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September 2024





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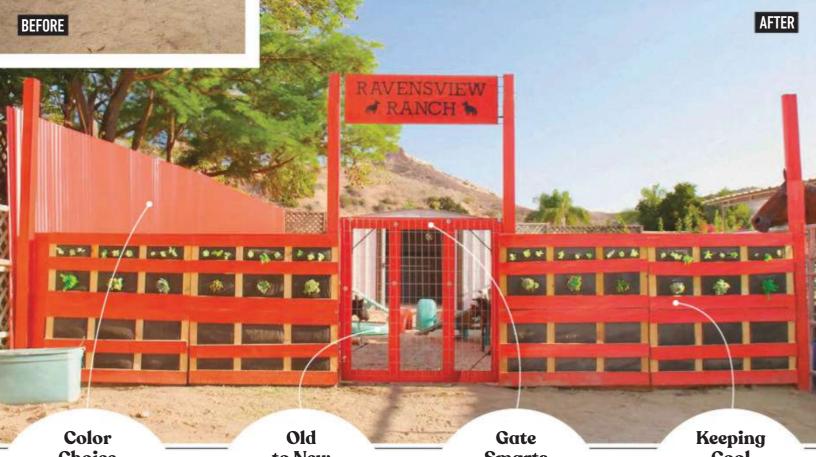


Creating a Farm Animal Sanctuary

Pet Palaces TV host Luke Barr turned vacant land into a sustainable home for goats



oats may want to roam, but this farmstead in Sunland, California, proves there's no place like home. "The owners saw a need for a bigger space with shady napping spots, play areas, feed stations and, of course, fencing to keep the goats in and the coyotes out," says Barr. Yet not all these things have curb appeal, so the designer opted for an enclosure that balanced form and function and appeared inviting. Here are some key takeaways from the project. -Kelly Aiglon



Choice

Nothing says farm like barn-door red. Once faded, it looks almost pale orange. This color is iconic and doesn't appear dirty when it gets dusty.

to New

Repurposed tires were installed as play pieces for the animals, and used crates were fashioned into hanging planters on the fence. Recycle and repurpose, and you'll save money.

Smarts

A see-through gate gives you a window into the lives of the goats and allows you to enter the enclosure safely. That's important for your and the animals' safety.

Cool

We designed things around the sun. For hot days, adding shaded areas was key, including using the fence. During certain times of day the pallet fence offers a cooler place to rest.



See this project in an episode of *Pet Palaces* on **At Home with Family Handyman**. Stream the channel free on Samsung TV Plus, The Roku Channel and more. Find more info at FamilyHandyman.com/tv.



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common cutting angles

• Shipping weight: ≈ 54 lbs.

• Footprint: 20" x 15"

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- Side-mounted power strip
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- 18"-High pegboard backing
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FEELING REJUVENATED

Everyone feels aging pain, but CBD can help

By: Beth Giles

ife 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.

What's New

Now Trending • Gear Up • Mini Makeovers

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



NOW TRENDING

Moroccan Mood

Whether on a backsplash, wallpaper or decorative accents, Moroccan patterns are big right now. Give your home a stamp in the passport with mosaic tiles—an easy way to bring vibrancy and texture to unexpected places.

When tiles are offset with earthy accents and botanical elements, the result is global appeal meets comforts of home. —Kelly Aiglon



What's New Gear Up



Make Yourself at Home

Enjoy comfier, cleaner and cozier indoor spaces with these editor-tested products

BY FAMILY HANDYMAN EDITORS

Better Bedside Storage

If a cluttered nightstand or limited space is cramping your bedtime routine, the BedShelfie might just be your new best friend. This handy shelf clamps to your bed frame or slides under your mattress, providing a convenient spot for your phone, water bottle, book or anything else you need within arm's reach. It comes in various styles and colors, including an eco-friendly bamboo option. I tested the BedShelfie Slide under my memory foam mattress and it fit perfectly, with setup taking just a few minutes. I particularly appreciated the thick felt padding on the portion that slides under the mattress, which prevents any scratches or damage to your bed frame.

While the clamp-style BedShelfie comes in multiple sizes, only one slide-style model is available. That said, I found the 13\% x 9\%-in. platform plenty roomy. The sturdy shelf is designed to hold up to 15 lbs., and it didn't budge under the weight of larger items like my heavy-duty water jug, Bluetooth speaker and laptop. Small notches on either side helped to hold charging cords in place. Ultimately, I highly recommend the BedShelfie as a well-made, space-saving solution for anyone who needs a little extra bedside storage. Plus, it's completely portable, so you can take it with you when you travel. - Mary Henn, Shopping Editor BedShelfie Slide, \$50; thinksmallish.com, Amazon



Mood Lighting Made Easy

Looking to add more smart home functionality to your house without breaking the bank? Kasa Smart light switches connect to your Wi-Fi network, allowing you to control them from anywhere using your phone or voice commands. Several styles are available, depending on your needs; in my home, I opted for the dimmer switch and the threeway switch (for controlling lights from two locations).

With the Kasa Smart app guiding me, the installation process was relatively straightforward, though having at least a bit of basic wiring knowledge is helpful. Once you've got the switches connected, the app is streamlined and userfriendly, allowing you to control all your Kasa Smart devices, set schedules and create routines. The switches can also be voice controlled with Amazon Alexa, Google Home and Microsoft Cortana, as well as Nest and IFTTT, among others. There is a lot to like about these switches, including the minimalist design that blends well with any decor. -Shay Tilander, Senior Digital Editor Kasa Smart Wi-Fi Light Switch, Dimmer, \$23; Kasa Smart Wi-Fi Light Switch, 3-Way, \$25; kasasmart.com, Amazon

Filter Away Kitchen Fumes

I'm a cookbook author with a small kitchen, which means I spend a lot of time battling smoke and grease. Because my current range hood is practically useless, I was excited to test out the AirHood, a portable kitchen exhaust system that sucks air through dual filters to remove kitchen odors and impurities. It also filters out airborne oil particles, resulting in a cleaner space. I used



the sleek, modern-looking device for a month to see how it fared against a daily barrage of cooking grease and gunk.

I opted for the wireless model, which needs some time to charge before it's portable, but if you plug the AC adapter into the wall, it's ready to go immediately. After that, a full charge provides up to eight hours of runtime. The AirHood made a huge difference when I cooked skin-on chicken thighs—I'd estimate a 95% reduction in smoke, and a significant reduction in the amount of grease that ended up splattering on my stovetop. I even seared steaks without setting off my smoke alarm. The AirHood's only downside is it's guite noisy on the highest setting. That said, it has a quieter low setting that works well for most cooking. A month in, consider me impressed—the AirHood is a lifesaver for anyone with a poorly ventilated kitchen. -Allison T.S. Robicelli, Food and travel writer AirHood Wireless, \$200; theairhood.com, Amazon

Luxury Sheets Worth the Splurge

As a hot sleeper, I was curious: Could Cariloha's Resort Bamboo Bed Sheets really deliver on their promise to regulate my body temperature and offer a five-star resort feel at home?

After months of use, the answer is a resounding yes. Made from viscose from bamboo, a sustainable material known for being cool and moisture-wicking, these bed sheets keep me far more comfortable than my (formerly) beloved crisp cotton or flannel sheets. The sheets sport a sateen finish, come in a variety of luxe colors and are silky soft. I don't wake up wet with sweat, even when

I wear an oversized flannel shirt to bed. And while the sheets do wrinkle easily in the wash, the benefits make a little extra care worthwhile. Note: If the steep price tag is of any concern, Cariloha offers convenient financing options and a 100-day return policy. —Sheri Kaz, Associate Product Tester, Home & Lifestyle Cariloha Resort Bamboo Bed Sheets, \$289 (queen);

cariloha.com, Amazon



AguaBliss is known for its high-output revitalizing shower filter. Since that was Family Handyman's choice for best overall shower filter and because I have very sensitive skin, I was curious to put the new HD version to the test.

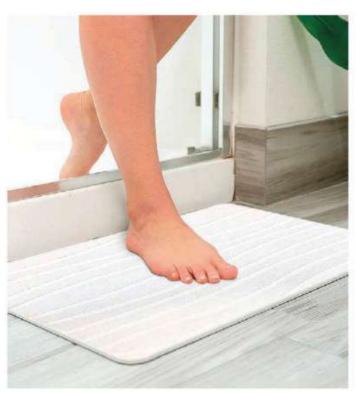
Like the high-output model, the HD revitalizing filter infuses water with vitamins and minerals for skin and hair benefits, but it comes with a more powerful cartridge and a sleeker look. Available in an attractive silver finish, the filter comes with the preinstalled filter cartridge, Teflon tape and two changeable sediment pads.

Though I'd already been using a shower filter for about six months, the HD filter reduced markedly more post-shower redness and itchiness than my previous one, and I noticed my skin feeling softer and less dry overall after showering. The AquaBliss also seemed to keep frizziness at a minimum and my hair feeling light. If you're in the market for an upgrade, AquaBliss is a great option. -Mary Henn, Shopping Editor AquaBliss HD Revitalizing Shower Filter, \$80; aquabliss.com, Amazon, Walmart



Dripless, Slipless Stone Bath Mat

With two adults and five kids, my family goes through dozens of baths and showers each week, so durable bathroom accessories are a must. I was pleasantly surprised by the modern nonslip Sutera Stone Bath Mat. Based on the name alone, I expected it to be rock-hard. Instead, the absorbent diatomaceous earth surface felt more like a hybrid of unpolished tile and the somewhat bouncier texture of wood. The real benefits, however, bore out in the mat's performance and care. Our Sunday nights are a bath and shower



marathon in the kids' bathroom, with wet footprints everywhere. With this nonslip stone mat, the floor is dry by the time the next kid emerges. Plus, in lieu of regular laundering, it needs only light buffing every few months with an included tool. Making the switch from my old terry mats has saved me time, money and a lot of laundry detergent. -Bryce Gruber, Shopping and e-commerce writer Sutera Stone Bath Mat, \$100; sleepsutera.com, Amazon

Keep Basement **Humidity at Bay**

My house is more than 100 years old, and the stone foundation lets in plenty of moisture. Suffice it to say, keeping the humidity level low in my basement wood shop has been an ongoing challenge. To tackle the problem head-on, I recently tested several dehumidifiers, and the powerful, convenient Frigidaire High Humidity 60-Pint Dehumidifier came out on top.

Generally speaking, dehumidifiers draw moisture from the air to help indoor spaces feel cooler and more comfortable, and reduce the risk of mold, mildew and other home moisture problems. The Frigidaire model features a 60-pint-per-day humidity control and a larger-thanaverage 2.64-gallon water reservoir, automatically shutting off when the reservoir is full. Attaching a drain hose is also easy if, like me, you prefer continuous operation. The built-in casters allow you to easily roll the sturdy unit between rooms, though I suggest recruiting a helper to move it up or down stairs. A 78-in. power cord also gives you plenty of wiggle room if basement outlets are sparse. If you don't mind a bit of ambient noise, try it out in the humid or clammy spaces around your home. —Deane Biermeier, Home writer and longtime contractor Frigidaire High Humidity 60-Pint Dehumidifier, \$499; frigidaire.com, Amazon, Home Depot



LOCKWISE FROM TOP LEFT: VIA AMAZON FOR AQUABLISS, VIA FRIGIDAIRE, VIA SUTER,

Systane PRESENTS



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Smart Fan for Cool Comfort

As a lifelong apartment dweller tired of scorching summers, I tried out a smart tower fan from Lasko that can be controlled remotely via Alexa, Google Assistant or a handy app. The sleek, narrow fan takes up minimal space, offering five speeds and 90-degree oscillation to spread cool air around the room even when tucked into a corner. It was quick and easy to assemble and connect to my smartphone, and while the physical buttons are a little clunky, the app is very userfriendly. I appreciated the "night mode" option to turn off the tower's LED lights. Plus, the ability to precool my apartment before I even reach my building's gate is a luxury I don't take lightly. -Anthony O'Reilly, Shopping writer Lasko 40" Smart Oscillating Tower Fan Powered by Aria, \$120; Amazon, Walmart

High-Style, Low-Maintenance Kitchen Rug

I don't have a dishwasher at home, so I need a hardworking kitchen rug that cushions my feet, absorbs splashes from the sink and stands up to my active family. Ruggable offers 2 x 3-ft. rugs perfectly sized for this purpose, so I hopped online to order one and put it to the test.

My rug arrived snugly rolled in a long, skinny box, and while the unrolling process was a bit tedious, the mat's small size made things easier. Ruggable rugs come in two parts: a pad and a removable top. The pad is made of a nonslip, latex-free material (think yoga mat), while the rug cover is stainand water-resistant, low-pile, lightweight and designed to fit inside your washing machine. The rug pad and top fit together like Velcro and stick fast, so be sure to line them up before you try to put them together, following the included instructions.

Over the course of a week, my rug remained truly nonskid, even though it saw plenty of foot traffic and long dishwashing sessions. When it was time for a wash, separating the top from the pad was easy. I ran it through the washer with mild detergent, dried it on low heat and voila!—it came out looking like new. —Ellie Martin Cliffe, Executive Editor, Taste of Home Ruggable Jonathan Adler Inkdrop Black & Ivory Rug (2' x 3'), \$119; ruggable.com, Amazon 🄹





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Color Your World

Fresh color can take your home a long way. We've got surprising inspiration, an Ikea hack how-to, splashy home decor recommendations and palette-matching to fit your personality.

BY FAMILY HANDYMAN EDITORS







GET INSPIRED Hues on the Loose

When it comes to painting with color, there really are no rules. In fact, some of our favorite projects break the norm. Get inspired by these examples of how color can pop up in unexpected places, giving your home a fresh look with little effort.



GEAR UP

Decorate with Color Trends

These accent pieces represent Coloro's colors of the year for 2025. Grab them while they're hot.

