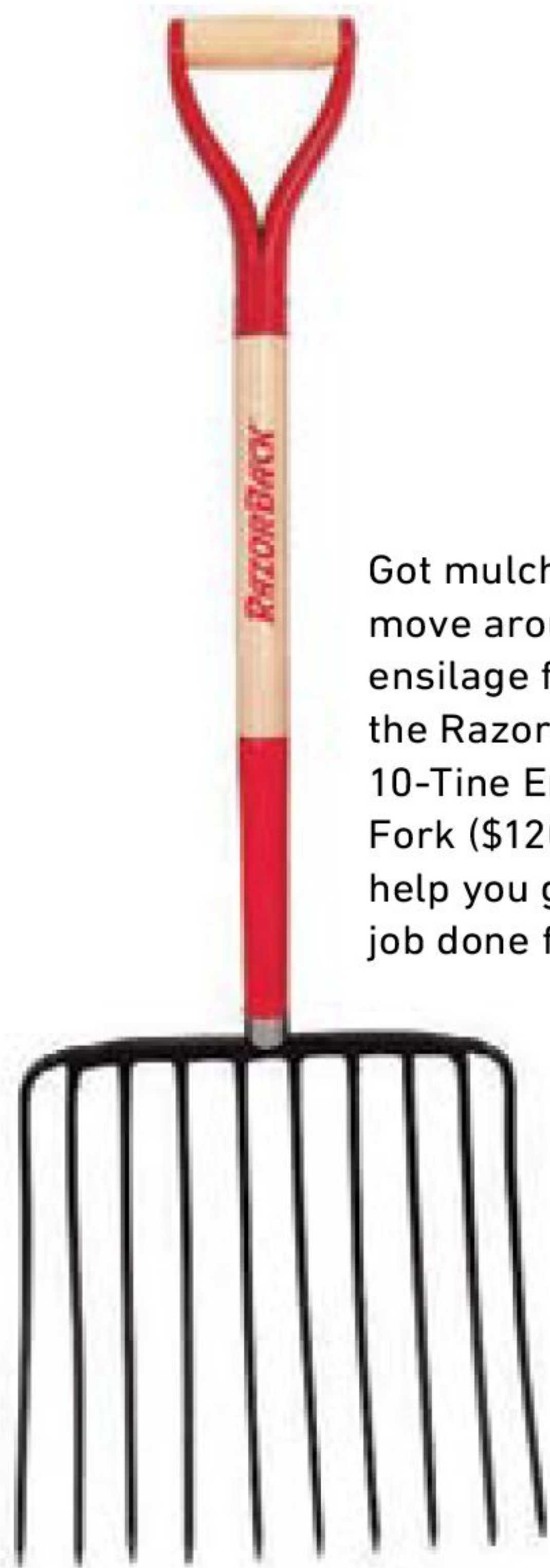
BEST PRO TIPS

Tree TLC

Discover tips for tending to
your trees, from the roots up

BY ALLY CHILDRESS

Summer brings backyard barbecues, lazy days by the pool and warm evenings with family and friends. But without the beauty and shade of a canopy of trees, summer's activities can be unbearable. *Family Handyman* talked with tree expert Spencer Campbell, manager of the Plant Care Clinic at the Morton Arboretum in Lisle, Illinois, to help you get your trees in tip-top shape for the season.



Got mulch to move around? An ensilage fork like the Razor-Back 10-Tine Ensilage Fork (\$120) can help you get the job done faster.

Tree care basics

“It’s important to take care of trees because they provide so much to us,” Campbell says. Trees enliven outdoor spaces, provide habitat for wildlife, reduce heating and cooling costs and increase property values. Tree maintenance can be species- and climate-dependent, but these “evergreen” tasks keep trees healthy and happy.

WATERING: Regular watering during the first few years helps promote healthy root systems. A slow-release watering bag works great, or just use your garden hose. Campbell says if you get about an inch of rain per week, you generally don’t need supplemental watering (depending on your particular climate). Established, mature trees can rely on rainfall alone.

