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JUNE 2018





SEKTION/VEDDINGE
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SEKTION cabinet frames in white melamine foil. VEDDINGE doors/drawer fronts in painted finish. MAXIMERA drawers in powder-coated steel and melamine foil. Shown with BAGGANÄS handles/knobs in brass-plated stainless steel.

*The total price includes cabinets, fronts, drawers, door dampers, interior shelving, hinges, toe kicks, legs, and cover panels. Your choice of countertops, sinks, faucets, knobs and handles, appliances, and lighting sold separately. Requires assembly. See IKEA store for limited warranty, country of origin and 10'x10' details. Valid in US stores only. **Subject to credit approval. Comenity Capital Bank issues IKEA Projekt credit card accounts.



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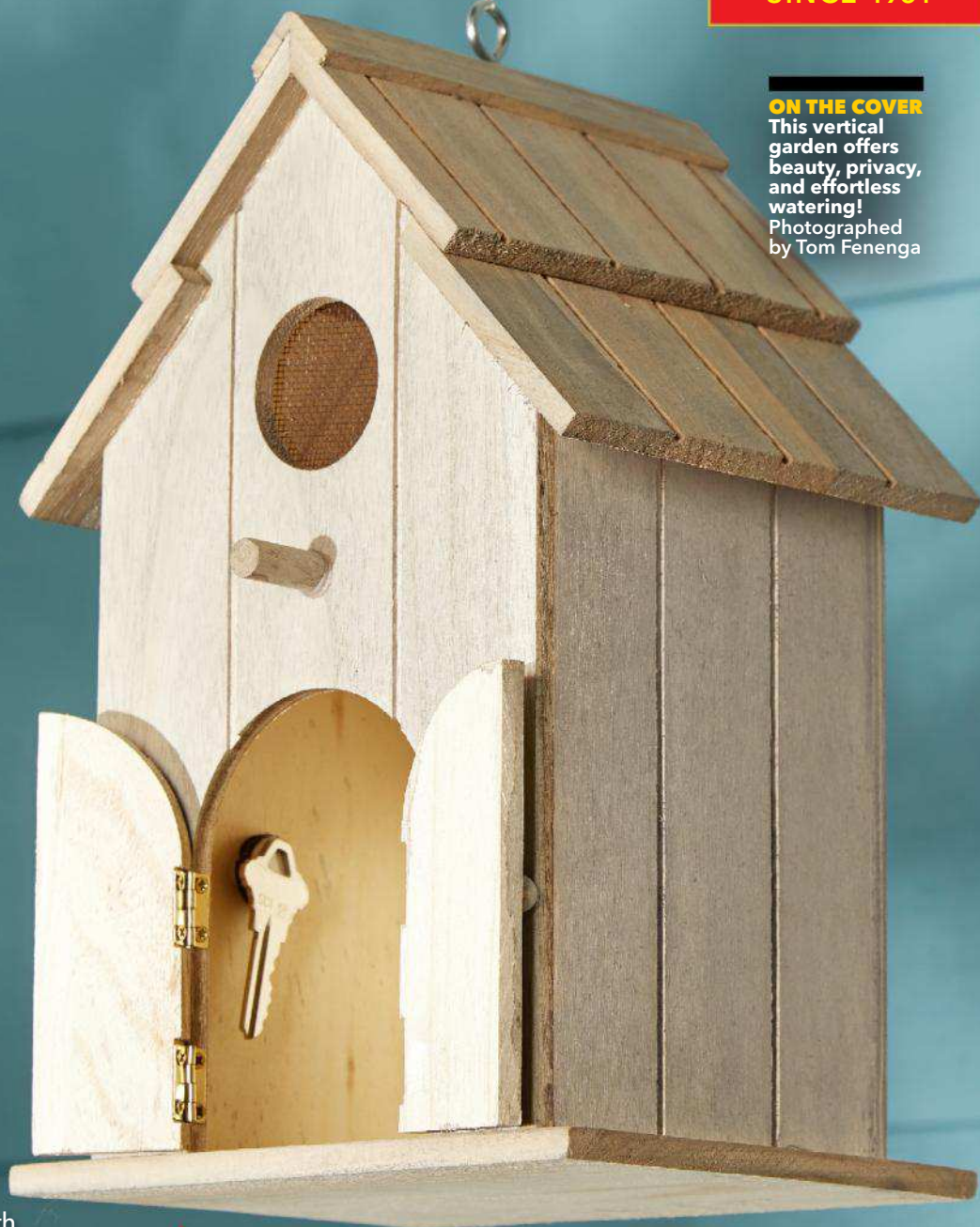
JUNE 2018

the family
handyman

**EXPERT
DIY ADVICE**
SINCE 1951

ON THE COVER

This vertical garden offers beauty, privacy, and effortless watering!
Photographed by Tom Fenenga



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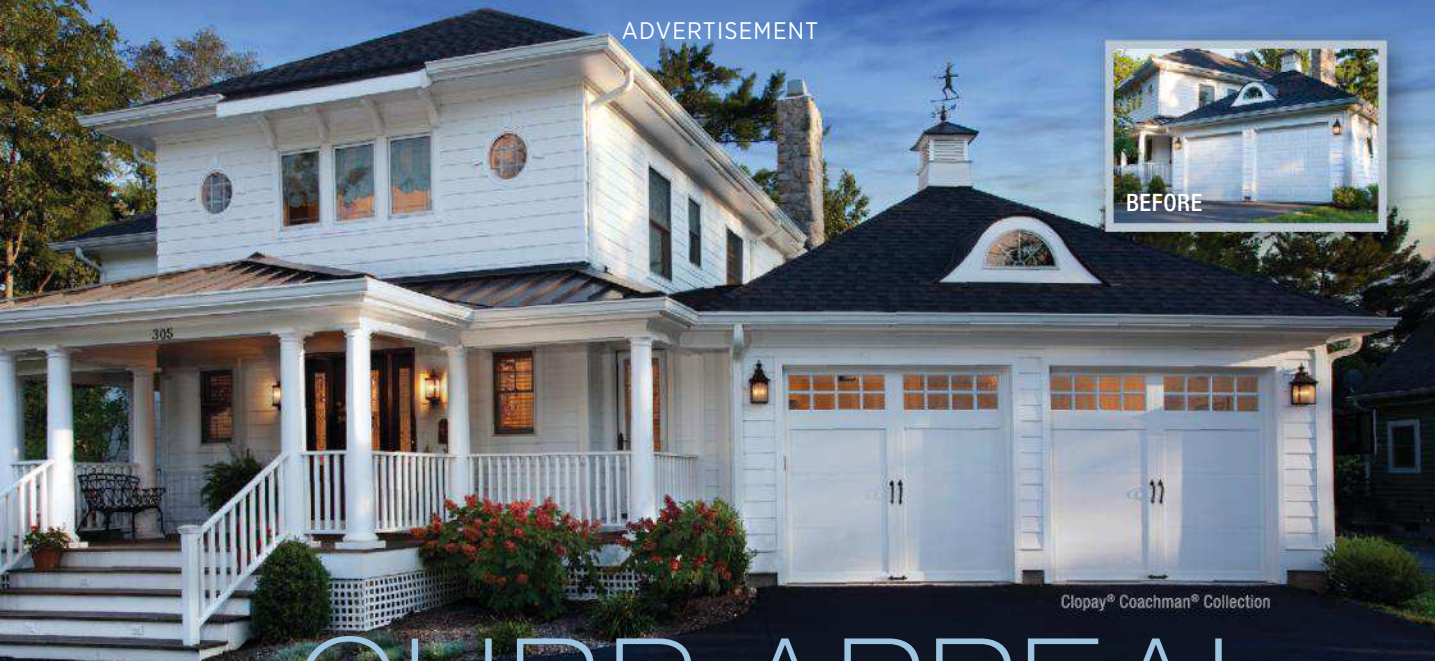
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BEFORE

Clopay® Coachman® Collection

CRANK UP THE

CURB APPEAL

A GARAGE DOOR UPGRADE IS A FAST AND EASY WAY
TO INCREASE THE VALUE OF YOUR HOME

When thinking of home projects, there is one that shouldn't be overlooked: **your garage door. One of your home's most significant architectural elements**, it has the potential to upgrade your home's exterior — without breaking the bank or taking weeks to complete.

It's also a home investment that pays you back. A new garage door was listed as **Remodeling 2018 Cost vs. Value Report's #1 ROI** when selling a house.*

When you consider that a garage door can account for up to 40% of your home's curb appeal, its impact is undeniable.

If this surprises you, perhaps you haven't seen Clopay's latest **garage door designs**. They offer styles from mid-century modern to elegant raised panel to rustic carriage doors. Add in accessories, including accent windows and decorative hardware, and this quick project transforms into a personalized statement and a substantial upgrade.

Constructed with high-quality materials, such as steel, natural wood, and low-maintenance faux wood composite, a new door also improves **energy efficiency**. An insulated garage door can reduce energy loss by up to 71%

and keep an unheated garage 10 to 20 degrees warmer in the winter and cooler in the summer.

Installation can be professionally done or handled as an 8-10 hour DIY project with helpers. Clopay offers an online tutorial video and the EZ-SET Spring System to support DIY installation.



Use **Clopay's Door Imagination System** to upload a digital photo of your home to try on different garage door styles before you buy.

Learn more at
imagine.clopay.com



America's Favorite Garage Doors®



Clopay® Gallery® Collection Ultra-Grain®



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7 Stuff We Love

Oh-so-quiet impact drivers, an LED safety flare, and a lawn mower that's got it all.

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DIY Universe

What's in it for you?

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**101 THINGS HOMEOWNERS
MUST KNOW**
pinterest.com/family_handyman

Stuff We Love

Our favorite DIY tools, materials + gear. By Spike Carlsen

QUIET POWER

HIGH IMPACT, LOW NOISE

Impact drivers are one of the coolest tool inventions of the last few decades. They have enough torque to drive construction screws, but they don't cam out heads the way conventional screw guns do. They're a must-have tool for any DIYer. The downside? They've always been mind-numbingly loud!

No more. Instead of a mechanical hammer-type system, several manufacturers now employ a new technology that uses oil to hydraulically drive screws. The 18-volt Makita shown (model XST01Z; about \$200 without battery) is one example. Last week, I used it to drive about 25 8-in. construction screws into solid lumber with no problem, and it was so quiet that I forgot my hearing protection! If you don't yet own an impact driver or want to upgrade your noisy old beast, go with an oil impact driver. Ryobi, Kobalt, Ridgid, Milwaukee and other companies also have offerings in this category.

TRAVIS LARSON, SENIOR EDITOR





[BROUGHT TO YOU BY] **TROY-BILT**

A lawn mower that's got it all

Troy-Bilt began making steel-wheeled rototillers in Troy, NY, more than 60 years ago. And it continues to churn out high-quality yard and garden equipment. The TB240 self-propelled mower is no exception.

The TB240 features front wheel drive and big, 11-in. wheels in back, a combination that makes it easy to maneuver. It's powered by a high-performance Honda engine with an AutoChoke starting system, which means no priming, no choking and no need to pull the starting rope more than once. Variable-speed control allows you to set the pace.

There are three cutting modes—side discharge, mulching and rear bag collection—and the 21-in. deck can be easily adjusted to cut grass in height from 1-1/4 in. to 3-3/4 in. The handle can be adjusted to three angles, so you can mow in comfort regardless of how tall you are.

The TB240 retails for about \$330. To learn more, visit lawncare.familyhandyman.com.