1. Future Dusk

Dark, moody and alluring, this hue sits between blue and purple. According to Coloro, it feeds into themes of transition whether it be moving from dark to light, or dusk to dawn. Its futuristic vibe is perfect for accent pieces like a mirrored mosaic cow skull from Skull Bliss. \$649, skullbliss.com

2. Sunset Coral

It's time for a dash of feel-good energy. This vibrant color is designed to inspire selfcare (chalk that up to its saturation level, which may encourage people to embrace feelings of happiness). Consider adding it to your home for pops of color. A graphic mandala pillow will do the trick. \$15. amazon.com

3. Transcendent Pink

A whisper of pink is actually an elevated neutral. Pairing well with earth hues, it goes with nearly everything. Coloro took inspiration for this dusty hue from virtual and Al-generated worlds. Add a dash of the barely-there shade with Amira handblown glass vases. \$299/set of 3, potterybarn.com

4. Aquatic Awe

Hello, transformative turquoise. Aquatic Awe was created to "celebrate the strange and wondrous aspects of nature." Its hyperreal quality also has a digital, alt-reality feel. Use it as a burst of color in the kitchen, hallway or bedroom. A hand-beaded Naka pendant light is your go-to. \$548, 54kibo.com

HOW-TO

How to Paint Ikea Furniture

The untreated furniture with a fan following is perfect to work your magic on. Make it your own with this step-by-step.





SAND INDIVIDUAL PIECES Use a 120-grit sanding sponge across all surfaces. A light sanding helps the paint stick to the surface. Wipe down the newly sanded pieces to remove all dust and debris. You don't want bits of dust mixing with your paint.



APPLY PRIMER Using a smooth roller or a high-quality brush, apply the primer to all surfaces you plan to paint.

We recommend the Zinsser B-I-N stain blocker. But either way, use shellac-based primer, then let it dry overnight.

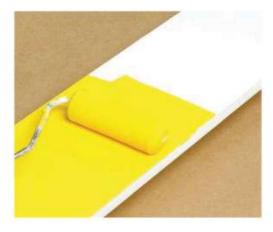
PRO TIP: If the furniture is darker than the new color, add a second coat of primer after a few hours. You'll use less paint, and it's more likely the new color will come out as expected.



Watch the Video

Scan the QR code to watch this project come together.





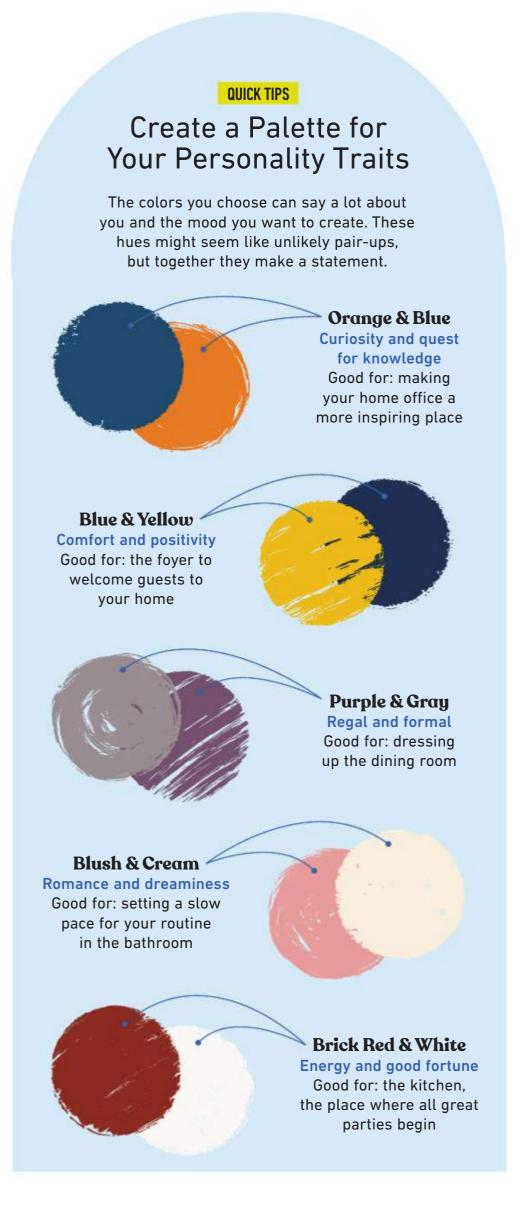
PAINT INDIVIDUAL PIECES Use a cabinet product with a hard enamel finish for a smooth surface. A paint roller is great for larger pieces. A brush gets into grooves. A sprayer provides a smooth and professional look.



SEAL INDIVIDUAL PIECES Choose a water-based polyurethane with a finish that matches your paint. When you apply polyurethane, be quicker with your application and check it for air bubbles before letting it dry. Then wait another one or two days for your masterpiece to completely dry before assembly.



ASSEMBLE AND ENJOY Grab the Ikea instruction manual and put it all together. You've got this.







QUICKER, EASIER

Built-In Bookcases

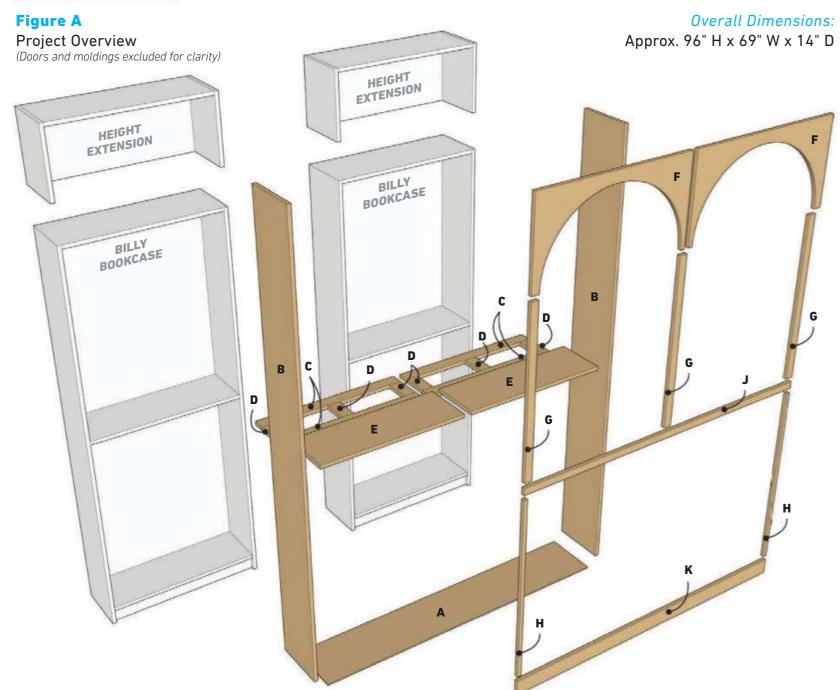
Turn prefab bookcases into built-ins that look as though they have been there for generations

BY NINA BRICKO

kea's classic Billy bookcases, hugely popular in their own right, have lately become DIY darlings as the base for more elaborate custom builds. As I scrolled through social media one night, admiring the many creative Billy "hacks" in my feed, I decided to try my hand at installing them as built-ins in a room I also wanted to refresh with new moldings and paint.

If you plan to re-create these souped-up bookcases—with their arched tops, crown molding and baseboards—in your own space, you'll need a few critical measurements first:

Time	Cost	Skill Level
Multiple days	\$600-\$700	Intermediate
 Tools 18-gauge brad nailer Allen wrenches Assorted drill bits Caulk gun Circle cutting jig or trammel arm Clamps 	 Drill/driver Level Miter saw or box Molding pry bar Painting supplies Random orbital sander with sandpaper 	Stud finderTable sawTape measureTrack saw



Materials

Item	Qty.			
1/4" x 4' x 8' plywood	1			
3/4" x 18" x 4' edge-glued panel	2			
³ / ₄ " x 4' x 8' plywood	1			
1x2 x 8'	4			
1x3 x 8'	2			
1x4 x 8'	1			
11/4" brad nails				
31⁄4" x 8' baseboard	2			
35%" x 8' crown molding	2			
150- and 220-grit sandpaper				
Caulk				
Construction adhesive				
Duct tape				
Ikea Billy bookcases	2			
Ikea Billy height extension units	2			
Ikea Oxberg doors	4			
Ikea joining screws	6			
Paint				
Primer				
Shims				
Tack cloths				
Wood filler				

Cuts

Key	Qty.	Dimensions	Part
Α	1	1/4" x 11" x 63"	Riser
В	2	3/4" x 11" 933/8"	Side
С	4	³ / ₄ " 2½" x 30"	Shelf build-up (long)
D	6	3/4" x 21/2" x 51/4"	Shelf build-up (short)
Е	2	³ / ₄ " x 10 ¹ / ₄ " x 30"	Plywood shelf
F	2	3/4" x 173/16" x 321/4" *	Arch panel
G	3	3/4" x 11/2" x 333/16"	Upper stile
Н	2	3/4" x 3/4" x 383/8"	Lower stile
J	1	3/4" x 13/8" 641/2"	Center rail
K	1	3/4" x 31/4" x 641/2"	Base rail

^{*}Cut to this size after routing the arch.

Safety Considerations

Billy bookcases (and all bookcases, for that matter) should be anchored to the wall, especially when young children and pets are present.

Ceiling height: The ceiling height determines whether you can use Ikea's Billy bookcase height extenders or will need to make your own. For this project, I built a soffit down to 8 ft., which acted the same as a standard ceiling.

Crown molding height: If the crown molding is too tall, it will make the arch lower and the top shelves almost useless. Too short, and it may not cover the gap between the top of the bookcase and the ceiling. I used a common and readily available 3%-in. crown molding.

Baseboard height: Ikea Oxberg doors are overlay doors, so they rest on the front edge of the bottom and middle fixed shelves of a standard Billy bookcase. If you use a tall baseboard, you will need to construct a taller riser to maintain the functionality of the doors. I stuck with a 31/4-in. baseboard that was already in the room and is common in newer homes.

A little extra measuring is well worth your time for an end result that fits your home perfectly. Who would ever think this build started in a box?

ASSEMBLE THE BOOKCASES

Assemble the two bookcases (each 31½ in. wide and 79½ in. tall) and extension boxes per Ikea's provided instructions. I reinforced the back panel seam with duct tape and primed and painted the bookcase backs ahead of time, sanding with 150-grit sandpaper to provide some bite for the primer to adhere to. Apply several coats of paint (and plan to do touch-ups later).

CUT AND ATTACH THE RISER

Remove the baseboards and/or crown molding where you will be installing the bookcases. Using the baseboard's height as your guide, determine how tall of a riser you'll need to put under the bookcases to be able to carry the existing baseboard around the cabinet without having it protrude over the bottom shelf or interfere with the doors. Using that height, cut or construct

a riser the same size as (or a bit smaller than) the footprint of the combined bookcases. (My baseboards required me to raise the bookcases around 3/16 in., so I used ¼-in. plywood for this task.) Glue the riser to the bottom of the bookcases with construction adhesive.

ATTACH THE **BOOKCASES**

With the construction adhesive on the riser still wet, apply construction adhesive to the sides of the bookcases you wish to join. Clamp the bookcases together, ensuring they are flush at the top, bottom and front.

Drill and insert at least six joining screws along the joined sides two each at the bottom, top and middle. Drill through existing shelf pin holes to create holes slightly larger than the barrel diameter of the joining screws, which are available from Ikea's spare parts section. (The screws, #100402, and barrels, #100644,







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are sold separately.) Push or tap joining screws into the holes and tighten them with the appropriate Allen wrench and/or screwdriver.

Let the construction adhesive cure while the clamps are in place. Once it has cured, mark the studs at the top of the wall and push the joined bookcases against it.

FASTEN THE BOOKCASES TO THE WALL

Once the bookcases are positioned, use the L-brackets provided by Ikea to attach them to the wall plumb and level. If the walls are not smooth or square, you may need to use shims and attach a second set of L-brackets to the bottom shelves of the bookcases, connecting them to

the wall studs through the back for stability.

ATTACH THE PLYWOOD SIDES Plywood sides that run from the floor to the top of the bookcase will hide the extension box seam and any shims needed to secure it to the back wall. Use construction adhesive and 11/4-in. brad nails to attach the plywood sides flush to the front edge of the existing bookcase sides. Ensure that your nail gun is set to the correct depth so that the nails do not blow through the inside of the bookcase. If the back wall is very uneven or many shims were used, cut the side pieces wide and scribe them to the back wall before attaching them.





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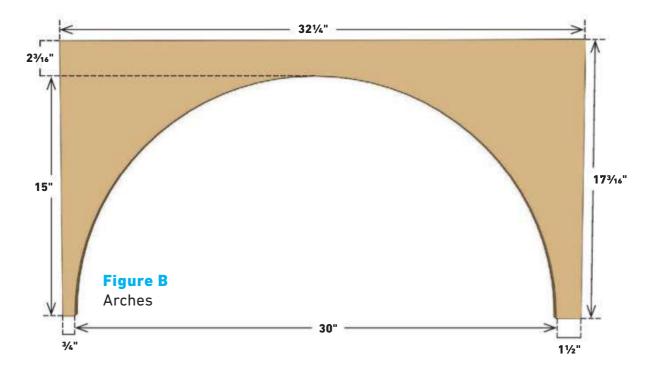
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BUILD UP THE FIXED SHELF

Because Ikea's Oxberg doors will protrude over most of the center fixed shelf, the shelf needs to be built up by 1½ in. to support the cross-member of the face frame.

Frame the shelf build-up with 1x3s or scrap ¾-in. plywood pieces. Secure the pieces with construction adhesive and $1\frac{1}{4}$ -in. brad nails, making sure there are no gaps between the fixed shelf and build-up pieces. Cut a ¾-in. plywood shelf the same size as the shelf and attach it to the frame, again using construction adhesive and nails to secure it.