PRUNING: Removing dead, damaged and diseased branches promotes air circulation and allows sunlight to reach all the leaves. Timing and cutting techniques can be species-dependent, so call a licensed,



Properly planting and watering a young tree can give it a head start on a healthy life in your yard.

certified arborist if you’re not comfortable. A pro will have the necessary tools and safety gear.

MULCHING: Mulching regulates soil temperature, suppresses weeds and retains moisture, but there are wrong ways to do it. “Do not ‘volcano’ mulch,” Campbell says, referring to piling a cone of mulch up against a tree’s trunk. Instead, make a bowl around the tree (but not touching it), and extend the mulch to the drip line. Repeat once or twice a year.

FERTILIZING: Soil amendments can keep trees healthy, but it’s important to do a soil test first to determine which nutrients may be deficient. Otherwise, you’re not helping—and you could be harming. Consult a certified arborist or university extension to choose the right treatment.

Picking the perfect tree

Before you bring home a new tree, consider your options. How big does the tree get? How



Know the Signs: How to spot when trees need help

"If trees could talk, we'd be in trouble," Campbell says. "If they could get up and move, we'd be in real trouble." Monitor your trees once a season for signs of stress, including immature leaves and leaves that turn brown and decay too early; falling branches and branches that cross each other; split or cracked trunks; oozing sap; and discolored bark.

Anything that's outside of the norm for your tree should alert you to potential problems. "You don't need a horticultural degree to identify these things," Campbell says. "You just have to be familiar with your tree."

wide will the branches spread? How wet is your location? How much sun does it get? Do you like the color? "These are the core questions you want to think about before planting a long-living organism," Campbell says.

And bigger isn't necessarily better. When a tree is dug out of the ground at the nursery, a lot of the roots get left behind. Older trees take time to redevelop those feeders. Younger trees bounce back more quickly, often

Before bringing home a new tree, consider your options. How big does the tree get? How wet is your location? How much sun does it get?

leading to better or comparable growth. Bonus: Young trees are cheaper, and easier to plant.

Tools of the trade

Campbell's favorite tool is an ensilage (or silage) fork, which has multiple tines that are perfect for shoveling mulch and loosening dirt. You'll also need a shovel for digging, a handsaw or pole saw for pruning, and a garden hose for watering. One less common tool in Campbell's plant-care arsenal is the Parsnip Predator, a specialty shovel designed to sever the roots of invasive species such as wild parsnip and burdock.

When it comes to moisture monitoring, Campbell says your hand is your best gauge: "You can buy fancy tools, but your fingers work the same." Stick them in the ground about 2 inches. "If you can't feel the moisture, neither can the tree," Campbell says.

Planting 101

Planting a new tree? "Remember, this is the last time these roots are ever going to see the sunlight," Campbell says. So help them out! Dig a hole two to three times as wide as (but no deeper than) the root ball, piling the dirt on a tarp for easy refilling. Gently loosen the soil where the root ball will sit, and place the tree in the hole. Remove and discard any burlap or wire surrounding the root ball.