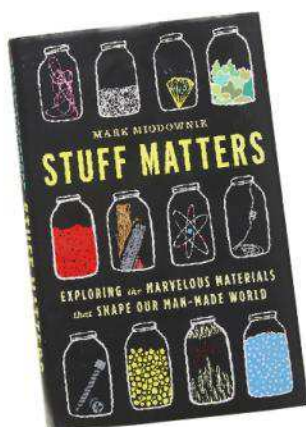
BOOK SMARTS

THE WORLD OF STUFF

Who knew 10,000 tons of copper ore were mined to create the 300,000 chisels used to build the pyramids of Egypt? Or that there was a 1,000-year gap between the Romans' use of concrete to build some of the most magnificent structures in the world and its rediscovery in the 1800s? In his book, "Stuff Matters," Mark Miodownik, a professor of materials science, explores a dozen materials we see, touch and use every day but know little about.

It's no dry, academic tome; he uses his personal experiences of getting stabbed on a London train and being thrown into a windshield in Spain to introduce two of the materials. If you love learning about the world around you, you'll love this book.

"Stuff Matters" (\$16 in paperback) by Houghton Mifflin Harcourt is available everywhere books are sold.



SIMPLE IS BEST

MAGNETIC STUD FINDER

I need a stud finder about once a year... and that's about how long the batteries in my electronic stud finder last. So I keep this handy gadget in the bottom of my toolbox for finding studs the old-fashioned way—magnetically.

You run this little fella in a zigzag pattern across the wall, and when it detects a metal screw or nail that fastens the drywall to the stud, the little red tongue waggles. It seems a little hit-and-miss, but finding a stud has never taken me more than 15 seconds. Johnson Level's Stud Finder Plus (about \$4) is available at most hardware stores and home centers.

SPIKE CARLSEN



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A YEAR OF BRUSHES

REPLACEABLE FOAM BRUSH HEADS

buy disposable brushes by the dozen; they're indispensable for painting little projects, touching up large ones, spreading glue and cleaning crevices. But some snap pretty easily, and then perfectly good handles end up in the landfill.

That's why this foam brush set caught my eye. It uses replaceable foam inserts that fasten securely to the handle. When you're done painting, you wash or toss them. You can use the inserts with most paints, stains and finishes, and they leave a smooth, streak-free finish.

The 48-piece brush set, which includes 12 handles and 36 inserts, costs \$16. That's a great value—even with shipping, these brushes cost about half as much as conventional disposable brushes. Refills cost 20¢ to 40¢ each. Get the set (No. 96-404) at woodworker.com.

MATT BOLEY

LET THERE BE LIGHT

A Matchless Safety Flare

The Flashing Safety Puck is a gadget you may never need—but if you ever did, it could just be a lifesaver.

This 4-in.-diameter polycarbonate disc contains 16 LED lights that flash in nine patterns (including the universal SOS warning). It has 360-degree visibility and is nonflammable and waterproof—it even floats. Its super-strong magnets hold tight to your car or other metal surfaces.

The manufacturer claims the batteries will hold their charge for 10 years and that the unit can be seen from more than 1/2 mile away. Its most common use is as an emergency flare—keep one stashed in the trunk of your car and you'll have a beacon that can be activated with the push of a button. They're most popular as a roadside emergency warning light, but some people put them on slow-moving vehicles on back roads, on kayaks to alert larger boats they're in the area, and on top of bike helmets for night riding.

The Flashing Safety Puck is available for \$30 at Duluth Trading Company stores and at duluthtrading.com.

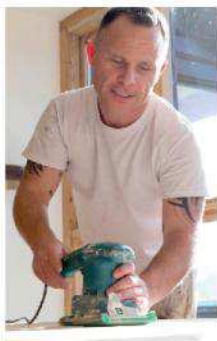


**4 TIPS
TO
KEEP
YOUR
BODY
IN**

DIY shape



We know DIY projects are your passion, which is why it's so important to be healthy and keep your body in its best shape so you can enjoy doing what you love. With these helpful tips, you'll keep your handyman status and never miss out on a new project.



1 Check on your posture. Bad posture can lead to a variety of health conditions such as misalignment in the spine or neck pain. Try standing at your workspace to make sure your shoulders and elbows are relaxed.

2 Take 10 minutes to do a couple stretches prior to tackling a home-improvement task. This will help keep you flexible and strong whether you're planting, plumbing or painting.

3 Be sure to stay hydrated. Keeping a water bottle on your workbench will remind you to drink water regularly. That

way your muscles and joints stay hydrated, flexible and performance-ready so you can nail down those small details.

4 For a more long-term improvement on keeping your body comfortable, try taking a regular joint supplement. We recommend **Move Free® Ultra 2in1** because it gives you faster comfort than Glucosamine & Chondroitin, plus comfort gets better over time — and with just one tiny pill per day, it supports your joints for any task that comes your way.



Handy Hints®

Clever solutions from our readers.

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Mini Blind Cleaning Tongs

Dusting mini blinds is a pain. It's difficult to thoroughly wipe both sides of the slats without bending them in the process. A pair of kitchen tongs makes it a lot easier.

First, cut a rag into two small pieces. Then use twist ties or rubber bands to secure the rags around the tongs. You can close the tongs around each slat and wipe away the dust.

E. REGALDO



C-CLAMP HANDLES

Quart-size paint cans don't have handles, but they'd be so much easier to use if they did. Here's my solution: Attach a C-clamp to the can. It actually works better than a bail because it's out of the way for dipping the brush, and it keeps the can from swinging. Your clamp will get paint on it, but cleaning it up is easy.

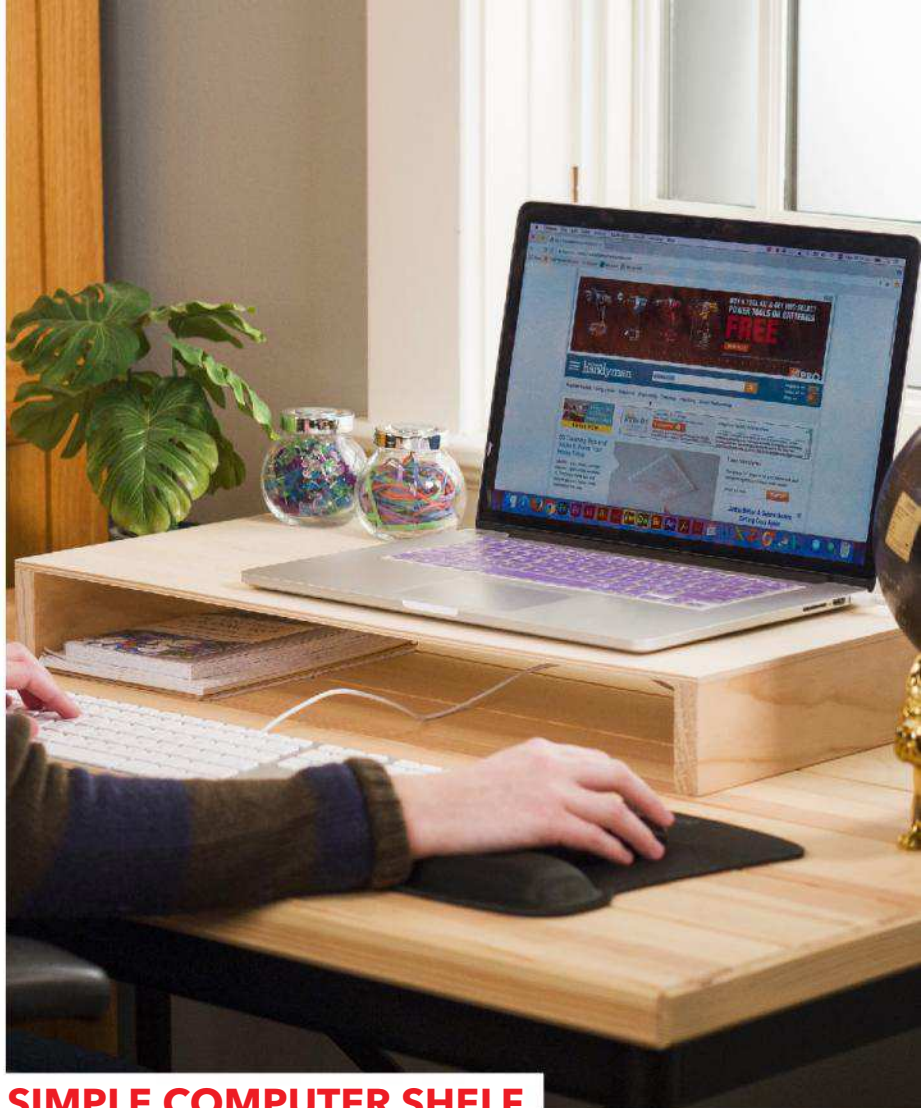
MIKE WATT



TWO NAIL LENGTHS IN ONE GUN

Small carpentry projects, such as trimming a door, often require a couple different lengths of brad nails. To save time, load the different lengths you'll need into the magazine. When you need to switch, just open up the magazine and put the strip with the correct length of brads first in line. You'll also break fewer strips by loading them all at once. Nail strips tend to break when they're shoved into a pocket or dropped on a hard floor.

TRAVIS LARSON



SIMPLE COMPUTER SHELF

To get my laptop at a comfortable height for working, I made this shelf for my desk with some leftover boards, glue and a few finish nails. I used a 12-in. x 24-in. piece of plywood for the platform and two 12-in. pieces of 1x3 for the supports. Attach the supports with glue and finish nails or screws. The open space is a good spot to stash a pad of paper, books or my keyboard when it's not in use.

MARK PETERSEN



A PENNY FOR YOUR TOILET SHIMS

I often use spare change as shims to level a toilet. Coins provide a firm seat, and each denomination is a different thickness. Simply slide as many coins as necessary under the toilet until it's completely level. Then tighten the flange bolts and caulk along the floor as usual. The caulk will hide the coins. Washers work well too.

**LES ZELL,
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EASY STORAGE FOR HAIR APPLIANCES

This PVC wye fitting looks like it was designed to store hair appliances! The 4-in. opening is perfect for a hair dryer, and the 2-in. one is just the right size to hold a curling iron or straightener. The fitting is stable enough to sit on a vanity top without tipping over. If you don't like the look, either spray-paint it or mount it inside a cabinet with a couple of screws.

JULIE OELLRICH



PAINTBRUSH PROTECTORS

After thoroughly washing and air-drying my brushes, I wrap them with the same painter's plastic that I use to mask off trim and protect the floors. The tape on the edge sticks to the metal ferrule, and the plastic is the perfect length to cover the bristles and help maintain their shape.

JOE MARTIN

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DIY Essentials

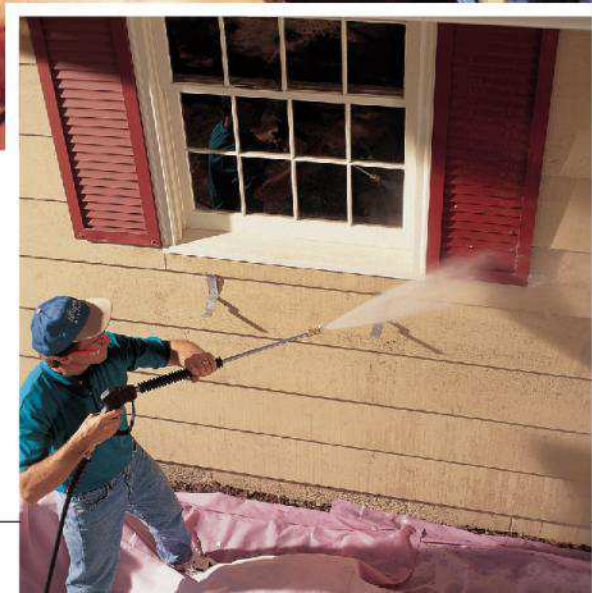
Our best tips for getting your project done right. By Brad Holden

MAKE PAINT LAST

Painting the exterior of a house takes a lot of time—you won't want to do it again soon! The key to a long-lasting paint job is solid prep work, and here are 17 tips that get the job done.