CUT AND ATTACH THE ARCHES

From the edge-glued panels, cut two arches: First, mark the center of the edge-glued panel's width. Then configure your router with a straight cutting bit and a trammel arm or circle cutting jig so that you can cut a 30-in.dia. circle. Attach the pivot nail/screw of the circle cutting jig on your mark and as close to the edge of the panel as possible. Rout the arches in several ¼-in.-deep passes to prevent tearing out the edges.

Cut down the arch panel using a track saw or table saw so one side of the arch has a 1½-in.-wide tail and the other has a ¾-in.-wide tail (see Figure B). Make sure the two arch panels remain square.

Cut the arches to the correct height. The

amount of material you leave between the top of the arch and the top of the cabinet depends on the profile height of the crown molding you plan to use. The reveal between the arch's top and the crown molding's bottom should be 1½ in., like the upper stiles of the face frame.

My cabinet, with the riser, measured 93¾ in. tall, which left a 21/4-in. gap between its top and the 8-ft. ceiling in the space. The crown I used had a 2¹⁵/₁₆-in.-tall profile. Thus, when the crown was installed at a 45-degree angle, only the bottom 11/16 in. would contact the case. For my space, the amount of material left above the arch was that 11/16 in. plus the 1½-in. reveal—2³/₁₆ in. total.

Glue and nail the arches to the top of the cabinet so that they mirror each other, with the smaller ¾-in. tails meeting in the middle of the joined cabinets.

ASSEMBLE THE FACE FRAME

Assemble the remaining pieces of the face frame, starting with the horizontal pieces.

Cut the base rail to the baseboard height and the total width of the bookcases. Use construction adhesive and nails to attach it to the bottom of the bookcases.

Install the center rail flush with the top edge of the plywood shelves. To provide myself with some wiggle room when I installed and adjusted





the doors, I trimmed the rail to 1% in. wide. Attach the narrow lower stiles with construction adhesive and nails flush to the outside edge of the plywood sides.

Secure the three upper stiles using construction adhesive and nails. Both outer stiles should be attached flush to the edge of the outer plywood sides. The middle stile should be centered on the

joined bookcase sides, in line with the short tails of the arches.

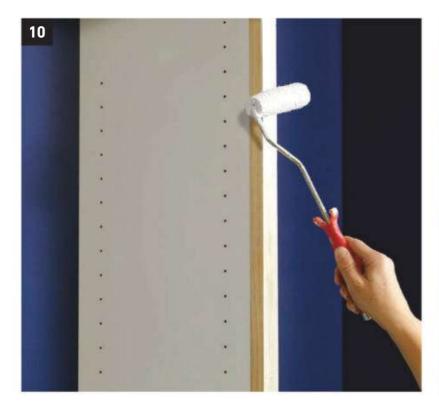
NOTE: The upper stiles will vary in length depending on the size of your crown molding.

ATTACH THE **MOLDINGS**

Install the baseboard so that it wraps around the secured bookcases. Repeat with the crown molding to cover the gap on top of the bookcases, either carrying the crown all the way around the room, as I did, or just letting it die into the back wall.

NOTE: This is one of the hardest parts of the build. Take your time, buy extra molding and make sure your miter saw is correctly set up for these cuts and equipped with a sharp blade. Attach the moldings with brad nails only.







PREP AND PAINT Fill all nail holes and the seam between the arches with wood filler. Wood filler shrinks as it hardens, so overfill these areas slightly.

You can use paintable caulk to improve the appearance of slightly imperfect miters on the baseboard and moldings. If you have open miters larger than 1/4 in., however, the molding should be removed and recut.

After the wood filler and caulk have dried, sand all components (except the painted backs) with 150-grit sandpaper. Use a random orbital sander in conjunction with hand-sanding in the corners and edges to smooth the entire piece and give some tooth for the primer to adhere to.

Use a shop vac and tack cloth to remove all sanding dust. The cleaner the project is, the better the finish will be.

Mask off the surrounding walls, floor and ceiling and prime everything, including both sides of the unattached doors and adjustable shelves. Once the primer has dried, lightly sand the entire surface with 220-grit sandpaper. Clean up the dust with a shop vac and tack cloth.

Paint everything in your chosen color with a quality brush and roller. Expect to apply at least two coats, sanding with 220-grit and dusting between each.

FINISHING TOUCHES Attach and adjust the doors according to the provided Ikea instructions. Put pulls on the doors if you wish, and begin filling your bookcases with books and treasures!



Video Online

Scan the QR code to see a video of this build.

Help Your Bookshelves Tell a Story

Whether you prefer to mix fiction and nonfiction, separate by genre or sort by color, there's a book organizing method that will work for you. Consider these tips from pro bookworms as you stock and style your newly installed shelves:

- "I have a spot for the books I own but haven't read yet," says Jennifer Lynne Barnes, No. 1 New York Times bestselling author of The Inheritance Games series. "It may look haphazard, but it lets me walk straight to a single shelf when I'm looking for something new to read."
- Scan your shelves monthly and remove any books you won't read, suggests book reviewer Lauryn Hickman (@lauryns_library on TikTok). "If you are consciously aware of what is on your shelves, you can be sure you are only holding on to the books you love."
- Dutch BookTokker Anouk (aka @booksneverdie) says "It's all about the color scheme." After organizing, she recommends taking a big step back, squeezing your eyes shut a bit and then seeing how the colors blend together.
- Perfectly straight rows of books may look neat, but Emily Aki, librarian and pillar of #LibraryTikTok, suggests messing things up a bit. "Try displaying the cover of a book in the middle of a shelf to break things up and add some character."
- Former teacher and librarian Cassie Brewton recently combined her book collection with that of her husband—also a former librarian. Her advice? Don't be afraid to change your mind! Books are easy to reorganize.

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Transform Your Outdoor Oasis with Rust-Oleum Custom Spray 5-in-1

Ready to breathe new life into your outdoor space? Look no further than Rust-Oleum Custom Spray 5-in-1—the ultimate solution for reviving your weathered patio furniture and other outdoor accessories. This innovative spray system offers a quick, easy, and affordable way to give your metal outdoor pieces a stunning makeover.

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Here, we used it to refresh a metal patio dining set. The project begins with thorough preparation, ensuring your furniture is ready for its makeover. You'll remove rust and flaking paint, then clean the surfaces to create the perfect canvas for your new finish. A crucial priming step follows, using Rust-Oleum Universal Bonding Primer to prevent future rust and guarantee proper paint adhesion.

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The star of the show is Custom Spray 5-in-1 for easy application of the spray paint and primer. This versatile system features five different spray settings, allowing you to tackle every part of your furniture with precision. From broad tabletops to intricate details, you'll achieve professional-looking results on all surfaces.

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Rust-Oleum Stops Rust with Custom Spray 5-in-1 is designed to resist rust, fading, and wear, keeping your outdoor furniture looking fresh season after season. Plus, with a wide range of colors available, you can really let your creativity shine. Get ready to enjoy your revitalized outdoor living space and impress your guests with furniture that looks brand new – all thanks to the power of Rust-Oleum.





COLORFUL, CUSTOMIZABLE

DIY Room Divider

Add style and structure to any room with this unique-to-you weekend build

BY CARMEN DE LA PAZ

aking a room divider from scratch is an easy way to give a space a truly personalized touch. Shape, color, dimensions—all creatively customized by you.

The base design of this folding divider comprises three wood panels joined by hinges. Beyond that, you can make the project as simple or as complex as you'd like, adding legs and a frame or taking it to the next level with features such as pegs, paint or fabric.

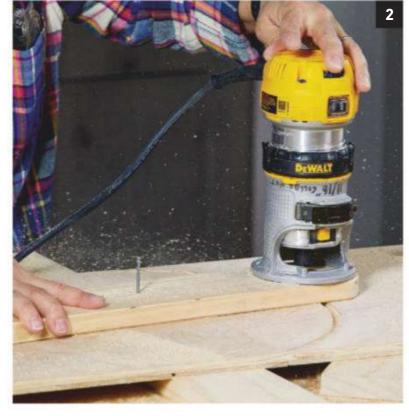
Here's my challenge to you: Take the steps ahead as a starting point and make this project all your own. It may sound cliche, but the possibilities are endless.

CUT THE PANELS Using a table saw, cut the plywood panels (A-C) following the cutting list on pg. 28. If desired, change the dimensions to fit your space. I varied the panel heights to lend visual interest and optimize the yield of my plywood sheet.

ROUT THE ARCHES Using a router with a trammel arm, cut an arch at the top and bottom of each panel (A-C), making sure that the peak point of each arch hits in the middle of each panel. For the cleanest arches, take a few ³/₁₆-in. passes rather than trying to

Utility knife





What It Takes

bit

Time Skill Level \$100-\$200 Two days Intermediate Tools • #1 Phillips Router with Clamps Drill trammel arm bit • ½" straight Drill press Self-centering cut router bit • Miter saw drill bit Painting Speed squares 18-gauge nail gun supplies Table saw 3/4" Forstner • Router table • Tape measure







rout through the full thickness in one go. After they are routed, sand the panels with 150-grit sandpaper.

DRILL HOLES FOR THE PEGS

If you plan to install pegs (K), lay out the hole spacing as desired. Next, create a jig to help you drill perpendicular holes and prevent any crooked pegs. To do so, drill a hole into a piece of scrap wood with a ¾-in. Forstner bit on the drill press. Use this jig to drill peg holes into the panels (A-C). Clamp it down so it doesn't wander as you drill.

NOTE: To ensure that the unit can be folded and the pegs adjusted, the pegs won't be glued in, so snug holes here are ideal.

PAINT THE PANELS If you plan to paint the panels, do so before assembly. This way, you can easily manipulate the individual panels instead of wrangling a large, hinged unit.

DADO THE SIDES **AND BASES**

Use a router table to rout a ½-in.-wide-by-¼-in.-deep channel down the center of

each 1x2 piece. Be sure the fence on the router table is locked tightly in place at a right angle from side to side.

CUT THE SIDES AND BASES

Using a miter saw, cut the 1x2 pieces to length to create the panel sides (D-F) and bases (G-J). The sides are cut square on top and have a 45° miter on the bottom, and both ends of the bases are mitered.

Slide the panels into the grooves in the panel sides and position them for a dry fit. The most crucial piece of the "U frames" are the bases (G-J), which must be cut to the exact width of the panel (A-C), plus

Materials

Item	Qty.	
½" x 4' x 8' maple plywood	1	
¾" diameter x 48" dowel	1	
1x2 x 8' maple	5	
1½" 18-gauge brad nails		
3" brass hinges	2 sets	
150- and 220-grit sandpaper		
Clean shop rags		
Clear coat sealer		
Paint		
Wood glue		
Painter's tape		
Scrap wood for		
hole-drilling jig		

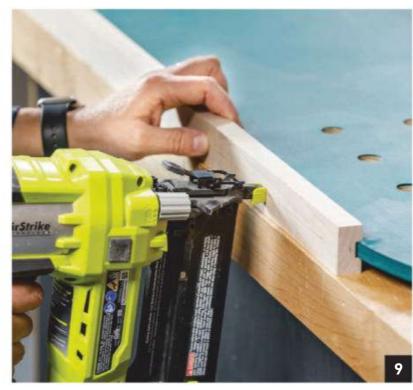
Cuts

Key	Qty.	Dimensions	Part	
Α	1	½" x 12" x 48"	Small plywood panel	
В	1	½" x 13%" x 60"	Medium plywood panel	
С	1	½" x 16" x 72"	Large plywood panel	
D	2	3/4" x 11/2" x 37"	Small panel side	
Е	2	³ / ₄ " x 1½" x 53½"	Medium panel side	
F	2	3/4" x 11/2" x 643/4"	Large panel side	
G	1	³ / ₄ " x 1 ¹ / ₂ " x 1 4 ⁷ / ₈ "*	Small panel base	
Н	1	3/4" x 11/2" x 17"*	Medium panel base	
J	1	³ / ₄ " x 1½" x 19½"*	Large panel base	
K	6	¾" dowel x 4"	Pegs	
*Cut to fit				









the panel sides (D-F) that frame it. The depth of your side channels will slightly change this measurement, so double-check before you cut each base.

LAY OUT THE **HINGE PLACEMENT** Lay the two sides (F) of the center large panel and the adjacent inside sides (D and E) of the outer panels dado-side down, with the miters aligned at the bottom of each pair of pieces. Use

a Speed square to mark them for hinges so that one marries into the next. I placed the bottom of the lower hinges 9 in. from the tip of the miters and the bottom of the upper hinges 37 in. from them.

RECESS THE HINGES Lay the sides (D-F) in a position to accommodate the routing of the recess hinges. Use the hinge thickness to determine the depth of your cut. Secure

and clamp two Speed squares on either side of your router shoe to ensure clean, straight cuts. To prevent tearout while cutting, cut along the lines with a sharp-bladed utility knife before you rout.

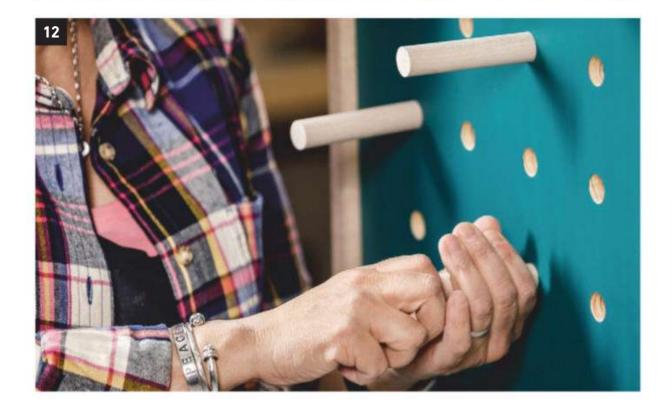
ASSEMBLE THE PANELS For each frame, attach the bases (G-J) to the sides (D-F) by gluing and brad-nailing the miter joints at the bottom to form a U.

Ensure that the heads of the brad nails are set below the surface of the bases (G-J) to prevent the finished piece from gouging the floor. Clean up any squeeze-out and let the joints cure to prevent them from separating while sliding them onto the panels.