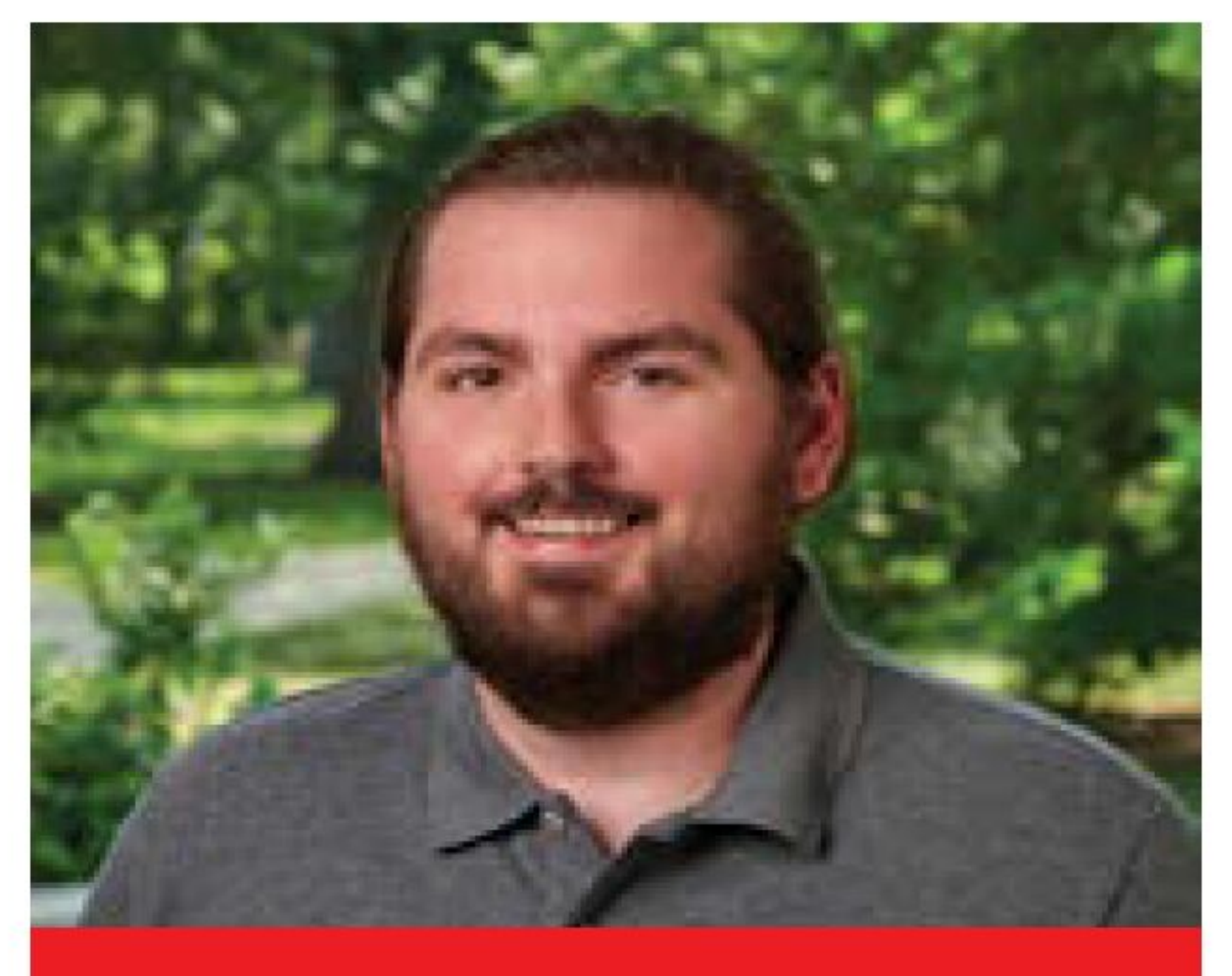
Cut off roots that are spiraling, or "girdling," the trunk so they don't choke off nutrients. Refill the hole, then tamp the ground to remove air pockets where pests and disease-causing organisms hide. Water twice, allowing the

first watering to percolate down before watering again. Mulch, then water weekly until established.

Protect against pests

Young trees are particularly vulnerable to deer, who rub the velvet off their antlers and munch on tender shoots and buds. Use exclusionary fencing and trunk protection to deter deer, beavers and other wildlife, but never wrap anything around the trunk or branches that's harder than the tree itself. Jute and corrugated plastic tubes are good choices that won't harm your tree.

Smaller pests like insects and fungi can be controlled by topical or soil applications, but the timing is important to minimize harm to the tree and to beneficial insects and pollinators. You also have to know what pest you're dealing with. Campbell says to consult a pro. ♦



Meet the Pro

Spencer Campbell, Plant Clinic manager at the Morton Arboretum, serves as an educational resource for both professionals and the general public, offering guidance on plant selection, care and protection.

HVAC SOS!

Everyone vents about the same problems when it comes to heating and cooling their homes. Worry no more—we've got easy solutions.

BY FAMILY HANDYMAN EDITORS



Knife Skills

Need to fix your compressor fins? Just grab a dinner knife. You can realign bent or crushed fins with it, using gentle pressure. Just don't insert the knife more than ½ in.