1. CLEAN SIDING AND TRIM

Dirty surfaces won't hold paint. Remove dirt, mildew, cobwebs and anything else that isn't meant to be there. Do the cleaning in stages. Start by applying a solution of bleach, water and a cleaner such as JOMAX (a bleach activator), using a garden sprayer. Next, remove weathered paint and dirt using a pressure washer. Be careful, as you can easily damage siding and trim with a pressure washer. If you don't feel confident using a pressure washer, a siding cleaner and scrub brush will do the job. Thoroughly rinse to remove any cleaner residue and let the surfaces dry.



2. SCRAPE

After the surfaces have dried completely, scrape off any remaining loose or flaking paint. Applying new paint over flaking paint will cause it to peel far sooner than it should. Before scraping, pound in any nail heads that could nick your scraper blade. You can buy a hardened steel scraper (\$5 to \$10), or for about twice the price, you can buy a carbide scraper. Carbide holds an edge far longer than hardened steel. With either option, buy a couple replacement blades so you don't have to sharpen as often. You can sharpen a carbide blade using a diamond stone.



3. REMOVE OLD CAULK

While you're scraping, check the caulking around windows, doors and trim. If the caulk is in good shape and still adhering, leave it in place. If not, dig it out with a 5-in-1 tool (shown), utility knife or putty knife.



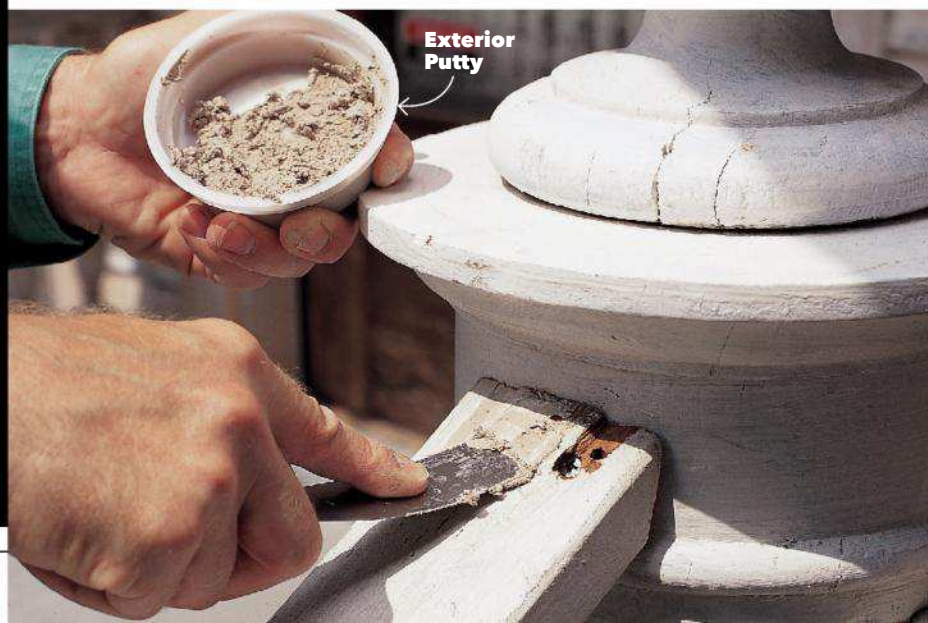
4. SAND OFF RIDGES

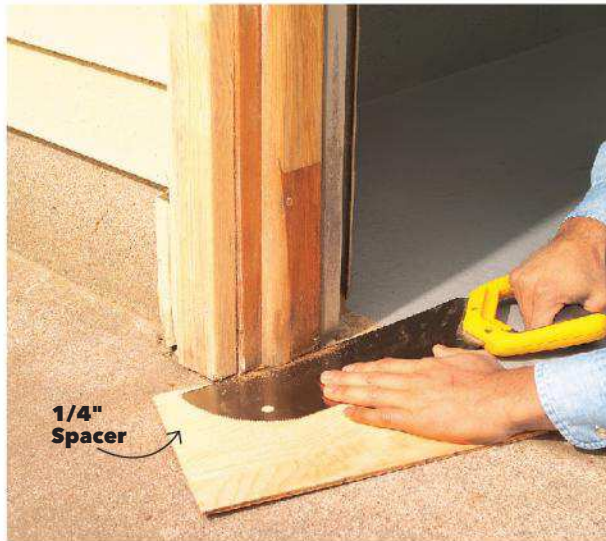
After scraping, sand any sharp paint edges, blending them with the surrounding surface. If you don't blend them in, the sharp edges will create thin, weak areas in the new paint. Brush away any dust created by sanding, and then rinse the siding and trim thoroughly.



5. REPAIR DAMAGED SURFACES

Don't paint over rotten or insect-damaged wood. Even if it covers, the paint won't last. Replace or repair any damaged wood. Fill nail holes and other small imperfections with exterior wood putty. Sand off excess putty after it's dry.





6. CREATE A GAP BETWEEN TRIM AND CONCRETE

Boards that come in contact with concrete won't hold paint for long. Water on the concrete wicks up into the wood, loosening the bond between the wood and the paint. To remedy this, trim any wood so that it's about 1/4 in. above concrete.



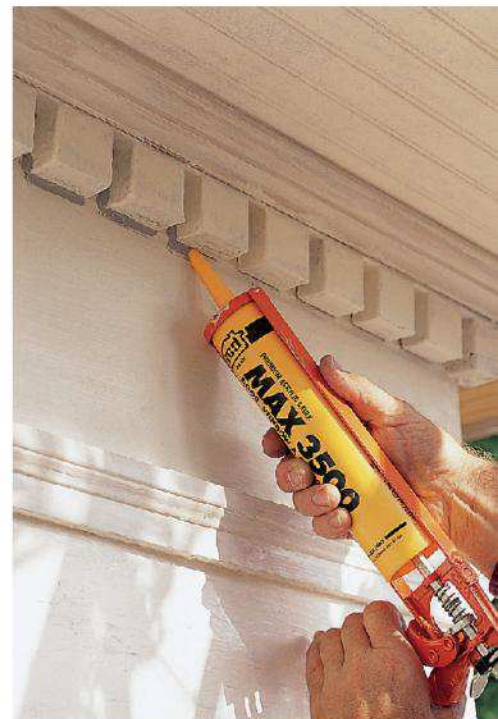
7. KEEP SPACE BETWEEN TRIM AND SHINGLES

If trim or siding contacts the shingles, water will wick into the wood and the paint won't last. Lay a 3/4-in.-thick spacer on the shingles and cut any trim or siding to create a gap between the wood and the shingles.



8. SPOT-PRIME

Prime nail heads, putty and knots before priming the whole surface. These areas are more difficult to cover, so they need a little extra attention.



10. CAULK ALL CRACKS & GAPS

Caulk around windows, doors, trim and anywhere else water could get behind a painted surface. Use interior/exterior paintable latex caulk. Be sure to prime first; primer adheres to bare or slightly dirty surfaces much better than caulk.



9. PRIME ALL BARE WOOD

You can get good results with oil or latex primer. For bare woods with a high tannin (a dark, natural pigment) content, such as cedar and redwood, use a stain-blocking exterior primer. Stain-blocking primers prevent "bleed-through" of tannin as well as stains from old, rusty nails.

11. DON'T FORGET THE THRESHOLD

The bottom of a wood doorjamb will rot prematurely if you don't caulk the line where the threshold meets the jamb.



12. SEAL END GRAIN

When you install or expose new wood, seal any end grain with a paintable water repellent, such as WOODLIFE Classic clear wood preservative. Allow the repellent to dry according to the directions, then prime and paint.



13. KEEP VEGETATION TRIMMED

Plants that come into contact with your exterior walls hold moisture against the paint, which can lead to compromised paint and rotting wood. That means more repair work, more money and more frequent painting.

14. WAIT FOR GOOD PAINTING WEATHER

Avoid painting on hot days, in direct sun and in windy weather. Ideal temperatures for painting are between 50 and 90 degrees F. Temperatures below 50 degrees can prevent the paint from adhering to the surface properly. Hot weather, wind and direct sun all cause paint to dry too quickly, preventing adequate penetration of the primer and/or paint. It can also cause oil paint to blister. When possible, work in the shade, following the path of the sun throughout the day. Never paint when rain is imminent or right after it rains. Painting a damp surface can cause paint to bubble.



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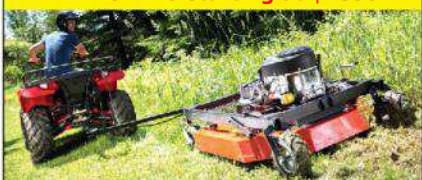


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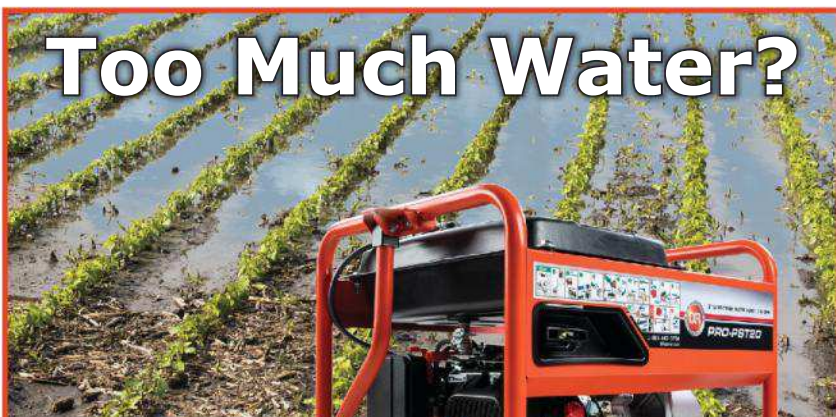
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15. KEEP AN EYE ON YOUR PAINT JOB

Whenever you're out doing yard work, check in on your paint. Look closely for areas of cracked or peeling paint, or wood that might be rotting. With a little spot maintenance, you can extend the life of your paint job by a few years.

16. EASE SHARP EDGES

Sharp edges won't hold paint; there just isn't enough surface area. If you install any new wood, be sure to give any sharp edges a slight round-over. It doesn't take much; a single pass with a sanding block is usually sufficient.

17. DON'T STALL ON PAINTING

Primer loses its bonding properties with prolonged exposure to UV light. After priming, you have a window of time to apply paint. Check the label on your can, as the amount of time can vary among manufacturers. We checked with two major companies. One said that paint must be applied within one week; the other said anywhere from four to six weeks.

Best ProTips

Expert advice from the job site. By Tom Caspar



WIPE-ON POLY

The fast, easy, goof-proof finish

The best choice for a clear coating is often a specialized finish like pre-catalyzed lacquer—but that assumes you have a spray booth outfitted with high-end equipment. For most of us, polyurethane provides a combination of cost and durability that's hard to beat. With wipe-on poly, you also get goof-proof simplicity, speed and convenience.



MEET THE EXPERT

Tom Caspar has been a professional woodworker and custom furniture builder for more than 40 years.

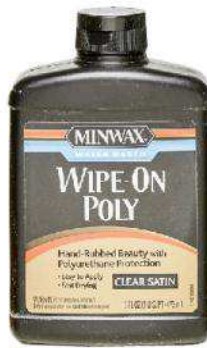
BEST PRO TIPS

Meet the team

We tried four versions of wipe-on poly. In terms of results, we found only small differences and were happy with each. Most home centers carry various sheens, but only one brand. All these options, and more, are available online. Prices start at about \$15 per quart.