Once the joints are cured, add wood glue to the routed channel in the sides and slide the panels into their respective frames. Secure the panels with $1\frac{1}{2}$ -in.







18-gauge brad nails. Wipe away any excess glue with a wet rag.

APPLY THE CLEAR COAT Complete any needed paint touch-ups on the colored sections, then use a clear coat to seal all the wood and paint. Whether you brush it or spray it on, lightly sand between the first and second coats with 220-grit sandpaper to remove any raised grain and achieve a smooth finish. Seal the pegs as well for a consistent wood color and texture.

INSTALL THE HINGES Stack the framed and finished panels and install the hinges into the sides (D-F) to connect all three. Make sure your screws are centered and straight by using a self-centering drill bit to drill pilot holes. Use the appropriate Phillips bit when installing hinges; otherwise, you risk stripping the screws, especially if they are brass.

INSTALL THE PEGS Relying on a snug friction fit, install the pegs in the predrilled holes.



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









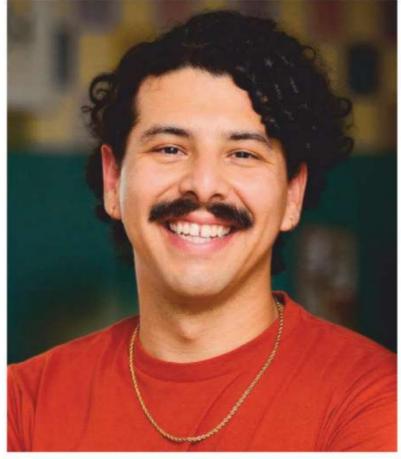
Leaving a Legacy

Instagram DIY star Kyle Ortiz does every home project and fix-it with his family in mind BY KELLY AIGLON

yle Ortiz grew up with a 'toolbox dad"—meaning, "If it couldn't be done with a screwdriver, a wrench, a hammer and some nails,

then he wouldn't do it. He'd call somebody," says Ortiz.

The San Bernardino, California, father of three admits that, while his dad was amazing, he wasn't a role model who would show him how to pull up his bootstraps and take on projects around the house. But something



Closet Turned Drop Zone

Kyle Ortiz transformed a congested space into something infinitely more useful for his family's comings and goings

A front closet is typically a keeper of coats. But in Southern California, the need for coats isn't too high. So Ortiz revamped the area into an organized drop zone with dedicated space for each child's school items and the useful addition of a water bottle filler. Here are some key takeaways.

Goodbye, doors and walls

"I instead created three built-in cubbies—essentially three lockers with hooks and dedicated organization space."

Bountiful baskets

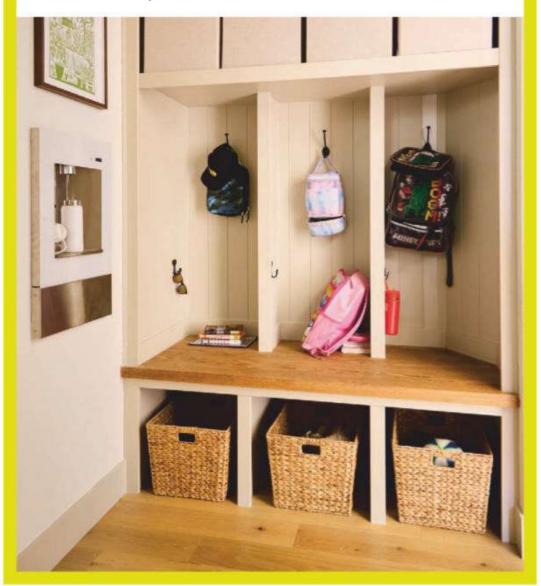
"Kids love pulling things in and out of baskets. It's fun. So those are spaces to put just about anything and keep it containeda few soccer balls, a stack of books and those water bottles with stickers all over them."

Hello, H2O

"You don't always want kids traipsing through the house to get to the kitchen sink when they need to dash out for school, so I installed a water bottle filler right there in the drop zone, right by the front door."

Make Your **Own Drop** Zone

Scan the QR code for complete step-by-step instructions!





Ortiz did have was the ambition to learn things on his own—and the passion to provide for his family.

So he did just that, starting with upcycling an old table when he bought his first home in 2002. Today, the 32-year-old can do that and so much more, including gutting entire rooms, building walls and installing flooring. Meanwhile, fans are coming in droves: Ortiz has grown an Instagram (@kyledidit) following of 162,000, thanks to his engaging how-to reels and cool-guynext-door nature. (Fittingly, his



trademarked tagline is "aggressively relatable.")

Starting with a blank slate

Ortiz currently lives in what he refers to as "an average builder-grade home," his third family residence in 10 years. This particular abode is different from the others; it marks a true coming-of-age for him, his wife, Amanda Ortiz; and children (Jonah, 10, Emma, 7, and Samson, 4). He's done more than ever before in this home. And from day one of moving in—in 2020—he's captured it on video.

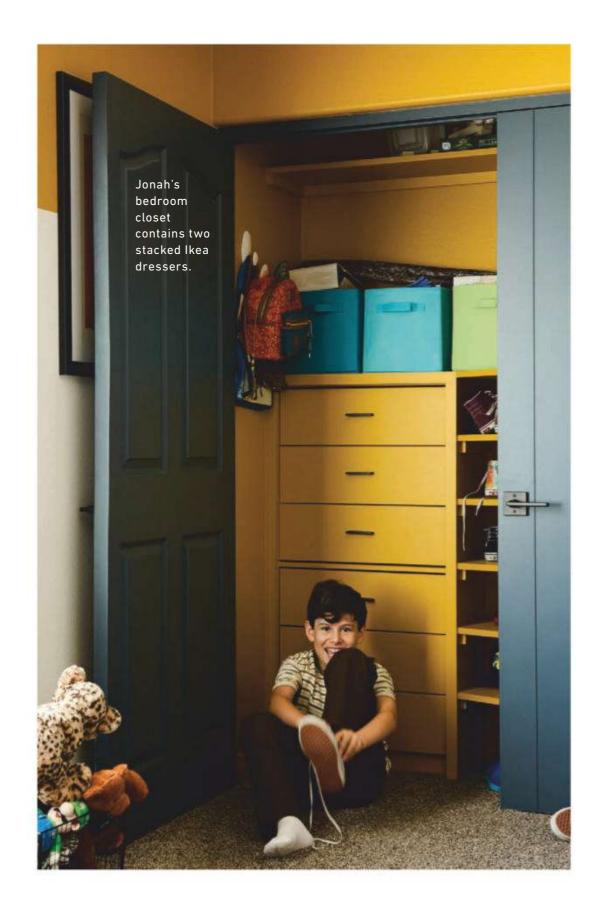
"I show people that if you can save it, you can reuse it."

"My first-ever post on Instagram was a video of me standing in front of a storage pod in the driveway and I was like, "Hey I'm Kyle ... let's do this."

From there, he tackled the first project that needed attention: repainting the joint. At the same time, Ortiz made the gutsy decision to leave his longtime corporate job as an analyst for a utility company and make a living from brand content partnerships. "It was a big leap for me to leave the job," Ortiz admits.

Seizing life by the paintbrush, he began work based on one of





his main DIY philosophies: "If you hate the room, you probably hate the color of it." So he took what was nearly every wall covered in an "Olive Garden brown," and turned them into clean slates. To brighten up the space, he went with a pretty warm white, Sherman Williams' Greek Villa.

He also did another easy lift by changing all the light bulbs from cool to warm. "It's a simple switch anyone can do—and it makes a whole lot of difference," he says.

"You don't need a sledgehammeryou need a screwdriver."

The kitchen was a sea of espresso-hued cabinets, which was bringing down the vibrancy of the space, so he painted those a green Jack Pine color from Benjamin Moore. Even the granite countertop got the paintbrush treatment: Ortiz gave it a fresh sheen using neutral-colored paint in an effort to keep it an appealing contrast with the green cabinets.

Sustainability first

Ortiz grew up in a budgetconscious family and admits that when he married Amanda and they had Jonah, they were trying to be as scrappy as possible. In fact, that's largely what led him to begin building his DIY skills in the first place.

Little has changed since. His approach to any job is still to do it inexpensively and, most importantly, sustainably. "I try to show people that if you can save it, you can reuse it," he says.

To wit: For a recent brand partnership, he was tasked with redoing his laundry room and installing an utility sink. He tore out most of the room, but saved what he could, including the cabinetry, which he repainted instead of tossing, even though he had enough in the budget.

"We live in a 10-year-old home. In that kind of situation, no matter who you are, you don't need a sledgehammer—you need a screwdriver," Ortiz muses with a laugh. He adds, "If you don't want something that's in your house, another person will. And in the small chance no one wants it, you can donate it to a local Habitat for Humanity ReStore. I always want to remind people to be mindful of how much they're consuming, and how as a society we tend to destroy something just to make a space look different. I try to teach my children those values."

All for the family

In the spirit of work-with-whatyou-got, Ortiz got creative when



assessing how to redesign his children's bedrooms.

"Jonah has a closet, but he's not a hanger-of-clothes," Ortiz admits. "So we transformed it into something more usable for him to match the way he puts things away."

Ortiz kept the hanging space, adding a second-level rod, but installed a built-in dresser with six drawers—which is actually two Ikea dressers, one stacked atop the other. And with reusing in mind, he took off the sliding doors and did a hack by hanging hinges, turning them into more user-friendly swinging doors.

In Emma's room, he really played into her personality. The elementary schooler wanted a place to put pictures of her friends, party invitations and



Inside a Reimagined Home Office

Kyle Ortiz tore down a wall to turn a drab office into a colorful retreat for himself and his wife, Amanda. Here are some secrets to its success.



even the school lunch calendar. So he installed a corkboard where she can pin whatever she likes. "She just wants to look up and know when pajama day at school is," Ortiz says with a chuckle. A budding artist, Emma was happy when Dad also put up a chalkboard wall. And while Emma is now "over" the pink she once requested, Ortiz says he has no problem slapping on some fresh paint.

In 4-year-old Samson's room, Ortiz painted a whimsical mural of mountains on the wall. "There are only so many years when that works," he says. "I am open to changing it." Now, as baby goes through toddlerhood, Ortiz is considering painting the walls yellow, Samson's favorite color.

Together, the family spends a lot of free time in the kitchen. There are four big island seats that give bird's-eye views of the range and stovetop. "I love to cook so it's fun to gather around there in the evenings," says Ortiz. He also mentions the upstairs living room as a hangout space for movie and game nights

Other spaces in the home have required a lot more planning, ingenuity and, above all, gut instinct. A front closet-turned-drop zone (pg. 36) is one example, as is a completely rebuilt home office that the couple shares (opposite page).

Looking ahead

Ortiz has built both his home and business on the simple premise of being himself and working with what he has. "I encourage everyone to pick projects that will have a high impact on their quality of life," he asserts.

Having established a foundation, Ortiz plans to keep growing his DIY business and to continue inspiring and educating homeowners on what endeavors they can take into their own handsand think outside the toolbox.

Above all. Ortiz is a father and husband first, and knows what

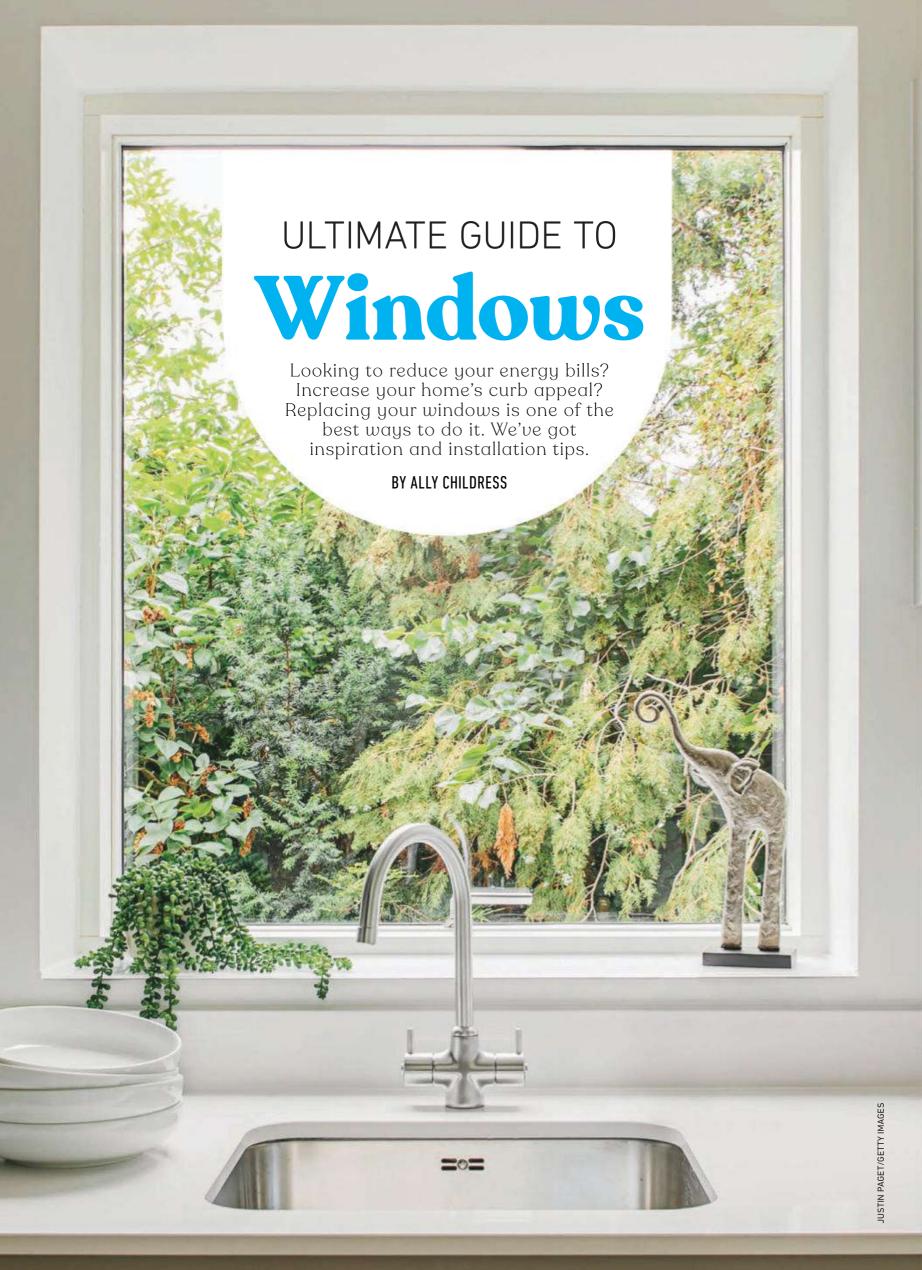


joy it brings his family to see his videos. He considers each and every clip as leaving a legacy something for the kids to look back on and say, "Can you believe my dad once did this?"