Q: What's an easy way to extend the life of my HVAC unit?

It's really easy to clean an air conditioner condenser, and it's one of the regular maintenance tasks that will make your unit last longer. Aim your garden hose nozzle upward into the top of the condenser coil to remove the crud buildup under the lid. Then work all the way around the coil. Then aim the nozzle down and flush the debris down the coil fins. Finally, adjust the nozzle to a gentler stream and shoot water directly into the coils to flush out any remaining debris.

ESKYNMAKS/GETTY IMAGES; TMB STUDIO

Power Check

No air? It could be that the furnace isn't getting power. To check, simply set your thermostat to the "fan" position. If you don't hear the fan turn on, there's a good chance there's no power to the furnace. If there's power, check the furnace itself.



In-line duct fan



Register booster fan system

Q: Why is one room of my house hotter than another? How can I fix it?

The culprit is usually uneven airflow. Remember: Heat rises naturally. Or it could be an extra-long duct causing the issue. If you have forced-air cooling, a duct or vent booster fan can increase the flow of cool air into the room. Two types are available. An in-line model, like Grainger's In-Line Duct Fan, fits inside the duct of the room you're trying to cool. Mount the fan near the outlet and it will kick on when your cooling system runs. Alternately, vent and register booster fans, such as AC Infinity's Airtap T6, sit directly on top of (or replace) ceiling, floor or wall registers. Depending on the make and model, you can set it to operate automatically, control it with a switch or operate it with a remote control.



Q: It feels as though the air conditioner isn't working as effectively as it used to. What could be the issue?

First, check your filter for dirt and debris. It might need changing. As a general rule, 1-in. filters should be changed every month, 2-in. filters should be changed every 2 months and 4- or 5-in. filters should be changed every six to 12 months. It could also be condensation that forms on your outdoor AC lines, which reduces efficiency and raises your energy costs. Solve that by replacing insulation that's damaged or rotted around your outdoor AC lines.



Q: There are temperature swings in certain rooms, some much hotter than others. How do I diagnose this?

Make sure that there's nothing blocking the air returns. The returns pull air out of the room and back to the furnace, while supply registers blow air into the room. You can check the return airflow by holding a piece of paper against the return register. The paper should stick to the register. If it doesn't, there's an airflow problem.

Understanding Your Air Conditioner

Most central air conditioners have two basic parts: an outdoor unit (compressor/condenser) that sits next to your home and an indoor unit (evaporator) that's located in a central duct near your furnace. If you have a heat pump instead of a furnace, the indoor unit will be in the air handler. Use the same maintenance steps we show here. If your furnace looks different from the one shown or you have a heat pump, use the owner's manual to find your way around it. The basic parts will be the same.