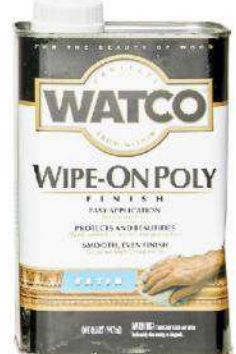
Minwax is the most common brand of oil-based wipe-on poly. Like other oil-based coatings, it adds a slight amber color to the finish. That can be good or bad, depending on the project.



Minwax water-based wipe-on poly dries faster than oil-based products, so you have to move fast. Unlike the others, it has no amber hue.



General Finishes Arm-R-Seal is formulated for brushing or wiping. It's slightly less amber than the other oil-based finishes.



Watco wipe-on poly is most like the Minwax oil-based product. Be careful when shopping; Watco's beloved Danish oil finishes comes in a similar container, and it's easy to grab the wrong product.



Set the stage

Drips happen, so use resin paper, a drop cloth or newspaper to protect your worktable. If your project has legs, make standoffs for them to perch on. Standoffs allow you to wipe finish all the way down to the ends of the legs. They poke holes in the wood, so if you have parts that must be finished on both sides, such as a shelf, set them on blocks covered with cloth instead.

Cut up an old T-shirt

Cut a T-shirt into 6-in. squares. Fold each square in half, twice, to make applicators. White fabric is best because any lint left in the finish is less likely to show.



The Pros & Cons of Wipe-On Poly

- + FAST.** You can coat a project in less than half the time it takes to brush on a finish.
- + EASY.** Unlike brushing, wiping on a flawless coat of poly doesn't require skill or an expensive brush.
- + DUST TOLERANT.** Because the coating is thin and dries fast, "nubs" caused by airborne dust are much less likely. That makes it great for on-site finishing.
- + NO CLEANUP.** Just dispose of the cloth, container and gloves. No brush to clean!
- EXPENSIVE.** On average, wipe-on poly costs twice as much as brush-on poly.
- SLOW BUILD.** As a rule, it takes three coats of wipe-on to match the buildup that you get from one coat of brush-on poly. That said, the speed of wipe-on application often makes up for those extra coats.



Wear gloves

Protect your hands with disposable vinyl or nitrile gloves. You can usually reuse them two or three times before they get too gummed up.



Bright lighting is critical

Good light helps you avoid leaving drips, sags and "holidays" (spots that you accidentally skip). When you've just applied finish to an area, check to see that all of it looks shiny and wet. Use a portable light if you're working in a dim room.



Pour it into a plastic tub

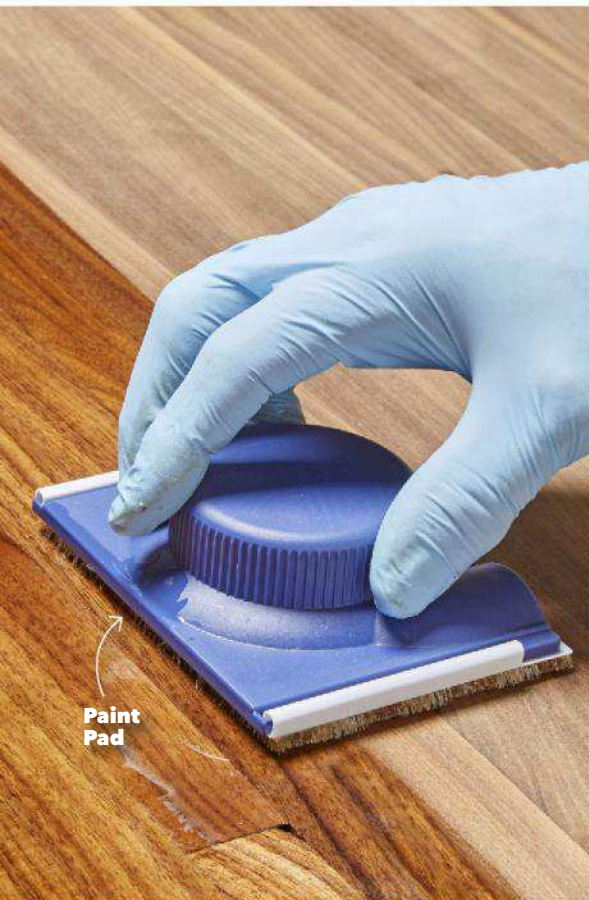
A margarine or cottage cheese tub is just right for wipe-on. Dip your rag into the finish, squeeze out the excess and wipe on. With the lid in place, the poly will remain fresh for a couple days. After a few days, the solvent will begin to degrade the plastic, so don't use plastic for long-term storage.



Brush first, then wipe

When you need a thick, protective buildup of poly on a door or tabletop, you have three choices: Go with brush-on poly, apply several coats of wipe-on or do a combination of both. You can, for example, brush on two coats for a heavy build, then apply wipe-on for a flawless surface. Sand the brushed-on finish absolutely smooth and apply at least two wipe-on coats for a consistent sheen. To make sure the two finishes bond to each other, they should both be oil-based or water-based. Using products from the same company is a good idea too.

BEST PRO TIPS



Cover large areas fast

A paint pad holds more finish than a rag and wipes it on faster. You can reuse a paint pad, too. After each coat, just store it in a sealed plastic tub or plastic bag. Get a paint pad at any home center for about \$5.

Keep the coats light

Three thin coats of wipe-on finish will look smoother than one or two thicker coats. For the best results, don't sand after the first coat. (You might sand through it!) Apply a second thin coat, then lightly sand with 220-grit sandpaper. Then apply a final thin coat.



Wipe off intricate projects

On most surfaces you wipe on the finish and just let it dry. If your project has lots of hard-to-access surfaces, try a different approach. Apply the finish to a limited area, then wipe it off after a few minutes using dry rags. This way, you don't have to worry about accidentally smearing finish on an area you've already covered. Just wipe it off.

PERFECT FOR TRICKY SURFACES

Wipe-on is a slick solution for hard-to-brush items. Sometimes it even beats spraying. You can work the finish into tight spots where spray would "bounce" out.





Freshen up an old finish

If your old furniture or woodwork looks dull and lifeless, try renewing it with a few coats of wipe-on finish. Wash it first with dish soap and water, then lightly sand the old finish with 220-grit sandpaper. Vacuum off the dust, then apply the finish as usual. Apply at least two coats to achieve an even sheen.



Let stain dry overnight

Applying poly too soon after staining is always risky. And it's even riskier with wipe-on poly. If the stain isn't completely dry, wiping it with a rag soaked with finish will cause it to smear. Ugly!



Sand by hand

Don't use an electric sander between coats. It will remove too much finish. Sand by hand instead. Fold the paper in thirds so it doesn't wrinkle, then hold it flat with two or three fingers. Be careful near sharp or slightly rounded edges, though. Sanding too hard might cut through the finish and leave bare wood. It's best not to sand them at all.

BEST PRO TIPS

Want ultra smooth? Try steel wool

If you're using an oil-based finish and you want to make a surface smooth as glass, apply the last coat with "00" steel wool. Rub hard. The steel wool will cut through any nibs or dust on the surface. To capture the grit and to maintain an even sheen, use a bunch of dry rags to wipe off the finish before it dries. This will leave only an ultra-thin film of finish on the surface.



Wet rags are a fire hazard

Take no chances. If rags wet with finish are wadded up, they can heat up, smolder and catch on fire as they dry. However, wet rags are safe if you dispose of them properly. Take them outside and separate them. Place them on concrete or asphalt or hang them with clothespins to dry overnight. Be sure to keep them away from kids and pets. Once the rags are stiff, they're no longer a fire hazard. You can put them in the trash.



Check for drips

There isn't much that can go wrong with wipe-on. But you can end up with a few drips or sags. Immediately after you wipe on the finish, give the whole project a quick inspection and wipe away any mistakes.

Correct bad brushwork

When brush-on poly goes wrong—dust nubs, sags, brush marks—you can correct it. After the finish has fully dried, wet-sand with soapy water or mineral spirits and 400-grit wet/dry paper. After you've sanded the finish flat and smooth, a couple light coats of wipe-on poly will give you a perfect surface.



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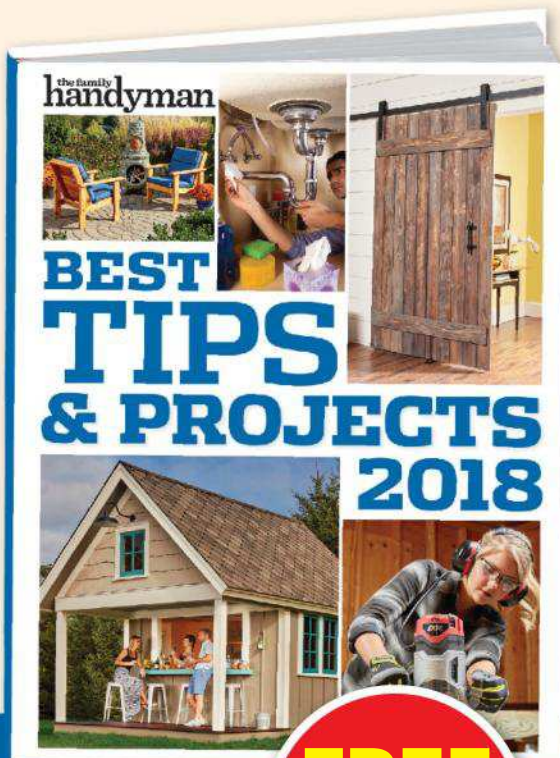
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Living Wall

Plant a vertical garden, and let the automatic watering system keep it thriving. By Travis Larson



WHAT IT TAKES

TIME

One weekend with a helper

COST

\$100 per lin. ft. for cedar; \$40 for treated lumber

SKILL LEVEL

Intermediate (same skills as for building a simple fence)

TOOLS

Posthole digger, 4-ft. level, drill/driver, circular saw, miter saw (optional)

if you have a ground-level deck or patio and would like a bit of privacy, consider building a living wall. It can shield you from the neighbors, surround you with flowers and provide fresh herbs just steps away from your kitchen or grill. The planter boxes are easy to build, and a drip irrigation system provides automatic watering all summer long—no worries about missing a day of watering or losing all your plants when you go on vacation.

EXTRA!
The planter boxes are easy to move around. You could even take your plants inside for the winter.



THE PERFECT PATIO PROJECT

Every project has its benefits, but few projects bring as many bonuses as this one. Just consider all the features this wall can add to your deck or patio:

- **PRIVACY.** This wall blocks the view and—covered with plants—even muffles noise a little.
- **SHADE.** At 7 ft. tall, the wall blocks late afternoon sun and screens the wind.
- **ECONOMICAL.** We used cedar lumber and spent \$1,800 for everything but the plants. Built with treated lumber, this wall will cost about \$800. Whatever lumber you choose, the wall will cost about 40 percent less if you clad only one side. Even with the most expensive option, it's a relatively low cost for a project that transforms a deck or patio.
- **COLOR.** Flowers and greenery enliven a bland deck or patio.
- **FRESH HERBS.** A steady supply, just steps from your kitchen.
- **EASY TO BUILD.** Setting posts straight and plumb is the hard part of a project like this one. But with our process, positioning posts is goof-proof. The rest is a simple matter of screwing boards to the posts.

Planning your wall

Our wall is about 16 ft. long including the small corner at the end. You can make your wall any length you want, but go with our height—about 7 ft. tall—or shorter. A 7-ft. wall will give you plenty of privacy but won't be so tall that it gets wobbly, and 10-ft. 4x4s work well for the posts. Whatever the length of your wall, space your 4x4s no more than 4 ft. apart so they're strong enough to support the planters, which weigh 20 lbs. or more.