Having a home that's reflective of who they are as a family will always be the most important thing for Ortiz.

"I don't design my house for future people. I don't know those people ... it's not my concern," he says. "At the present moment, this very day I want to live in a house that I like. A space to work in and relax in, and something that really feels like home. This does it for me. I'm so happy to be here." •







Installation Tips

Ready to get to work? There's a lot to keep in mind when installing windows, from safety and technique to quality and craftsmanship.

Prep the opening

The window opening should be ½ in. taller and ½ in. wider than the window to allow for a ¼-in. perimeter once installed. Check for level, plumb and square, and cut the house wrap so it can be folded back inside the house.

Seal & wrap

Cut the wrap at the top into a 45-degree-sided flap, and tape it out of the way. This flap goes over the window flange so that any water that finds itself behind your siding will be directed over the window, not behind it. Apply a flexible waterproof flashing tape to the sill, extending 6 in. up the sides of the opening and

several inches down the exterior wall. Roll it on with a roller to ensure a strong seal with no bubbles or holes.

Shim under the window

Windows should not sit directly on the sill. Add ¼ in. shims on the sill flashing-two near the edges and one in the middle—before lifting your window in. If your window is large, add additional shims spaced no more than 14 in. apart.

Caulk three sides, not four

Caulk along the sides and top of the window opening but not the bottom, so water has a way to escape. A 1/4-in. bead of exteriorgrade window caulk is all you

need. The caulk on the sides goes on the house wrap; the caulk at the top goes on the plywood.

Choose your fastener

Two-inch galvanized roofing nails are a traditional choice for windows, but exterior-grade cabinet screws work well too, and they're easier to remove if you make a mistake. Avoid screws with large heads, which can interfere with the window trim.

Lock the window

Locking the window before installation snugs it up tight, making it less likely that you'll install it out of square. You may get lucky with auto-locking windows; otherwise, engage the lock.

Straighten the jambs

Once your window is centered, level, plumb and square, tack it into place. Inside, make sure the jambs are even by measuring the space between the jambs and sashes. Open and close the window to check the operation. Add shims on the sides to even the gaps.

Don't shim the top

All buildings settle, and shimming a window at the top can cause it to torque and compress. You may have trouble opening and closing your window, and in extreme cases, the compression could break the glass.

Backer rod vs. expandable foam

To seal the space around your window, use backer rod and caulk, a low-expanding foam or a combo of both (follow manufacturer instructions). Buy lowexpanding foam, and don't overdo it, or you may distort the jambs.



Learn More

Scan the QR code to get a step-by-step on how to replace a vinyl window.



Clean your windows

Rain, snow, pollen and plain old dirt make your windows filthy and shorten their life, so it's a good idea to clean them twice a year. Shoot for spring and fall, before temperatures get too extreme. Streaks are more common in hot and sunny weather, and in winter the washing solution may freeze on the glass.



Pro cleaners swear by easy, inexpensive dish soap and water. Add a little vinegar if you want. Apply and scrub with a window washer, then squeegee it off. Use this method inside and out, and don't forget the screens. Remove screens from the windows, spray with a garden hose and put back up once dry.

Fix pesky drafts

Get control of energy bills this winter by fixing drafty windows. One easy first step is simply to lock them. Locking a window tightens the sashes together, compressing the weatherstripping. If the weatherstripping is subpar, replace it.

Check around the window frames (inside and out) for air gaps and apply caulk. Never paint a window shut, no matter how cold it is. Instead, use temporary sealant that you can remove in the spring, or try a window insulation kit, which is a thin plastic film that's easy to apply with a hair dryer.

Replace a broken pane A broken window

Window glazing points

looks bad and allows air to escape, affecting your home's utility bills and curb appeal. If you have single-pane wooden windows, replacing a pane of glass is pretty easy, but some vinyl windows allow for sash replacement too.

To replace an individual broken pane in a wooden window, first put on safety gloves. With a putty knife, chip away the old glazing compound. Remove the tabs, called glazing points, that hold the glass in the frame. Carefully pull out the pane or remaining shards of glass.

Scrape off any remaining glazing compound and prime the exposed wood. Add a bead of glazing compound, which can be putty or caulk, then press the glass into place. Secure with new glazing points, then add more glazing compound to hold the pane. Tool the compound to create a smooth edge.

Get rid of condensation

If your windows are foggy, your indoor relative humidity is probably too high. Anything over 60% is a recipe for mold and mildew, so listen to your windows and bring that humidity down. Invest in a dehumidifier, or crack a window when needed. Keep interior doors open to promote circulation.

If you have double- or triplepaned windows, and the condensation is inside the panes, your window glazing has failed. Unlike with a wooden single-pane window, this is not an easy fix. It's time to replace your window.

Types of Windows

You don't have to do a one-to-one replacement. Here's a view into the most popular varieties.

Single-Hung

This classic window has two glass panels, called sashes. The top sash is fixed in the window frame, and the bottom one slides up and down. Single-hung windows are energy efficient and economical.



Casement

Casements open on a hinged edge, often with a hand crank. Slightly more expensive than other windows, casements work well in harder-to-reach places, like over a kitchen sink.

Picture

Picture windows are large, fixed windows that create a dramatic focal point, bringing the outdoors in. Because they don't open, picture windows lose less energy than other windows.

Bay and Bow

These light, airy windows stick out past a home's exterior, extending the living space and views. Bays have a large fixed window in the middle with a smaller operable windows on each side.



Double-Hung

This is a low-maintenance, versatile window with two movable sashes—great for controlling airflow and ventilation. Double-hung windows are less energy efficient than single-hung, but are easier to clean.



Sliding windows move along a track, making them easy to operate at a reach. Sliders are also perfect for tight spaces, where a window that opens outward won't work.

Transom

These skinny horizontal windows sit above a door or larger window. (A transom is the top reinforcing beam.) Transom windows add height and light, so they're perfect for entryways.



Glass 101

There are various types of glass, each with its own properties and benefits. Here's a quick guide to the most common.

Tempered Glass

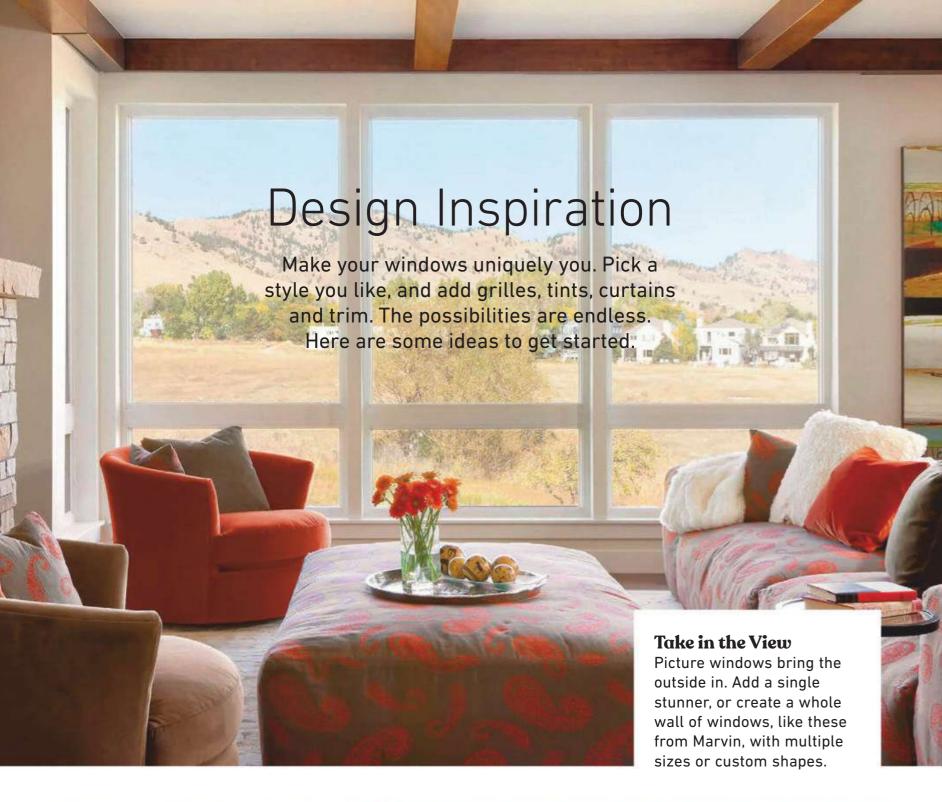
Tempered glass is a safety glass that breaks into dull chunks rather than dangerous shards. Most residential windows are "annealed," aka plain glass, and are more dangerous if someone falls through them. Look for tempered glass when purchasing patio doors and floor-to-ceiling windows that could pose a safety hazard.

• Low-E Glass

Low-emissivity glass allows light through while reflecting heat, helping your home maintain a constant temperature. In summer, low-e glass keeps heat out. In winter, it keeps heat in. Early low-e glass sometimes had an unwelcome tint, but advances in technology have improved the look.

• Single vs. **Insulated Panes**

For centuries, windows were made from single panes of glass. With today's higher energyefficiency standards, it's common to see doubleor triple-pane windows, which have an insulating gas in between the layers.





Work the Angles

Be bold with dramatic angles, as in this example from Pella. It offers a welcome change of perspective.



Stick with Tradition

Single- and double-hung windows are common, but they don't have to be boring. Play with color, mix up the grilles and add window treatments to make them yours. This rustic-chic scene by Marvin is a cozy option.



Frame with Paint

Express your creative side with paint and trim. This window seat featuring single-hung windows from Andersen has it all: color, interest and light. Add a color-coordinated paint scheme to perk up a plain double-hung.

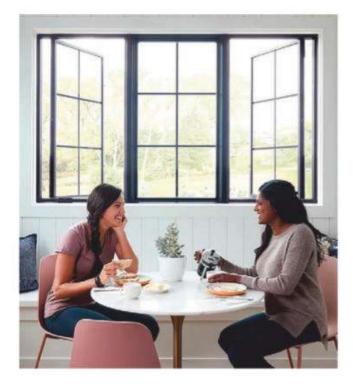


Go Big with a Bay

Bay windows add real estate, not just light and beauty. Follow this example from Pella and create a seating area. Consider adding a bench seat, which could also provide some hidden storage space. Bay windows are also nice in kids' play areas, adding pleasant sunlight.

Crank Them Open

Bring fresh air into your kitchen and other living spaces with the turn of a crank. Casement windows, commonly seen in Europe and dating back to the 18th century, do the trick. These from Pella are clean and modern—an unstuffy addition to any home. Consider maximizing your ventilation by installing casement windows on opposite sides of a room, allowing for continual airflow.



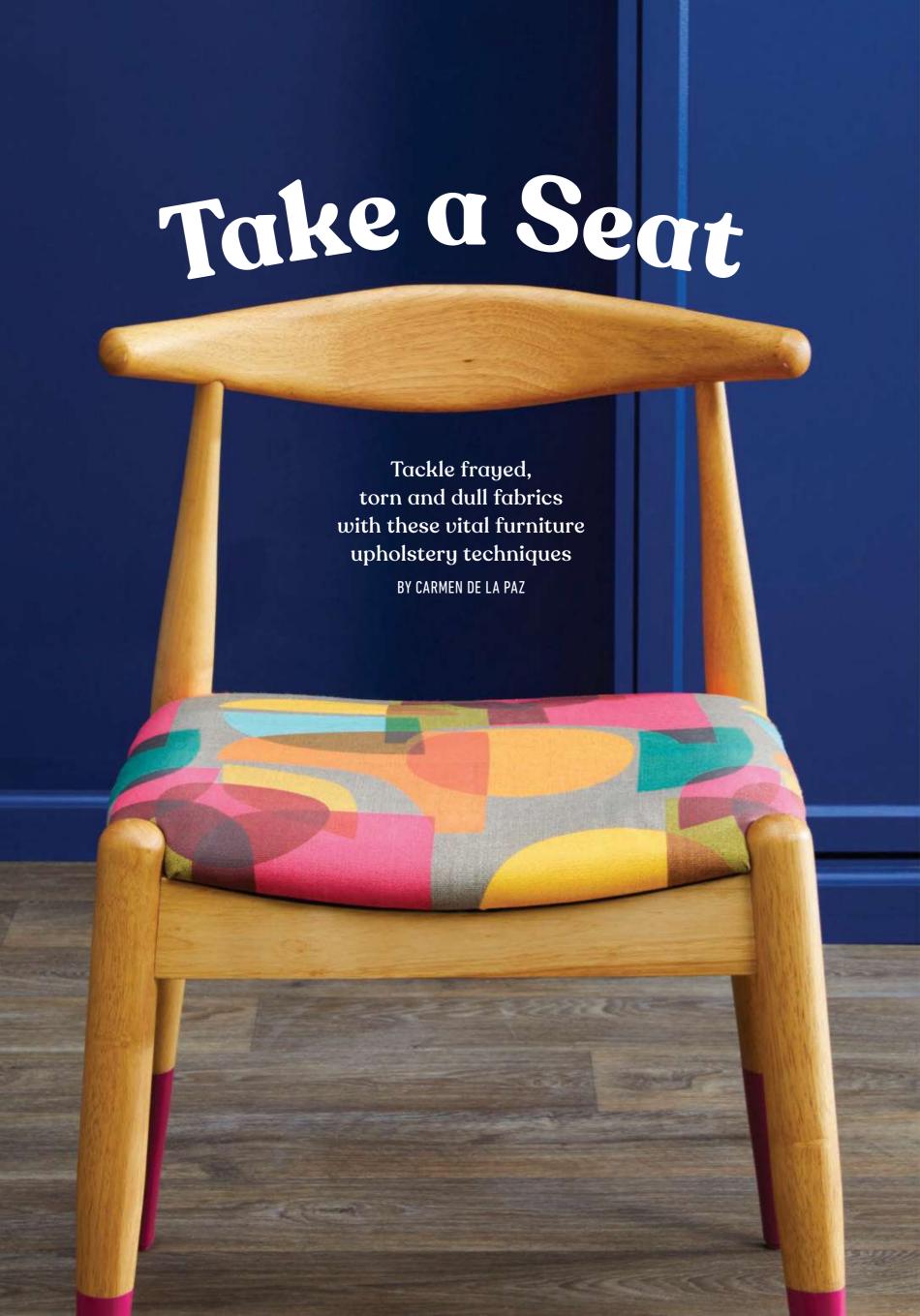


To Shutter or Not to Shutter?