Shop Talk

Make your workshop work for you with these reader-submitted tips and tricks

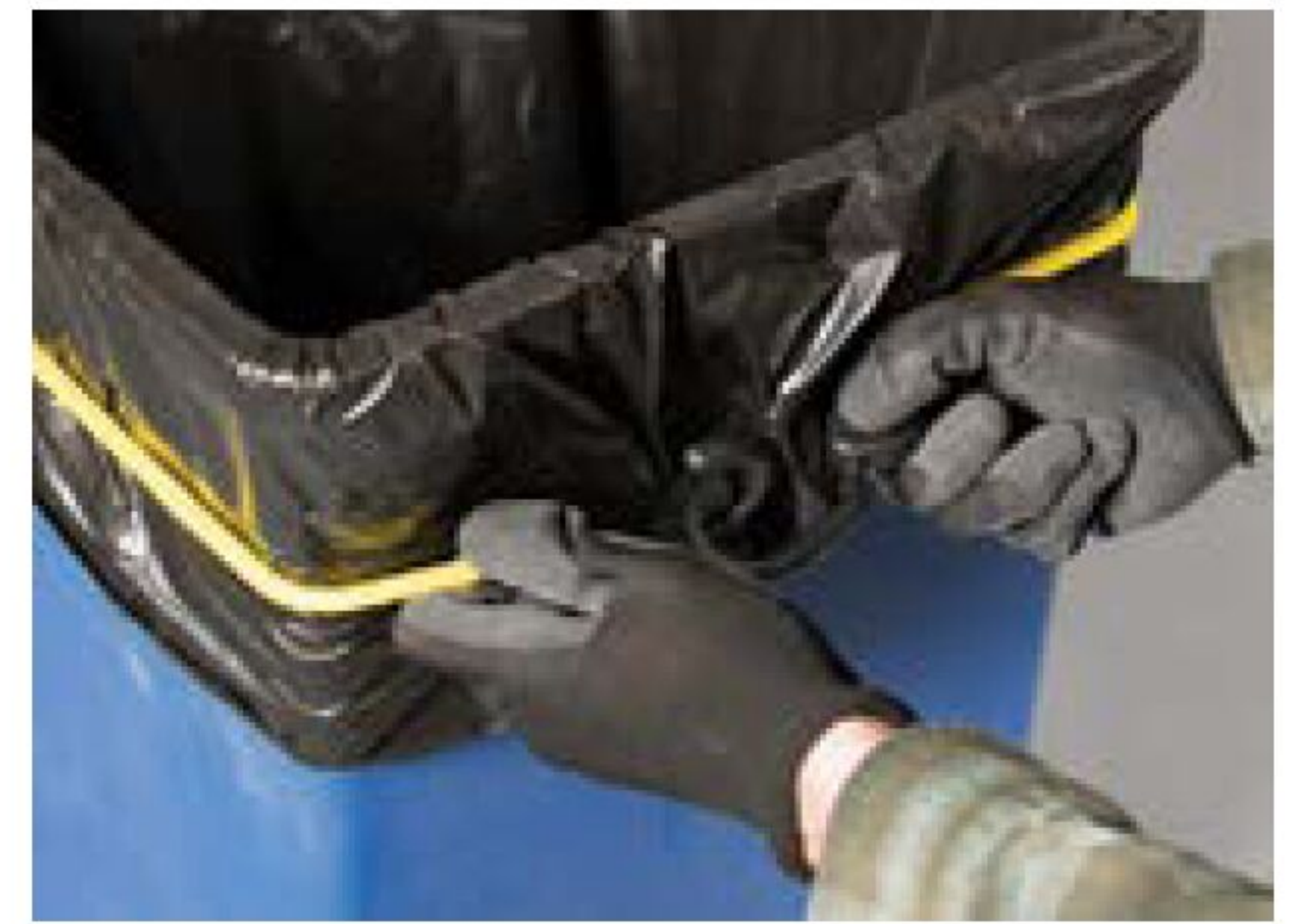
Keep Wrenches Organized

Tired of searching for the right size or style of wrench in the middle of your project? Try this to keep things organized. First, in order based on their size, thread the wrenches onto an eye bolt. Then attach a wing nut to secure the wrenches in place. —Frank Wright



A Sneaky Way to Clean Sandpaper

You can clean sandpaper on your power sander quickly, getting it back to nearly new condition, with a simple old sneaker. Start up your power sander and dust collection system, making sure to wear hearing and eye protection. Then, slowly press the rubber sole of an old sneaker along the sandpaper. —Tim Harper



Trash Bag Tie-Down

Bungee cords are perfect for holding the trash can liner in place on my large workshop trash can. All I do is overhang the trash bag along the top of the trash can and secure the cord on top of the bag. You can also hook two cords together if needed. —Ed Hunkele



Use a Comb with Brad Nails

Protect your fingers by using a plastic comb to hold small brad nails in place before striking with a hammer. Needle-nose pliers work great for this task too! —Les Wilson



Secure Small Parts with a Clamp Bar

To safely drill small parts, you need a way to hold them. A clamp bar is a fast solution. Predrill a screw hole in the end of a 1×2, and then screw it directly to the table where needed, according to the size of the workpiece. This pivoting bar lets you squeeze the workpiece against the fence while keeping your hands out of the way. For a dowel, cut a V-notch in the bar to keep it from sliding. A hand screw clamp also works well for small parts, again with a V-notch for a dowel. —Thomas Wheeler

“Want to save a half-used tube of caulk? Insert a nail or screw into the hole, then wrap it with duct tape or painter’s tape for an airtight seal.”