We clad both sides of our wall with cedar 1x4s spaced 3/4 in. apart. If your wall runs along the wall of your house or garage, you can skip cladding the side that won't be seen.

Buying the materials

With the overall length in mind, do some math to figure out how many 4x4s you'll need. Again, try to plan for a 4x4 every 4 ft. or less, adding one more for one end. You'll need 21 1x4s for each side you clad. If

MATERIALS LIST

Treated 10-ft. 4x4s: One for every 4 ft. of wall. (Don't forget to add one more for the first post.)

Treated 8-ft. 2x4s: One for each inside corner for backer boards (**Photo 11**).

1x4s: Select lengths to avoid seams if possible. You'll need 21 for each side if you build your wall 7 ft. tall, or three for each foot of height for a shorter wall.

2x6s: 1 ft. for each planter box.

1x6s: Use your box liners as a guide to determine the best lengths and quantities. Don't forget you need enough for both the back and the front.

2x4s: Ribbons for laying out and setting the posts. Choose straight ones a couple of feet longer than your wall.

8-ft. 2x4s: Get two for each corner and any end posts for bracing. (Cut some off the ends to use for stakes.)

Figure A Living Wall

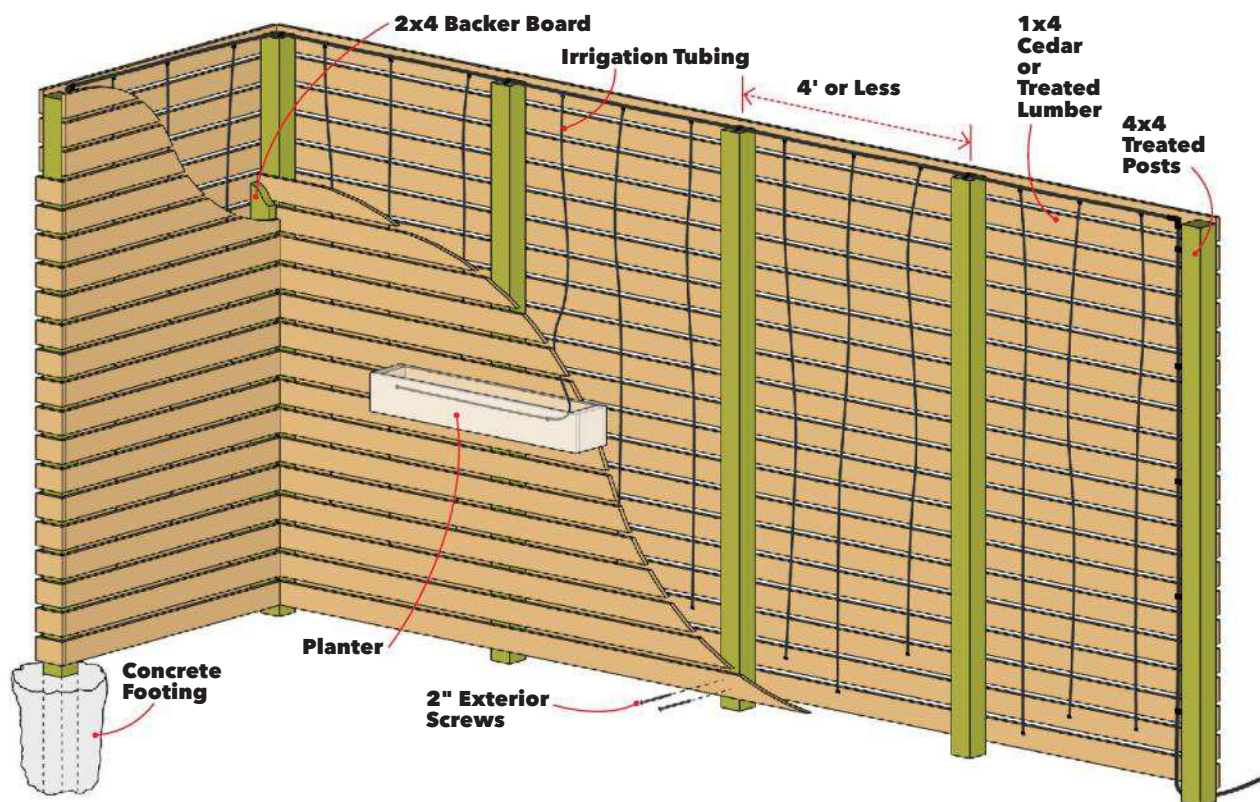
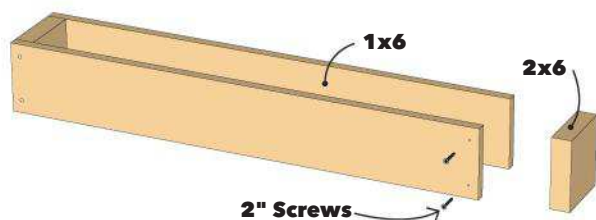


Figure B Planter Box



Hardware:

1-1/4-in. exterior trim-head screws: 42 per post for attaching the 1x4s (84 if you're cladding both sides).

Small box of 3-in. trim-head screws: For bracing.

2-in. exterior trim-head screws: Eight per planter box.

5/16 x 3-3/4 in. hooks: Two for each planter box.

60-lb. bags of concrete mix: Two per post.



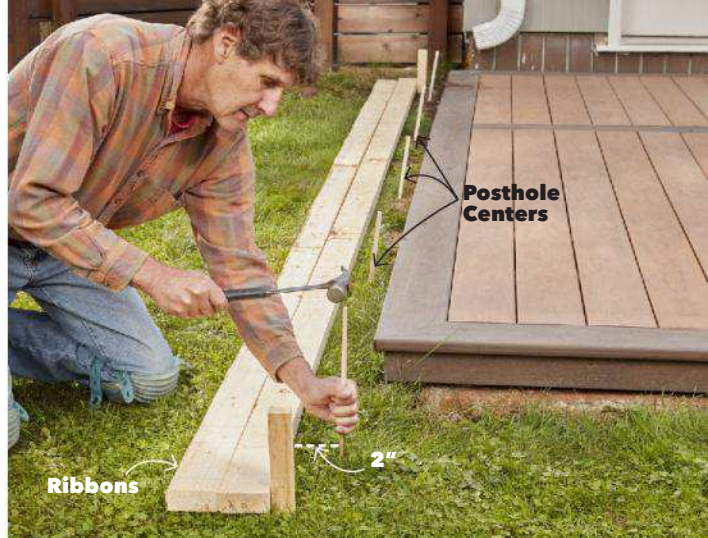
1. LAY OUT THE POST LOCATIONS

Drive stakes a foot or more beyond the end post locations. Push both 2x4 ribbons against the stakes and mark the ends so you'll know where to reset them later. Lay out the post positions on both ribbons.



3. DIG THE HOLES

Set the ribbon aside and dig 8-in.-diameter, 30-in.-deep holes at each stake.



2. MARK THE POSTHOLES

Drive stakes in the center of each post position, 2 in. away from the ribbon.



4. SET THE END POSTS

Reposition the ribbons using the marks you made earlier (see Photo 1). Screw one of the ribbons to the end stakes. Then screw each end post to the ribbon while a helper holds the post plumb both ways.



5. SET THE MIDDLE POSTS

Screw the top ribbon to the end posts, then set the middle posts, fastening each to the ribbons. Pour dry concrete mix into each hole, leaving the top 3 to 4 in. unfilled.



6. BRACE THE END POSTS

Replumb the end posts in both directions and brace them in place. Eyeball the middle posts to determine if they need to be plumbed and braced. The dry concrete will absorb soil moisture and slowly harden, so don't leave this step for tomorrow!



7. ADD WATER

Fill each posthole with a couple of gallons of water. If you used fast-setting concrete mix, you can resume the project after a couple hours. Otherwise, wait overnight.



8. CLAD THE FIRST SIDE

Level the first 1x4 and fasten it to each post with two screws. Space each row above that with 3/4-in. blocks. A 2x4 stop board aligns the 1x4s at the corner. At the other end, let the 1x4s overhang and cut them off later.



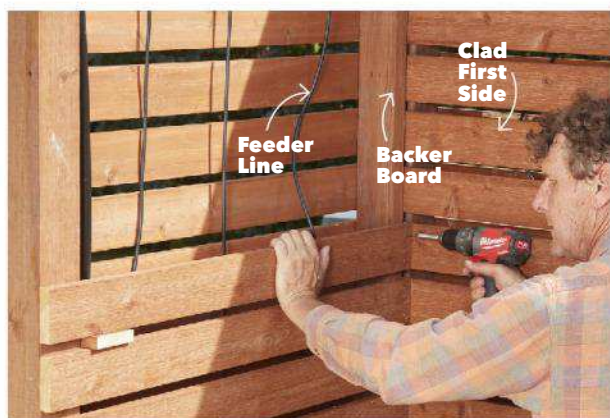
9. TRIM THE POSTS

When you have just two rows of 1x4s left to install, measure up 8 in. from the top of the one you just attached. Cut off the posts and then install the final two rows.



10. INSTALL THE IRRIGATION SYSTEM

Pierce the main line with a special hole punch and use a 1/4-in. barbed connector to attach the 6-ft. feeder lines. Don't forget to plug the ends of the feeder lines.



11. CLAD THE INSIDE CORNER

Clad one side, overlapping the inside corner post(s). Then screw a 2x4 over the 1x4s to act as a backer for the remaining 1x4s.



12. CAP THE ENDS

Cut short lengths of 1x4s to finish off exposed post ends. Butt joints are best for these. Miters are tricky to cut and will open into ugly gaps later. Keep screws near the center to avoid splitting.

you're building a shorter wall, figure on three boards per foot of height. Your wall will look best if you buy lengths that will cover the entire wall without seams. We liked the look of rough-sawn cedar with an oil-based stain. But you could save a fair amount of money by using treated 1x4s instead of cedar. See the Materials List on p. 30 for more shopping information.

Planter boxes

Go to the garden center and look at planter box liners. These thin-walled shallow plastic boxes hold the soil to protect wooden boxes from rotting. They come in a few different lengths. Pick narrow ones (6 in. or less). When filled with soil, wider ones may be too heavy for our system to support. Choose liners that are 5-1/2 in. deep or less so they won't show below the wood boxes. The lip will rest on the top of the boxes and support the liner, soil and plants (**Photo 15**).

Building the wall

For dead-straight and foolproof post-setting, lay out, set and align your 4x4 posts using our 2x4 ribbon system (**Photos 1 - 5**). Once they're all placed, pour two bags of concrete mix around each post, leaving a few inches at the top for adding a couple of gallons of water. There's no need to hassle with premixing the concrete. By the next morning, the posts will be firm enough for you to start adding the 1x4 cladding.

Begin cladding one side, making sure the bottom 1x4 is level. That 1x4 should be perfectly straight because if it's wavy, the ones above it will be too. Don't use the slab or patio as a reference; it's likely sloped. Then add each row of 1x4s using a 3/4-in.-thick spacing block, fastening it with two 1-1/4-in. exterior trim-head screws into each post. Screw a temporary 2x4 stop board to the post at one end to

keep the ends perfectly aligned (**Photo 8**).

Leave off the last two rows of 1x4s so you can mark and cut off the 4x4s 8 in. above the last row you fastened (**Photo 9**). That'll keep the 4x4s 1/2 in. below the top row to help hide the irrigation tubing that will run across the top of the 4x4s. Leave off the 1x4s on the other side of the wall for now to give you easy access for installing the irrigation system.