Before windows had glass, they had shutters. How else would you keep out the rain, or secure your home when you went to sleep? Today's shutters, on the other hand, largely serve a decorativenot practical-purpose, so you have a lot of leeway when choosing to shutter or not to shutter. It's mostly an aesthetic decision.

The first rule of shutters is that they need to appear functional, even if they're not. Size and placement are key. Shutters that are too small for a window, attached too far away, or look as if they can't close without hitting each other or the sill don't look natural. Your mind wants balance. and it (and your neighbors) can tell if something's off.

It's also important to match the style of your home and windows. Board and batten shutters are cozy and rustic, and paneled and louvered shutters are more elegant. If your window has an arch, buy arched shutters. Window sash and shutter rail heights should match, or get pretty close. Point louvers down and toward the house. It's a more authentic look, and it prevents critters from nesting behind them. •













Reupholster a Faded Seat

Don't be intimidated—you can bring an old chair back to life with inexpensive materials and simple tools

REMOVE THE SEAT Remove the screws that secure the seat to the base of the chair or bench. Set aside the base while you work on the seat. Be sure to save the screws that came with the chair—you will use them during reassembly.

REMOVE THE STAPLES With the seat bottom facing up, carefully remove the staples around the seat edge to release the cambric dust fabric and old upholstery fabric. Try to keep the cambric fabric intact, as

you may want to use it again. (If it tears, replace it.) Pull the upholstery fabric away from the seat.

NOTE: If the foam beneath the old fabric is worn and matted down, consider replacing the foam and adding new batting.

CUT THE NEW FABRIC Cut the new upholstery fabric to size using the original upholstery fabric as a template. There should be at least 2 in. of fabric on each side to fold over and cover the seat completely.

If your fabric has a large repetitive pattern, consider how you want it to look once the chair is right side up. Also be aware of the differences between the front and back orientation of the chair. Some chairs are not symmetrical, making it easy to lose track of the layout. Mark the front and back to help keep the pattern in the direction you prefer.

POSITION AND STAPLE THE NEW FABRIC

Position and center the new upholstery fabric on the seat, then

Tools

Electric serrated knife (optional)

Fabric scissors

Needle-nose pliers

Pencil/marker

Screwdrivers

Small tack hammer

Staple gun (preferably electric)

Materials

1-to-3"-thick upholstery foam (optional)

3/8" serrated staples

Cambric dust cover fabric

Upholstery batting (optional)

Upholstery fabric



Before stapling, apply some spray mount adhesive along the edges of the seat bottom, catching the wood and the fabric so that the edges don't shift around as you work.

pull it tightly over the seat (and make sure that it remains pulled taught as you work). Place one staple in the middle of each side of the chair to prevent the fabric from shifting as you continue. Next, focusing on one side at a time, gradually staple your way around the chair, avoiding wrinkles and not overlapping the fabric. (Do NOT staple the fabric in the corners until all four sides are stapled in place—see Step 5.) Use a small tack hammer to deeply seed the staples into the fabric and the wood of the seat.

NOTE: Cut away some fabric to expose the screw holes for the frame and seat to come together (see inset, Photo 4). This will help you find the old screw holes easily and prevent the fabric from twisting when installing the screws.

UPHOLSTER THE CORNERS Corners are tricky to upholster: The fabric folds are bulky and hard to work with, and bulky folds may prevent the seat from sitting flat against the







frame when you reattach it to the chair.

The most important part is to ensure that the fabric covers the seat completely and extends beyond where the frame will sit. Think of upholstering the corners as wrapping a gift, and feel free to trim the fabric as needed. Use as many staples as it takes to get the fabric laying flat and secure.

REUPHOLSTER THE **CAMBRIC DUST COVER**

Reposition the cambric dust cover and staple it in place. Avoid placing staples in the previous holes, as the fabric is weakened and may come apart easily. If needed, use a tack hammer to sink the staples deeper.

REINSTALL THE REUPHOLSTERED SEAT

With the fabric fully secured, reposition the chair seat onto the frame and make sure it sits flat. Using the same screws, join the seat back into place. Be sure to enter the same holes so that the seat is positioned correctly.

For an additional pop of color, paint the lower third of the chair legs in a shade complementary to the new upholstery fabric. This optional feature is called a paint dip.



More Online Scan the QR code to see a video of this project.



Patch a Hole or Tear

Whether the culprit was a cat's claw or a roque fireplace ember, imperfections are fixable with a little patience

PREP THE FABRIC

To begin, you'll need to disassemble the seat and access the back of the fabric and hole almost as if you are about to reupholster the chair completely (see pg. 47). If disassembling the piece proves too challenging, you may be able to repair the hole from the front.

Use sharp scissors to neatly trim the hole, clearing away any frayed strands or burn marks.

CUT THE PATCH AND BACKING Cut out a piece of upholstery fabric about ¼ in. larger in each direction than the hole you're repairing, ideally using the same

Tools

Fabric scissors Iron (optional) Needle-nose pliers Screwdivers Small tack hammer Staple gun (preferably electric) Toothpick

Materials

3/8" serrated staples Fabric backing (iron-on or scrap fabric) Flexible fabric adhesive Upholstery fabric for repair

material. Look at the orientation of the weave and try to orient the patch in the same direction. If there is a pattern or image on your fabric, try to match the orientation of the print as well.

If you don't have the same material on hand, it may be possible to cut away a small piece of upholstery fabric from parts of your chair that are out of sight, such as the underside or along the seams and hems.

If you still can't find enough fabric to cut a patch, you will have to use a complementary piece of fabric. If this is the case, you may find it best to embrace the repair and make a design choice that intentionally stands out.

Cut a slightly larger piece of fabric backing than the upholstery fabric patch—about ¼ in. larger in each direction to allow room for a bead of glue along the edge. If you'd like, you can use iron-on backing. Instead of breaking out an adhesive, you'll just have to iron it in place.

GLUE THE PATCH INTO PLACE From the back side of the fabric, secure the upholstery fabric patch in place with flexible fabric adhesive. Again, be sure



More Online Scan the QR code

to see a video of this project.

to orient the weave in the same direction as the rest of the upholstery. Be sure to keep any glue from seeping into the hole.

GLUE THE BACKING INTO PLACE

Once the fabric patch is glued, run a bead of flexible fabric adhesive along the edge of the backing patch and place it over the original fabric (if you have iron-on backing, use the iron for this step). At this point, you should have the fabric covering the hole and the backing patch glued over it. Ensure the adhesive has created a good seam between the backing patch and the back of the upholstery fabric.

ADD ANOTHER FABRIC PATCH FROM THE FRONT (OPTIONAL)

Turn the fabric right side up. If the fabric patch attached from the back is not flush with the rest of the fabric upholstery on the seat, cut another piece of the fabric about the size of the hole. Dab a small drop of adhesive in the hole and place the small piece of fabric on top. Use a toothpick to help you spread the adhesive evenly and guide the small fabric patch into place. Once again, be sure to orient the weave in the material so it is consistent with the rest of the upholstery. It is essential to get a good seal with the adhesive.

REATTACH THE FABRIC TO THE SEAT

After finishing the upholstery repair, it's time to put the chair back together. I chose to change out the old foam and added new batting to give the chair a full, comfortable face-lift. Reattach the fabric to the chair with a staple gun and screw in the original screws.





Addressing seam damage early will keep your couch looking beautiful for years to come

PREP THE SEAM

For this type of repair, pro upholsterers use curved needles, which are inexpensive and highly efficient. However, if all you have is a straight upholstery needle, that will suffice.

Thread the needle and tie a knot at the end. Backstitch along one side of the open seam, going from one end of the damage to the other. This will prevent the seam from fraying further and strengthen the repair. Prepping the seam is particularly helpful when the material has a wide weave with threads that easily come apart.

THREAD THE NEEDLE

Re-thread the needle and tie a knot at the end. Do not double up the thread, as it tends to knot up and will be difficult to cut out if you need to redo any sections. (This is also why I specifically use upholstery thread.)

START THE LADDER STITCH Insert the needle through the ripped seam and bury the knot inside it about ½ in. from where it's starting to open. If possible, come up through an existing stitch hole in the seam where the thread is still intact. This may be easier to see in a thicker, stiffer material.

Tools

Needle-nose pliers

Scissors

Thimble

Upholstery needle

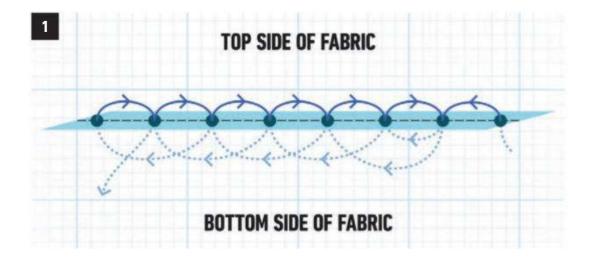
Materials

Upholstery thread

If the stitch holes are not visible, try to space your stitching the same distance as the original. If the material is too stiff. you may need to use needle-nose pliers or a thimble to help push the needle through. Avoid forcing the needle, which can cause it to break below the surface of the fabric.

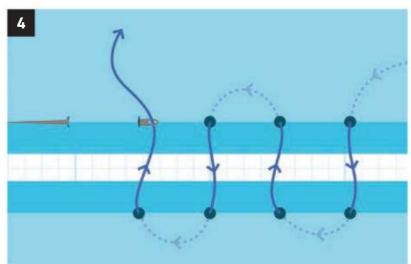
STITCH TO THE OTHER SIDE **OF THE SEAM**

Direct your needle across the seam, threading into the part that has already been backstitched. Try to push the needle directly into the stitch hole opposite the one you started with. Guide the needle parallel along the seam and up through the next stitch hole.















Jump back across to the other side of the seam and again push through the next stitch holes, leaving the thread loose. Don't pull or cinch the stitch too tightly.

REPEAT THE STITCH **BACK AND FORTH**

Repeat stitching back and forth in a zigzag pattern across the seam. Go a few stitches beyond the fray and end with the thread hanging out to ensure that the new stitches are locked into the original seam and don't pull out or separate again.

CINCH THE THREAD Cinch or pull the thread from the starting point. This will require a gentle touch and may take a few tugs to until it is tight enough to make the seam come together and have the thread disappear.

KNOT THE END OF YOUR STITCH Once the seam is fully stitched and the thread has been cinched, tie a knot in your thread and cut. Rethread your needle into the knot, pulling it back into the seam, and stitch to hide the

knot. Bring your needle back out of the seam further down so it doesn't easily find its way out and is slightly separated from the knot. The whole trick to this stitch is to hide the work. This includes the knot and the very end of the thread. •



More Online Scan the QR code to see a video of this project.



Lawn Rakes



TACKLES STICKS, MULCH AND MORE

The Groundskeeper II

\$46 • Head width: 21 in.

The Groundskeeper II isn't just for groundskeepers, though it does offer the top quality one would expect of a professional-grade tool. The stiff, rounded tines are good for general purpose raking but also allow you to rake up heavier items such as sticks, wood chips, mulch and gravel.



LIGHT & STURDY

Craftsman 24-In. Lawn and Leaf Rake

\$35 • Head width: 24 in.

The 24 spring-backed steel tines on this versatile rake have the strength and durability to effectively gather up leaves and dethatch lawns. The 51-in. fiberglass handle may feel light, but it's sturdy and weather resistant, and the head is bolted on securely.



CLEARS LARGE AREAS QUICKLY

Ames Collector Series Poly Leaf Rake

\$25 • **Head width**: 26½ in.

Poly leaf rakes tend to have wider heads than steel-tine models, meaning you can finish your yard work faster. This lightweight rake sports a 26½-in.-wide poly basket-style head atop a 60-in.-long steel handle, adding up to impressive reach as you work. The closely spaced tines minimize clogging and make even contact with the ground.



DOUBLE-LAYERED TINES

True Temper 26-In. Dual Tine **Poly Leaf Rake**

\$29 • Head width: 26 in.

This unusual-looking lawn and leaf rake sports dual tines meant to reduce clogging and provide up to 45% faster clearance than standard leaf rakes. It has a comfort grip on the handle and a 26-in.-wide head for better coverage with each pass.



COMFY TO GRIP

Craftsman 30-In. Lawn and Leaf Rake

\$24 • **Head width**: 30 in. A fan-shaped head and anti-clog tine design keep leaves from bunching up on this rake and slowing down your work. The wide head clears an impressive swath with each pass, and the cushioned end grip makes the hardwood handle comfortable to use.