—Kathy Horne

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Stars and Stripes

A *Family Handyman* reader transforms old materials into charming, patriotic decor



I make American flags out of materials that would otherwise be thrown away, giving them a new purpose. The wood is usually from pallets, and the stars are made of melted brass or other metals. When I make these flags, I think of all my friends and family who have served in the military or are in law enforcement. —Gregory Lazzell, Prescott, AZ •



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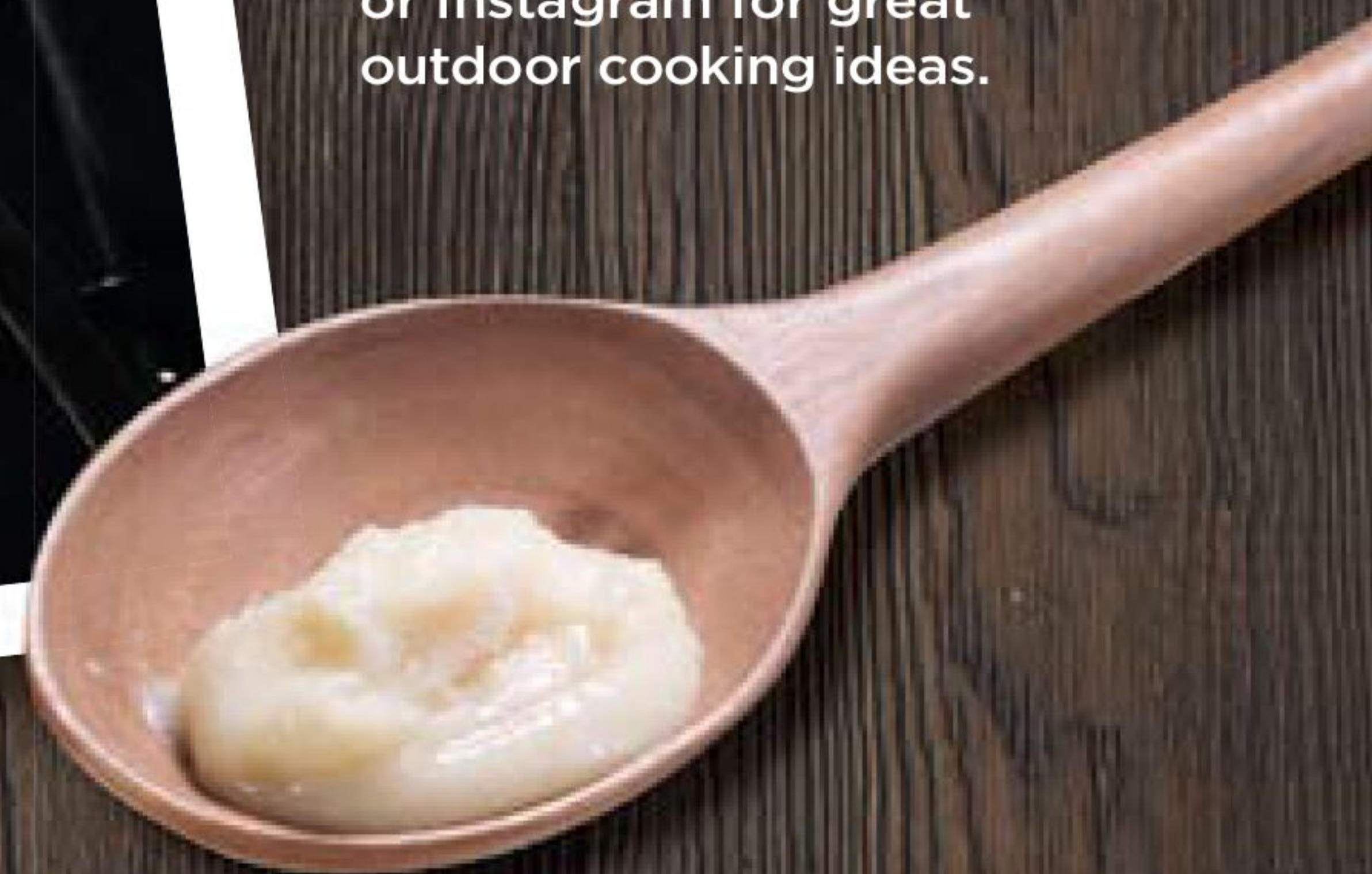
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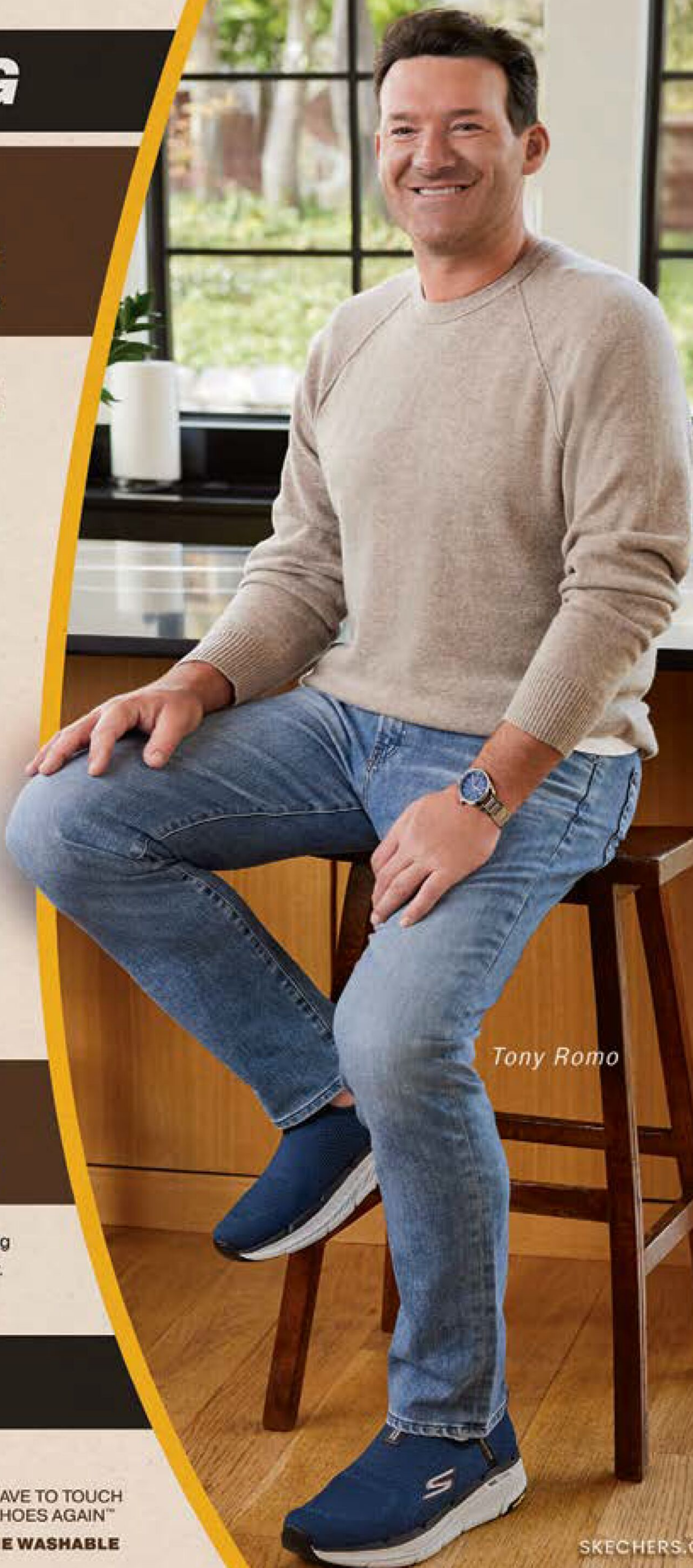


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