The irrigation system

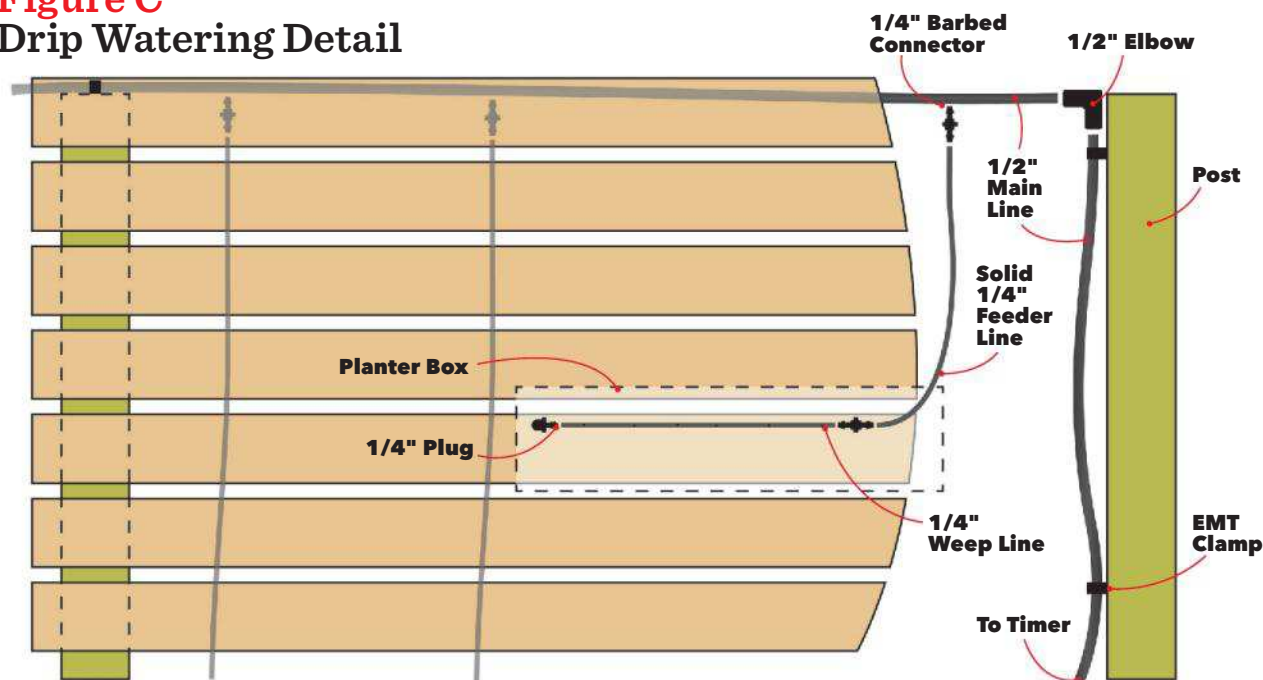
We won't go into detail about how to install the drip irrigation system. Search for "drip irrigation" at familyhandyman.com for all the information you need. But here are a few details on how it works for this project.

A timer valve at the hose bib meters the water going to the planters via a 1/2-in. vinyl line that runs up and across the tops of the 4x4s. We pierced that line (**Photo 10**) and plumbed in 6-ft.-long 1/4-in. feeder lines—three in each 4-ft. bay. Plug the ends of those lines for now. Once the planters are hung, you simply fish out a line just above each planter. Cut off the plug and replace it with an elbow. Slip a 1/4-in. weep line the same length as the planter over the elbow and plug the weep line. Any extra feeder lines can be used for more planter boxes. You'll find everything you need for the irrigation system at any home center or nursery. The components will cost about \$100.

Prefinish the wood

If you want to use a finish on your wall, apply it before you start building. The posts and the back side of the 1x4s will show through all those cracks, so it's important to finish all four sides of everything. We applied an oil-based stain with a 1/2-in. roller. The truth is that you'll likely spend as much time staining as building the wall. (Three of us built this entire wall in one day.)

Figure C
Drip Watering Detail





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13. BUILD THE PLANTER BOXES Cut the 2x6 ends and 1x6 boards so that the completed planter frame will be about 1/4 in. wider and longer than the body of the plastic box liners. (The liner lips rest on the top of the boxes.) Join the parts with 2-in. screws.



14. ADD THE HOOKS At both ends of each planter box, drill a 1/4-in. pilot hole 1-1/2 in. from the top. Turn the hooks with a box wrench. Cut away any vinyl coating with a utility knife.



15. TEST AND ADJUST THE HOOKS

Fine-tune the depth of the hooks by hanging the boxes on the wall. Turn them in as far as they'll go while still hooking onto the 1x4. You'll have to twist the hooks slightly sideways to fit them through the 3/4-in. slots.



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MAKE YOUR OWN BARN WOOD

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By Jeff Gorton



Whether you're creating a rustic interior or adding aged wood accents to a modern decorating scheme, barn wood is a popular choice. And the good news is you don't have to pick through piles of splintery old lumber or pay exorbitant prices for the look of barn wood. You can easily transform inexpensive pine boards into rustic boards that are almost indistinguishable from the real thing. In this story we'll give you a recipe for doing just that. The 8-ft. 1x6 boards we used for creating our authentic-looking "aged barn wood" cost about \$4 each.

A FOOLPROOF RECIPE:

1 GRIND THE EDGES

2 GRIND THE SURFACE

3 MAKE WORMHOLES

4 STAIN WITH THE BASE COLOR

5 ADD DARK STAIN

6 TOP IT OFF WITH GRAY



MEET THE EXPERT

Jeff Gorton is a carpenter and an editor, as well as our in-house forgery expert.

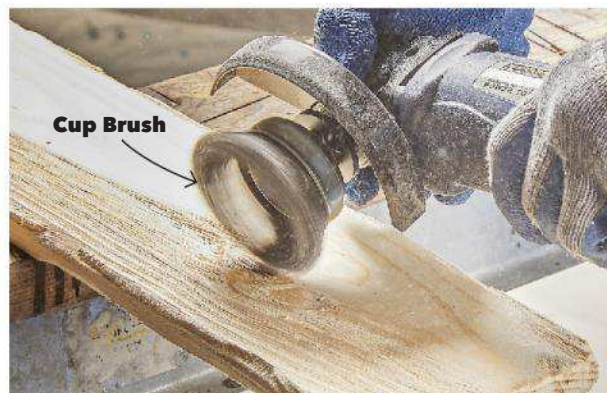


1. GRIND THE EDGES AND ENDS

With the grinder spinning in the direction shown here, make random gouges on the edges of the board. While you're at it, round over the sharp factory edges. Then grind the ends of the boards to look weathered as shown here.



Knot Cup Brush



Cup Brush

2. ERODE THE SURFACE

Remove some of the soft wood from between the growth rings (darker wood grain) by running the cup brush along the board. Follow the grain pattern. The growth rings are harder and will remain, while the brush will wear away the softer wood between them.



3. MAKE REALISTIC WORMHOLES

Punch groups of "wormholes" in a random pattern with the awl. Elongate some of the holes by tipping the awl down after punching. Space groups of holes 6 to 12 in. apart.



Awl

What you need

There are a few essential tools for this project. The first is an angle grinder. It doesn't have to be expensive. The one we're using is from Harbor Freight Tools and cost only \$30. The second essential tool is a knot cup brush attachment for the grinder (\$8 to \$24). Make sure the arbor diameter of the cup brush matches the arbor on your grinder. In addition, you'll need an awl, a utility knife and a claw hammer for further distressing.

Grinding throws a lot of dust and even an occasional wood chip, so wear safety glasses and a dust mask.

You'll also need a roller to apply the first coat of stain, and cotton rags for the remaining two coats. We used Varathane Summer Oak for the first coat, Varathane Kona for the splotchy dark layer, and Varathane Weathered Gray for the final coat.

You don't have to be too picky about choosing knotty pine boards. As long as they're reasonably straight, they'll work fine.

Getting started

Since clamps would get in the way of the grinding process, tack the board to sawhorses with 6d finish nails. Then follow **Photos 1 - 5** to distress the surface of the wood. **Photo 6** shows an additional technique, one for making curved wire brush lines that resemble sawmill marks. You can use this technique on a few of the boards for variety. If both sides of the boards will be visible, flip the board over and repeat the steps.

Apply the finish

When you've completed the distressing steps for all of the boards, follow the staining process shown in **Photos 7 - 9**. Don't worry if the finish looks a little different from one board to the next. Variation will add to the authentic look. When you're done with the stain rags, hang them over the edge of a bucket or garbage can to dry before disposing of them. Wadded-up, stain-soaked rags can spontaneously combust. Your boards will look most authentic without a clear coating, but if you need a more durable finish, let the stained boards dry overnight before brushing on a coat or two of polyurethane. Choose a flat or matte sheen to retain the weathered look.



4. ADD DENTS

You can make dents with almost any blunt tool, metal pipe, or even a chain. A hammer claw is handy and works well. Group dents in random patterns along the board.



5. CARVE OUT SPLITS

Carve out the soft wood along the grain to simulate a crack. Make fake cracks on the ends of boards, or along the edges. You can also simply enlarge an existing crack.



6. MAKE SAW BLADE MARKS

Sweep the grinder across the board in a series of arcs to create the look of old, "rough-sawn" lumber. Add this pattern to a few of your boards for variety.



7. START WITH A BASE COAT

Roll on the first coat of stain. Cover the board entirely. Then wipe off the excess with a cotton rag. Let this coat dry about five minutes before moving on to the next layer of stain.



Bundled Rags

8. DAB ON DARK STAIN

Dip a wadded cotton rag into the dark stain and apply it to the board in random patches. Spread out the patches with the rag to create an uneven layer of dark stain.



9. FINISH WITH GRAY STAIN

With a separate cotton rag, wipe on a coat of gray stain. This coat can be more consistent than the dark coat. Wipe off excess stain with a dry cotton rag until you achieve the aged look you desire. If you want the additional protection of a clear finish over the stain, let the stain dry overnight before brushing on a coat or two of flat polyurethane.



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Fast, Safe and Simple. TV•Ears transmitters use Speed of Light Infrared Technology™ (SoLIT) to send the television's audio to the headset. Unlike slower Bluetooth or Radio Frequency, SoLIT does not need to be paired or adjusted, is completely safe with pacemakers, and will not interfere with your telephone.

Twice the Power with 120 decibels. The TV•Ears headsets are classified as "Assistive Listening Devices" for hearing-impaired individuals. This special designation permits the TV•Ears headset to have twice the maximum volume compared to all other wireless headsets.

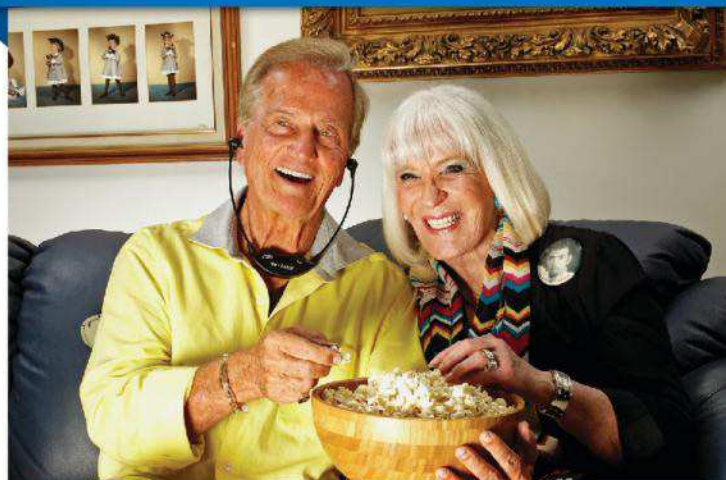
Voice Clarifying TV•Ears Headset

Over 2 million satisfied users since 1998

TV dialog is clear and understandable

Works better than hearing aids

New Special Offer!



Pat and Shirley Boone
Happily married over 60 years!