Cordless Blowers

WELL-ROUNDED PERFORMANCE

Ego Power+ 765 cfm Blower \$329 • Max. power: 765 cfm Overall Power, durability, control—our favorite cordless blower has it all. Standout features include a durable brushless motor, long runtime and thumb-adjusted cruise control feature that holds the trigger in a constant position. This model easily tackles large leaf piles, and the battery can be used with several other Ego tools.

BEST-IN-CLASS POWER

EnHulk 58V Leaf Blower-930 cfm \$350 • Max. power: 930 cfm "Hulk" is an apt term for this astonishingly powerful blower. Beyond its brawn, it has a user-friendly screen that lets you set a cruise control function and a turbo mode at the push of a button. The blower also comes with nozzles for wet grass, large leaf piles or a concentrated stream, allowing you more control over the task at hand.

LIGHTWEIGHT & AFFORDABLE

Greenworks Tools 80V Cordless 580 cfm Brushless Leaf Blower \$230 • Max. power: 580 cfm At just under 10 lbs. including the battery, this blower is easy to use for extended periods, which can save your forearms, shoulder and back during peak season. The brushless motor keeps the motor running cooler, pushes out more torque and provides years of reliable operation.

OPERATES QUIETLY

Ryobi 40V Whisper Series Cordless Blower

\$329 • Max. power: 730 cfm This handheld blower is among the most powerful on the market, yet it blows air at only 57 dB—less than the typical 60-70 dB of electric blowers and way below the 100 dB of a typical gas-powered backpack blower. The blower's 40V battery system also spans tons of other Ryobi tools for your lawn and home.

GAS-POWERED

Stihl BG 86 C-E Handheld Blower \$300 • Max. power: 365 cfm While gas handheld blowers are becoming less and less common these days, they still have some major positives. With the proper care, for example, a gas blower like this classic model from Stihl can last well over a decade. That said, you'll need to tolerate some extra maintenance, louder operation and exhaust fumes.



Beyond the Leaf Pile

Yard finally cleared? Here are 5 other handy ways to harness the power of a new blower.



Keep Soffits Dust-Free

Use a leaf blower to clear out all the dust from the perforations in your aluminum soffits (or rectangular screens if you have plywood soffits). Dust can block some airflow into your attic, which is important for preventing ice dams in winter and keeping the attic cooler in summer.



Conquer Clogged Gutters

Many brands sell gutter cleaning extension kits for leaf blowers. They're easy to assemble and use—and you'll be able to dislodge stubborn clogs in no time.



Blow-Dry Your Patio Furniture

Want to dine alfresco tonight? Blow the water off the chairs and table so you can enjoy the evening with friends and family without worrying about wet seats.



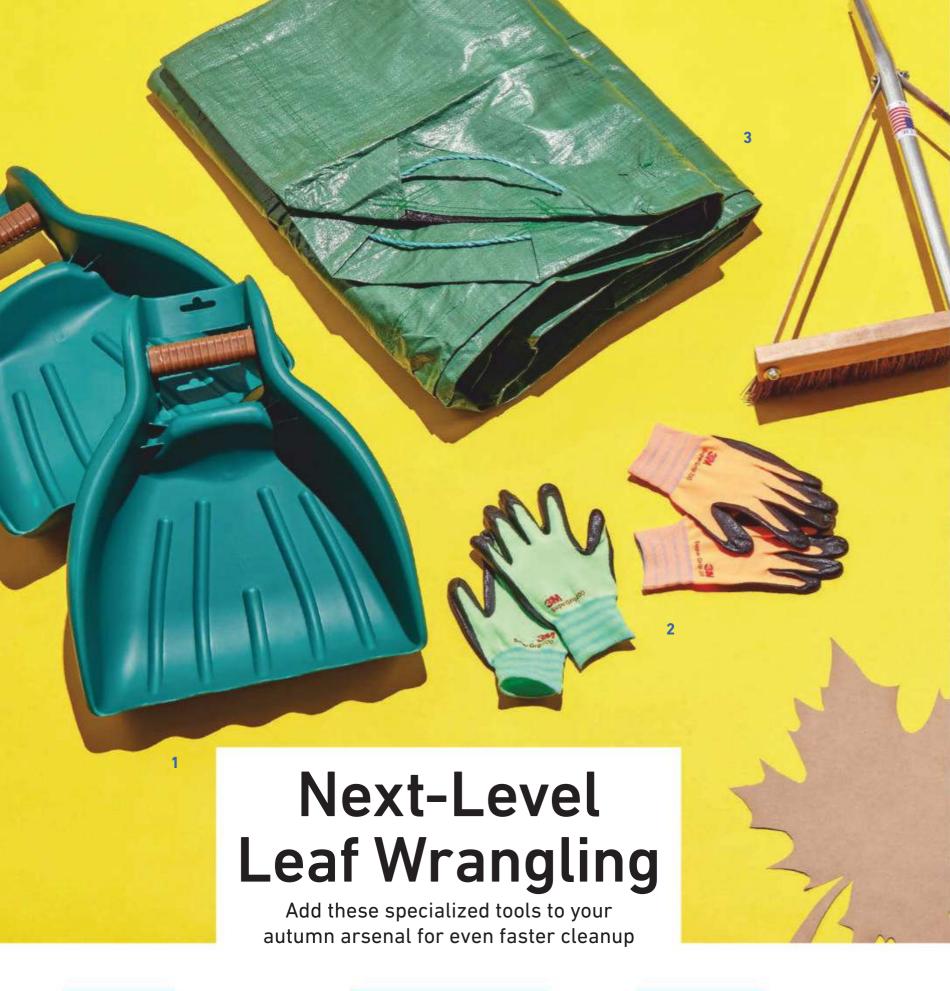
Clean Shop Vacuum Filters from a Distance

Blowing out a shop vacuum filter on the ground with a leaf blower keeps you a lot cleaner than holding one at arm's length and trying to use an air hose nozzle.



Clear Out Car Crud

If you haul around lumber or tools that fill your car with debris, use a leaf blower on the back, the floors, the dash—everything. You can even take out the rugs and blow them off. It isn't exactly "detailing," but it gets the job done quickly.



SAVE YOUR BACK

1. MEKKAPRO Leaf Scoops and Claws V2.0

\$33 • Material: Reinforced plastic Made from thick and sturdy plastic and sporting comfortable grips, these leaf scoops are great for moving smaller piles of leaves, grass clippings and other yard waste. The clawlike scoops act as extensions of your hands and save your back from excessive bending.

ABRASION-RESISTANT COATING

2.3M Super Grip 200 Garden Work Gloves

\$14 (3-pack) • Materials: Nylon, nitrile A good pair of gardening gloves is essential for anyone gathering leaves, spreading leaf mulch or clearing out gutters. These grippy, breathable gloves from 3M can be thrown in the washing machine when your job is done.

HAUL LARGE LOADS

3. Rocky Mountain Goods **Drawstring Tarp**

\$26 • **Dimensions:** 9 x 9 ft. Once you blow/rake your leaves onto a leaf tarp (a tarp with reinforced handles), you can then fold it up and drag the whole thing away. It's a reusable, easy way to move and dispose of large leaf piles, and a great option for those who prefer not to use bags.



CLEAR OFF YOUR ROOF

4. USA Handy Tools **Leaf Roof Brush**

\$60 (Brush head and four 5-ft. poles) • Handle length: 20 ft. This extended, angled outdoor broom with a lightweight handle allows you to you draw leaves, pine needles and other debris off your roof before it causes damage. Consider using a roof brush instead of power-washing your roof, which can damage the shingles.

ADJUSTABLE HANDLES

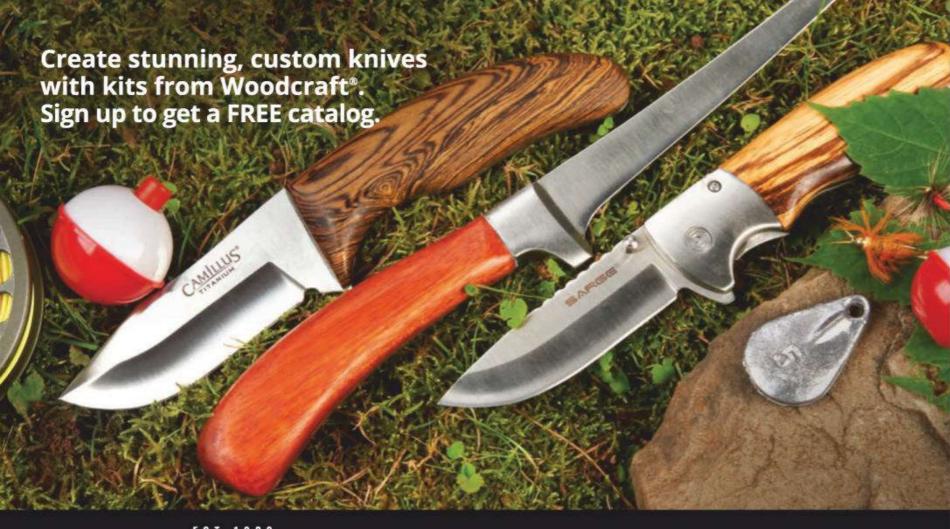
5. Earthwise Power Tools by ALM Gator Grabber

\$90 • Materials: Powder-coated steel (shafts), polyfiber (jaws) This clever tool has a "grabber" design using two different sections to clasp onto leaf piles, sticks and more. It is similar to a pair of leaf scoopers, but with a longer reach. The telescoping handles allow you to set a customized, comfortable length for working.

STREAMLINE CLEANUP

6. LeafEasy Leaf & Lawn Chute

\$10 • Material: Corrugated plastic Leaf chutes are affordable upright guiders that you can use to quickly to fill up bags, mulchers or cans with leaves. They make fall cleanup more efficient and can be reused as necessary. This corrugated plastic model resists wet leaves and folds down flat when you're finished for the season.



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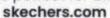


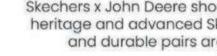




MAKE TRACKS IN SKECHERS x JOHN DEERE

Skechers x John Deere shoes are infused with the iconic brand's rich heritage and advanced Skechers technologies. These comfortable and durable pairs are perfect for any rugged adventure.







Toolkit

Best Pro Tips • Fix-It Focus • Handy Hints

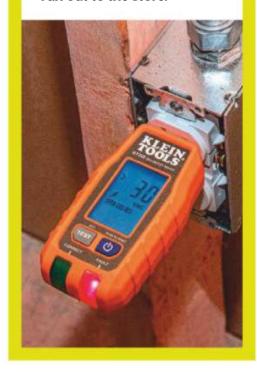




When you're giving your home a good once-over through an inspector's eyes, you should have a few tools on hand. Gromicko recommends having a tape measure to track the overall health of your home's foundation, and a ground fault circuit interrupter (GFCI) receptacle tester to check the functionality of GFCI circuits and outlets.

Outdoor receptacles (aka outlets) must be GFCIprotected to prevent electric shock. For less than \$20, a hand-held, easy-to-use GFCI receptacle tester tells you if your receptacles are wired correctly. In wet winter weather, ground fault protection is critical.

Gromicko suggests using the tape measure to check the slope around your house and measure cracks in your foundation. Make note of any cracks that grow over time. Inside, measure your furnace filter and replace it before you turn the crank on the heat. Buy multiple filters at once, Gromicko says, so you don't need to constantly run out to the store.





all's the time for bonfires and football games and prepping your home for winter. That last one isn't as fun as the first two, but your home (and your wallet) will thank you for it. "Whenever you catch a problem early, just like with your health, you're better off than if you wait," says Nick Gromicko, a certified home inspector and the founder of the International Association of Certified Home Inspectors.

Where to start? There's a lot of ground to cover, especially if you've never done it. "You want to focus immediately on the outside because that's probably what's changed over time the most drastically," Gromicko says. Here's how to keep your house in tip-top shape through spring.

Inspect the roof

Do you see missing shingles? Fallen branches? Sagging gutters? "There's a lot of square footage on a roof," Gromicko says, so do a thorough inspection from the

ground before snow obscures your view.

Missing shingles could signal a leak in your roof and eventually your attic. Now's the time to catch it, "as opposed to when your ceiling collapses onto your baby grand piano," Gromicko says. If you feel safe up there, repair and replace shingles and trim back branches, or hire a pro.

Clean your gutters

Your roof, gutters and downspouts work together to catch, move and remove rainwater and snowmelt. "Well, all of that means nothing if your roof water is just puddling up against your house" because your gutters are clogged, Gromicko says. "You're actually using your roof as a catch basin to pour water next to your foundation." Not great.

Clean out your gutters and downspouts, and install rain diverters in areas where gutters aren't possible, or if you notice trouble spots on your roof where water backs up. "Anything you can do to push the water farther





and farther from your house" is worth doing, Gromicko says.

Check the grade

Make sure your flower beds and foundation plantings slope away from the house. "A lot of people plant around their house," Gromicko says, but all that digging and mulching creates places for water to get trapped. Remove mulch that's piled up against the siding or brick, and grade the remaining dirt and mulch at about a 5% slope.

Fall is a great time to plant, so if you're starting from scratch, Gromicko has some advice: "Plant things that don't need water." Most foundation water problems are from surface water, not groundwater, so the expert says native, low-water grass and plants are a better option for both your home and the environment.

Look for leaks

"Water is what causes most damage to a home," Gromicko says, "whether it's a plumbing leak or a roof leak or a basement leak."

Check your outdoor spigots for leaks and loose fittings so you're not stuck with a frozen pipe this winter.

Luckily, most outdoor spigots today are self-winterizing, Gromicko says. "When you close the valve from the handle on the outside, the valve actually closes on the inside of the house, so the water doesn't freeze." If your outdoor spigots are old, it might be time to replace them with a newer model.

Non-water leaks cause damage too, mostly to your utility costs. "Almost all of your heat loss from a wall comes from the windows," Gromicko says. Check for drafts, and add weatherstripping and caulk around drafty doors and windows.