"I can watch TV as loud as I want without disturbing my wife. The dialog is clear and it's good to hear my favorite shows again!"

— Pat Boone, Singer/Songwriter

"My wife and I have used the TV•Ears headset almost daily for many years and find them an invaluable help in our enjoyment of television. We would not be without them. As a retired Otologist, I heartily recommend them to people with or without hearing loss."

— Robert Forbes, M.D., California

TV Ears Original™~~\$129.95~~

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FATHER'S DAY ★ GIFT GUIDE

Great Gift Ideas for the DIY Dad

Increase Dad's Strength & Durability

RYOBI introduces Brushless Motor Technology to our family of ONE+ power tools. Brushless technology provides the user with increased performance so you can tackle the most demanding jobs.



RyobiTools.com

A Perfect Gift for the DIY Dad

The SIMPSON® MS60805-S 3000 PSI at 2.4 GPM pressure washer combines performance with minimum effort as it is lightweight and easy to maneuver. Featuring a Honda engine, maintenance-free axial cam pump, 50 foot high pressure hose, on-board gallon soap tank and 15" surface scrubber to clean up to 3x faster.



POWERED by
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Simpsoncleaning.com

Upgrade Dad to a Self-Propelled Mower

Troy-Bilt's TB240 mower features an easy-to-operate front wheel drive transmission to eliminate pushing. High rear wheels are perfect for uneven terrain or hills, and a high-performance Honda engine eliminates the need to prime or choke the engine – just pull the cord to start!



TroyBilt.com

The Perfect Finishing Team for Dad

Give Dad a HOMERIGHT® Finish Max Fine Finish HVLP Sprayer and Spray Shelter to make finishing projects simple. Both available from Woodcraft at more than 70 retail stores nationwide, via catalog and at woodcraft.com.

WOODCRAFT®

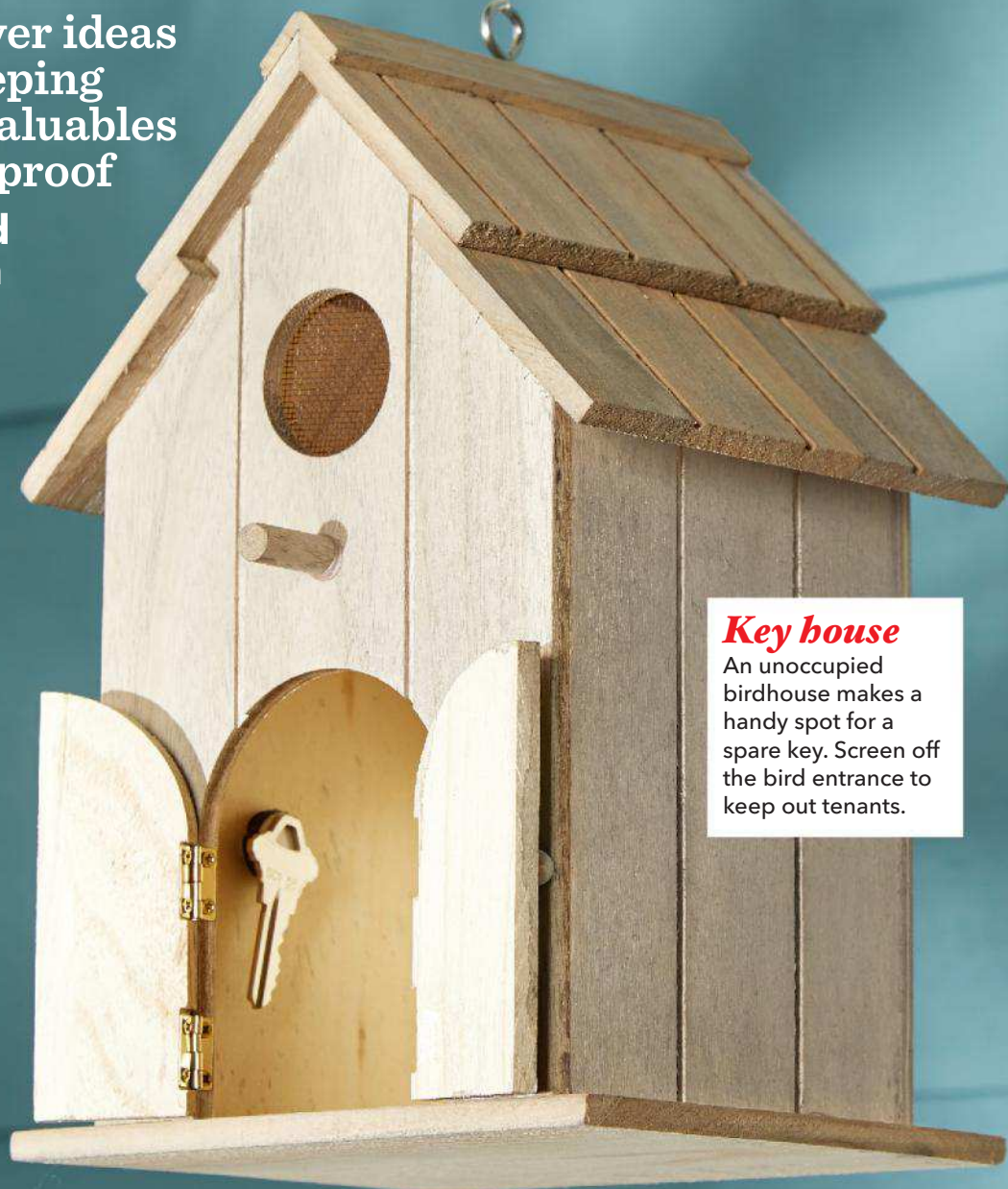


Woodcraft.com

(secret) HIDING PLACES

12 clever ideas
for keeping
your valuables
pilfer-proof

By Brad
Holden



Key house

An unoccupied birdhouse makes a handy spot for a spare key. Screen off the bird entrance to keep out tenants.

Whether it's jewelry, important papers or emergency cash, we all have stuff we want to keep safe. We'll show you 12 clever hiding places to safeguard your treasures. Be sure to catalog the location of everything you've hidden and share it with someone you trust, just in case.

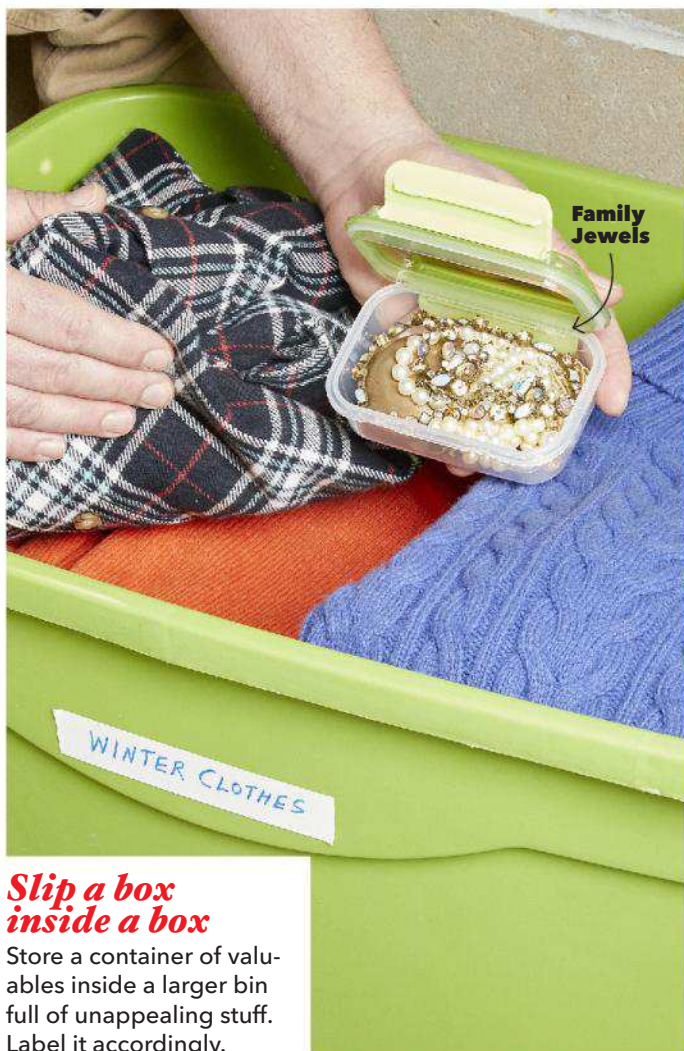
Not IN the drawer

Drawers don't go all the way to the back of a cabinet, and there's typically a little space on the underside too. Put cash or important papers in an envelope and tape them to the back or underside of a drawer.



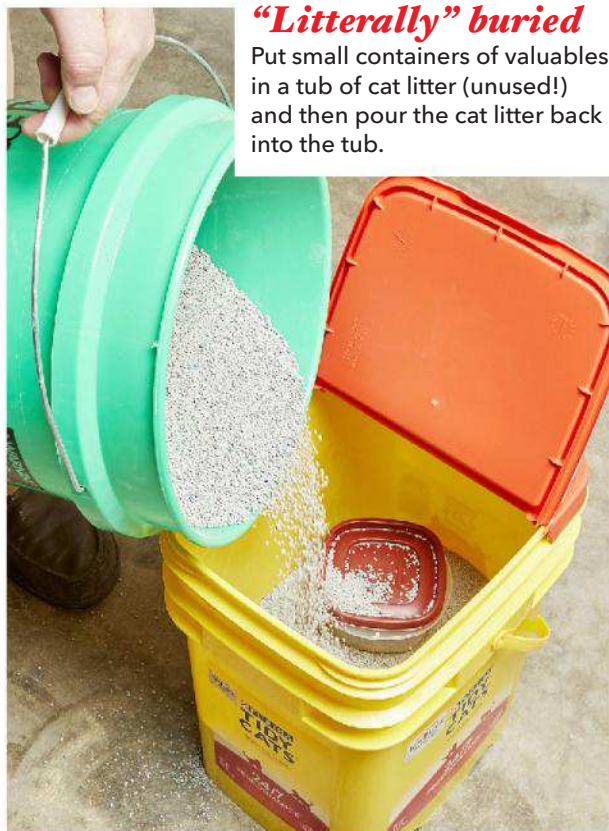
Time well spent

Store a few small items in a wall or mantel clock, as long as the clock itself isn't worth stealing! Tape them to the back or put them in any open cavities.



Slip a box inside a box

Store a container of valuables inside a larger bin full of unappealing stuff. Label it accordingly.



“Literally” buried

Put small containers of valuables in a tub of cat litter (unused!) and then pour the cat litter back into the tub.



Good venting is key

Stick a magnet to a spare house key using hot glue, and tuck the key up out of sight inside the dryer vent hood. If your vent hood is aluminum or plastic, glue a magnet to the inside of the hood as well as the key.



GOOF PROOF SHOWER®

Installation System



Install Your Shower – Fast, Easy & Right

Step 1

PrePitch™



A unique tool that creates the proper sub floor slope needed underneath the pan liner to manipulate the water towards the weep holes that are an integral part of shower floor drains.

+

Step 2

Kirb-Perfect®



A stay-in plastic form designed to eliminate the possibility of any nails puncturing the liner on the top or inside walls of shower curbs.

+

Step 3

Quick-Pitch®



A stay-in place screeding guide system that guarantees a properly pitched shower floor every time regardless of size and shape.