Sweep the chimney

Nearly half of home heating fires happen during winter, and unconfined chimney fires are a major cause of property damage. "You don't want to start a fire in a chimney that's damaged." Gromicko says. But it's hard to

see inside a chimney, even for an inspector. He recommends hiring a chimney sweep.

Find one offering camera services and inspection as well as sweeping. They'll clean out the highly flammable creosote buildup and look for structural issues so you can have peace of mind when lighting a fire this winter.



Meet the Pro

Nick Gromicko is the founder of InterNACHI®, the International Association of Certified Home Inspectors, based in Boulder, Colorado.

What's That Noise?

Get to the bottom of what's causing that rattling, buzzing and squeaking around the house

BY FAMILY HANDYMAN EDITORS



ost of us can get used to outside noise, from airplanes, trains or the neighbor kid's garage band. But persistent little sounds in our own homes are a different story. Rest assured, most home noises are easy to eliminate without spending hours on repairs or a ton of money. Here is a collection of fixes for the most annoying squeaks, creaks, gurgles and bangs.

Why is my fridge making a loud motor-like noise?

Refrigerator noise comes from either the compressor under the fridge, the condenser fan motor under the fridge or the evaporator fan motor inside the freezer. Open the freezer door while the fridge is running. If the noise doesn't get louder, pull out the fridge. Most refrigerators have a condenser fan motor. Unscrew the back cover and listen—you'll be able to tell whether the noise is coming from the fan or the compressor. The best cure for a loud compressor is usually a new fridge. To replace the fan motor, remove its mounting screws, unplug it and install a new one.





How do I fix a squeaky door hinge?

Spray squeaky door hinges in place with a little all-purpose lube, silicone spray or dry Teflon spray. If the squeaks persist, remove the hinge pins and rub off any rust or corrosion with a steel wool pad, then coat the pins with a lubricant before replacing them.



What's up with that steady and annoying whistling in the duct grilles?

If you have a grille or register that hums or whistles, all you have to do is twist the fins slightly until the noise stops. Pliers will scratch and kink the delicate fins, so use a hinge with strips of tape applied to the inside. Then grab a fin between the hinge leaves and give it a twist. Twisting all the fins so they open a little wider will give the best results.



What's the best way to stop a rattling door?

A door will rattle when there's too much space between the door and the doorstop. Here's one solution to fix the gap: Knock the doorstop flush with a hammer and a scrap piece of wood. If the stop is more than 1/16 in. out of whack, you may end up with a noticeable unfinished spot where the doorstop used to be, especially on painted doors. Add a couple of brads or finish nails to the stop if it's a door that regularly gets slammed shut.



Door Upgrade

Watch this video to learn how to replace a hollow-core door and reduce sounds.

Toolkit Fix-It Focus



How do I stop that popping sound from my ducts when the furnace kicks on?

Ducts made from sheet metal can make a popping sound when the furnace kicks on, changing the air pressure inside the ducts. One simple fix is to reinforce the sheet metal by scoring it. Simply take a straightedge and score a large "X" in the center of the sheet metal with a screwdriver. It may take a few X's in a row to stop the pop.



How can I put an end to exhaust vent chatter?

When the wind blows just right, the flapper on an electric dryer or exhaust fan vent can open and close, causing a chattering noise. One solution is to put a little weight on the flapper, enough to resist the wind, but not too much or the flapper won't open when the dryer or fan runs. Attach a few small magnets first and then run the dryer, hood vent or bath fan to make sure the flapper still opens. If the chatter is gone, great. If it persists, add another magnet. Always check that the flapper still opens when it's supposed to. Once you figure out the right balance, add a dab of adhesive to each magnet to keep them in place. You can get a ½ x 30-in. magnetic strip at home centers for a couple of bucks. For noisy plastic vents, try attaching small washers with a dab of clear silicone. Note: These flapperquieting tips are not for use with gas appliances.



What's the secret to stopping a noisy gutter drip—is there a hack of some sort?

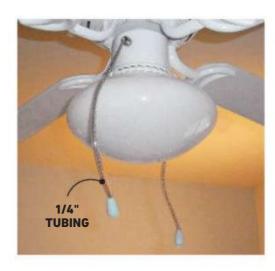
Is that dripping noise in your downspout forcing you to keep your bedroom window closed at night? Simply tie a synthetic rope onto one of the gutter hangers and run it down into the downspout. Drops of water will cling to the rope and flow down instead of plummeting the whole length of the downspout and causing that irritating drip. Adding a rope does restrict the water flow, so this may not be the best option if your gutter is prone to overflowing or gets clogged easily.





What can I do to stop the bang when the toilet seat goes down?

Slow-close toilet seats effectively stop the *clank* when lowering the toilet seat, but if you still hear the noise of the lid hitting the tank upon opening, here's what to do. Put a vinyl bumper on the lid of the toilet tank. Toilet seats with a slow-close lid and vinyl bumpers are available at home centers or online.



How do I stop that · clink, clink, clink of the ceiling fan chain?

Even if a ceiling fan is perfectly balanced, the breeze from the fan can cause the pull chain to smack up against the light fixture. Solve this annoying noise by removing the chain and sliding a $\frac{1}{4}$ -in. plastic tube over it. You can buy the tubing at home centers.

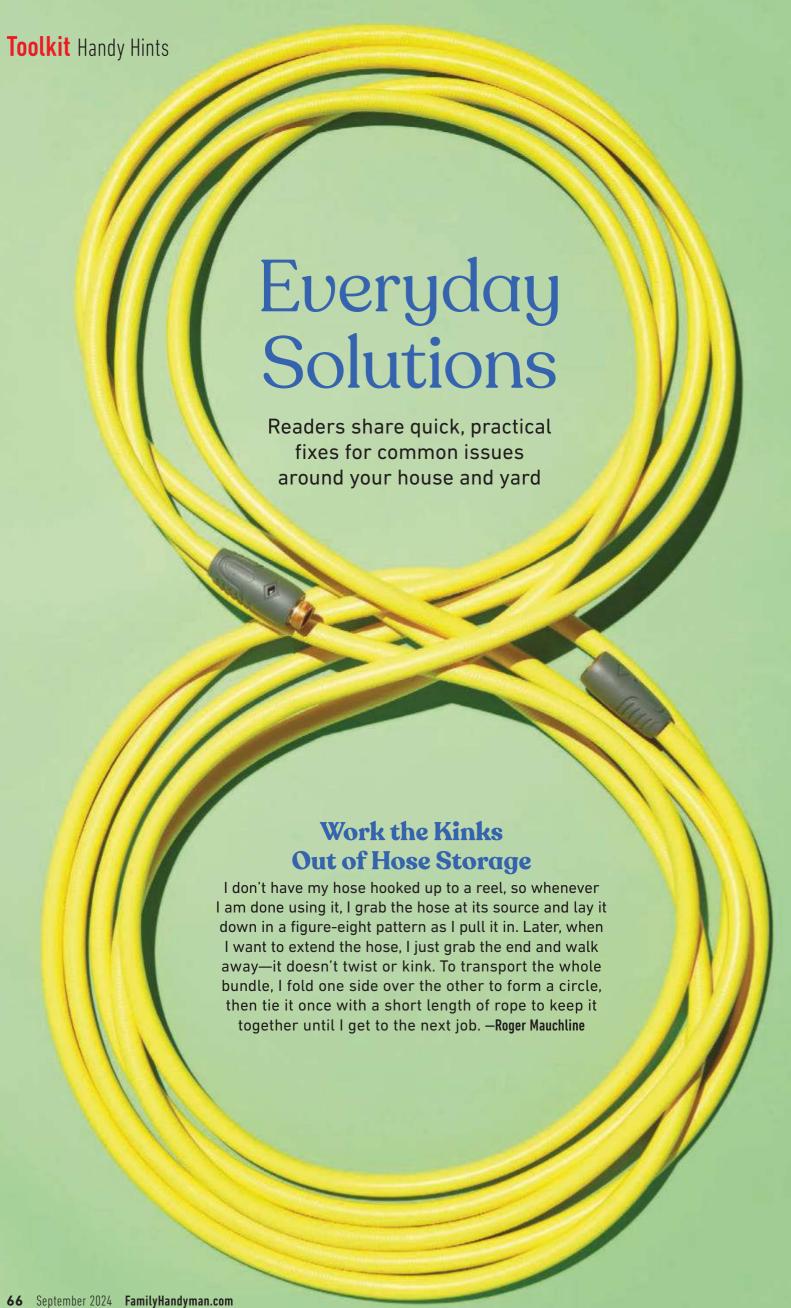
What if I want to soundproof my entire home-or even one key room?

To create a true quiet zone, add an extra layer of drywall and isolate it by one of two methods. The first is to screw resilient drywall channels horizontally across walls and add a second layer of %-in. drywall. The second method, for ultimate quiet, is to build a separate 2×4 wall, insulate the cavity, add drywall on both sides, then erect it 1 in. away from the existing wall (to isolate it). Adding drywall usually means that you have to move outlet and switch boxes (or add box extenders) so they're flush with the new surface. To make door and window trim fit right, you'll have to add extension jambs.













Mix Up a DIY Wasp Killer

To control the wasps around my back porch, I make my own pesticide. I just fill an empty spray bottle with 2 oz. of Dawn dish soap and 10 oz. of water, screw on the lid and shake everything to combine. Once it's ready, I head outside and saturate the wasps or wasps' nest with the mixture—this kills the wasps and dissolves the nest. It's not exactly 100% natural, but it's not toxic to humans, especially in comparison with store-bought chemical pesticides. -Nina Ramos



Keep Soil in Your Planter (and off Your Deck)

It's important to let water drain out of planter pots, which is why there is typically a hole at the bottom of them. But sometimes thorough watering can cause dirt to leak out of the same hole, creating a mess. To keep my deck clean, I used a square of extra window screen as a filter for the bottom of my planter pot, allowing water to drain but no dirt to escape. Cut out enough screen to cover the hole at the bottom of the pot, then place the screen over the hole and fill the pot with dirt. No more messes! -Yvonne Edwards



Label Your Toolbox

If you're tired of opening multiple toolbox drawers to find what you're looking for, use magnetic labels. Write on the labels with permanent marker, then place them on the appropriate drawers. —Daniel Hodge



Prep Cheap Rollers

To prevent bargain paint rollers from leaving fibers behind on my freshly painted walls, I wrap the whole roller cover with painter's tape before starting the job. Pulling off the tape takes any extra fuzz with it. -Joshua Everett

"If you use a small flathead screwdriver to press the tab inside the head of a zip tie, you can pull the long tail free and reuse it."

-Malcolm Stanley



Bright Idea for Broken Bulbs

Need to remove a broken lightbulb? Use a potato! Disconnect power to the broken bulb by turning off the light switch or unplugging the lamp. Slice a potato in half, push the sliced half against the broken bulb, and once the bulb sticks to the potato, begin turning counterclockwise to unscrew. Once the bulb is removed, toss out the broken bulb and potato. -Jacob Padilla



Give Your Sponges a Bath

Kitchen sink sponges tend to get grimy and smelly, so I store them in my dishwasher. This way, every time I run a load of dishes, the sponges get cleaned too. -Kristi Williamson



Set-and-Forget Furnace Maintenance

I'll bet the last thing on your mind today is "when did I last change out the furnace filter?" I made things a bit easier on myself by subscribing to automatically receive new filters in the mail when they're due for a change. Services such as Filterbuy.com, SecondNature.com and Amazon will automatically deliver on an appropriate schedule. -Peter Logan



Use a Cardboard **Box for Plastic Bags**

I filled an empty tissue box with plastic bags and secured it to my cabinet door with Command strips. Now it's quicker to grab what I need. —Pamela Kendall

"I use a strong magnet attached to a broom handle to pick up any dropped screws or nails in my garage workshop."

-Neil Haynes

Keep Dust Bunnies Under Control

Cleaning ceiling fan blades can cause an accidental dust storm and a lot of frustration. Here's a simple solution. After you turn off the fan switch on the wall, place a pillowcase over one fan blade so it completely covers the top and bottom. Hold the blade with two hands over the pillowcase, near the center of the fan. Pull the pillowcase toward you, wiping the blade on the top, bottom and edges. Contain the dust inside the pillowcase as you reach the end of the blade. Take the pillowcase outside, turn it inside out and shake it to remove most of the dust. -Austin Clifford









Fix a Stripped Screw Hole

It can be frustrating when you are trying to tighten a cabinet or door hinge but the screw just keeps spinning without tightening. The screw hole is stripped! This can occur when a hinge or joint is put under a lot of weight or used frequently. My father gave me this great advice for fixing the stripped hole:

After you remove the screw from the stripped hole with a screwdriver, clean out any debris. Apply wood glue to a few toothpicks (as many as you can snugly fit in the hole), then push the toothpicks into the hole. Break off the toothpicks as close as you can to the opening of the stripped hole, and clean off any excess glue with a rag. After the glue has dried completely, use a screwdriver to fasten your screw back into place. -Chris Miller



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From Grill to Workbench

A Family Handyman reader breathes new life into an old, past-its-prime barbecue



I transformed a worn-out gas grill into a mobile assembly table. It was a cheap way to create a portable workspace and keep the grill "carcass" out of the landfill. The guts were there: cabinets, casters, and a flat top that's magnetic! After removing the cooking shell, I gutted the burner fittings to create storage for tools, jigs, clamps, etc. I attached a 3/4-in. MDF top with piano hinges and extended it

beyond the grill's original wing on one side for clamping, but I left the stainless top on the other side to place tools so I can access the storage space under the tabletop as needed. I also added some fittings for easy-access tool storage when working at the table. I love to roll this out into my driveway to enjoy the fresh air while woodworking, so the next phase of this makeover is to modify the MDF top for a

downdraft table for sanding, and possibly replace the casters with industrial versions.

—David King, Marble Falls, TX ●



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