=



Waterproofing of Your Choice

Roll-on Liquid Membranes



Tools used:

- 1) Pre-Pitch™
- 2) Kirb-Perfect®
- 3) Quick-Pitch®
- 4) Universal Center Ring

Handi-Kirb with Roll on and Sheet Membranes



Tools used:
Standard Curb

- 1) Pre-Pitch™
- 2) Handi-Kirb
- 3) Quick-Pitch®

Low Profile curb

- 1) Pre-Pitch™
- 2) Handi-Kirb

Sheet Membranes



Tools used:

- 1) Quick-Pitch®
- 2) Quick-Clips
- 3) Kirb-Perfect®

String-A-Level™



Simultaneously attach and level a continuous stringer on which to stack heavy or large format tile vertically.



Sitting pretty

Dining chairs often have space under the seat for a drop-down hinged panel.

Hinged Panel

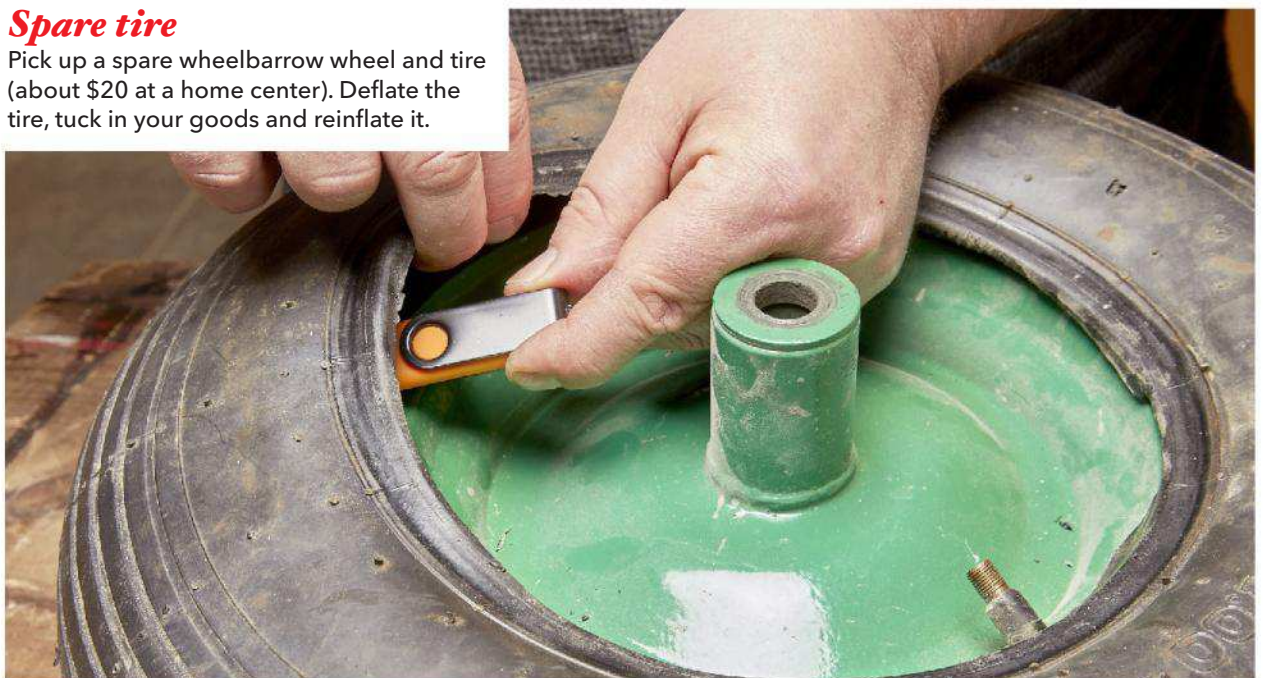


It's magic, all right

Pop the end cap off a marker and remove the ink cartridge. Just right for a spare roll of cash.

Spare tire

Pick up a spare wheelbarrow wheel and tire (about \$20 at a home center). Deflate the tire, tuck in your goods and reinflate it.





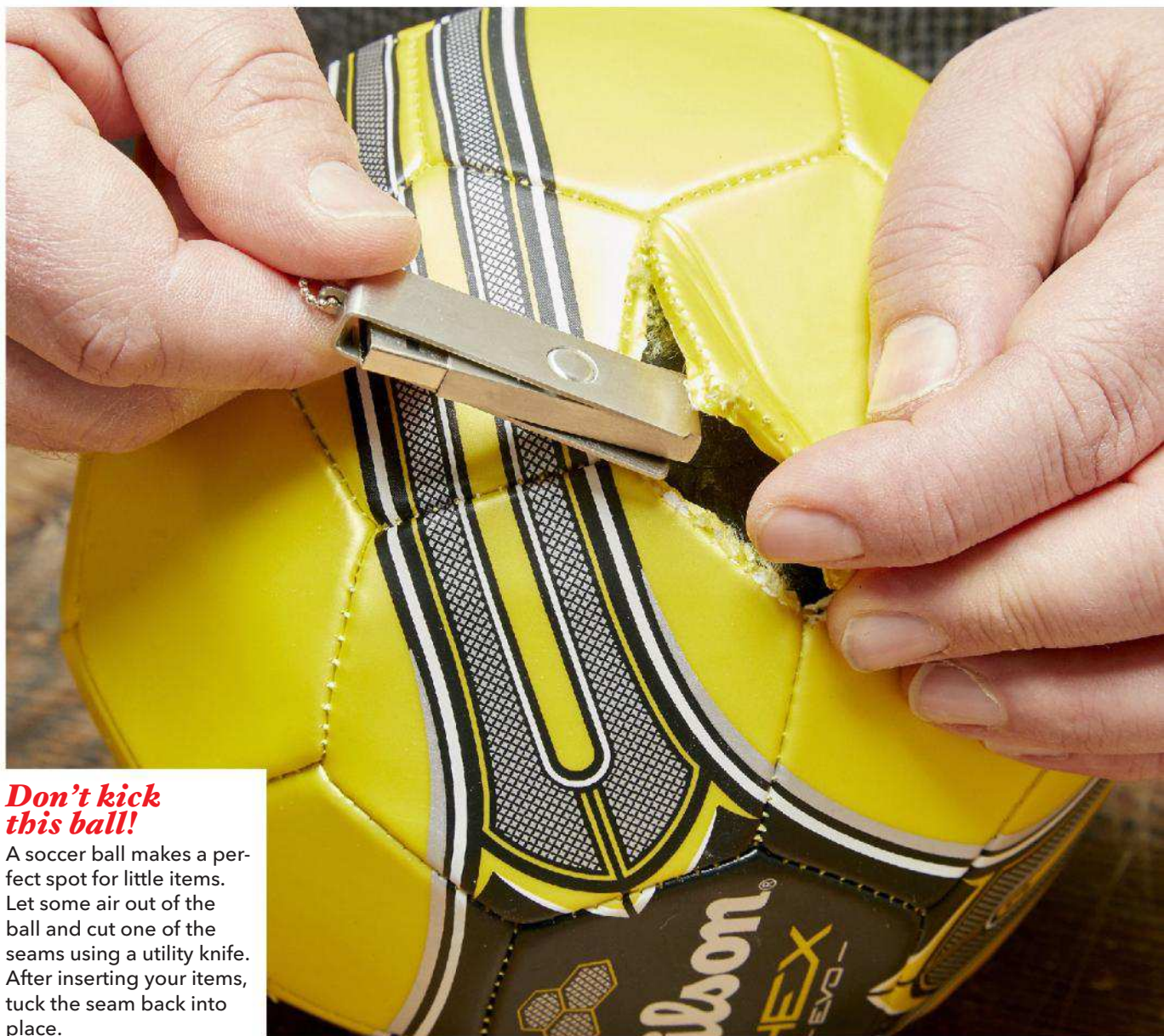
A roll in the roll

Take apart the spring bar that holds your toilet paper. Roll up a stack of bills, stash them inside and reassemble the bar.



Secret cash stash

Keep some emergency cash rolled up in a clean, empty sun-block tube. Tuck it in a drawer or medicine cabinet where you can easily grab it when you need it.



Don't kick this ball!

A soccer ball makes a perfect spot for little items. Let some air out of the ball and cut one of the seams using a utility knife. After inserting your items, tuck the seam back into place.

AVOID INSURANCE SURPRISES

10 critical lessons most homeowners learn only after a claim

By Lucie Amundsen



With something as complicated as homeowners insurance, there's nothing better than having an insider tell you what's what. We recently met an expert who's spent half his life working with insurance claims—as a contractor for homeowners, and later as a claims adjuster.

What he told us has changed the way we look at our policies. And even more important, we now understand the limitations of our coverage.

1. Your garage may not be fully covered

Policies are set up to insure your main structure and whatever is physically attached to it. This would include an attached garage but NOT a detached garage. Structures like stand-alone garages and sheds are typically covered at only 10 percent of your main dwelling coverage. So, if you carry \$200,000 of coverage on your house, your detached garage would be protected only up to \$20,000.

Our expert says this is a perfect situation for an "endorsement" to add coverage (see "Vocab," below). Typically, the upcharge is nominal for the increased coverage.

2. Terms frequently change

Occasionally, letters arrive from your insurance company. If you're like most people, you don't read them. But understand this: Insurance companies are constantly fiddling with your contract. And those letters legally inform you of changes—usually new exclusions. In the fine print, the company puts the onus on you to call if you want to restore the coverage through an endorsement. Often, that's a call worth making.

3. Beware of storm chasers

Storms attract traveling contractors who follow damaging weather. They may be reputable—or not. You're safer with a local, established contractor who will be around if repairs aren't done right,

or if there is a warranty issue. What good is a 10-year warranty if you can't find the contractor?

Before signing anything, consult the Better Business Bureau, Angie's List and the secretary of state to see if contractors are registered, and the Department of Labor and Industry to be sure their licenses are up to date.

4. Get "replacement cost" coverage

Something you don't want to change is your "replacement cost" coverage. Insurance companies

would much rather cover you for actual cash value (ACV) or market value. That's because market or ACV pays only for the depreciated value—meaning what an item is worth after calculating its diminished value over time. For example, on a 15-year-old roof, you may get only \$3,000 even though the cost to replace it would be closer to \$7,000.

That's why our expert loves replacement-cost coverage, which pays the entire cost. Often, adding this increases your bill by only a couple bucks per month.



VOCAB ENDORSEMENTS

An insurance endorsement is an amendment that changes the terms of the original policy. Endorsements are also called riders.

EXCLUSION

An exclusion limits or eliminates coverage for things that the insurance company is unwilling to insure.

TALES FROM THE INSIDE

The case of the crushed garage

Pulling into the yard, I could see that a large tree had fallen and damaged the detached garage beyond repair.

The owners held a typical policy with coverage of \$130,000 on their house. Because the garage was detached, it was considered an "other structure"—this limited it to only 10 percent of the coverage of the main structure.

My estimate to rebuild the garage came to \$23,000, but the insurance payment could not exceed \$13,000. It was terrible to explain all this to people who had no idea they were underinsured. They were not happy.

5. Your finished basement might be at risk

Standard policies typically don't cover a sewer backup or sump pump failure. If this occurs in your finished basement, you could be looking at a costly cleanup and remodel. Even if you did purchase a sewer backup endorsement, a limit of \$5,000 is standard. That may be enough to pay for the cleanup and "dry out," but it leaves nothing for rebuilding. Our expert recommends coverage of at least \$10,000 for a finished basement.

6. Consider a public adjuster

Not all adjusters are alike. You likely are familiar with insurance adjusters who work for the insurance company. But there are also independent adjusters (also known as public adjusters) who work on behalf of the homeowner. For example, if you had a lot of damage from a smoky fire that required many complex repairs, hiring an independent adjuster might be a good idea.

BEST PRACTICE SCHEDULE A POLICY REVIEW

If you don't have a specific agent, call the number on the insurance company's website and request a "policy review." It's the best way to get a handle on your policy.

Start by asking the agent to explain your coverage in lay terms. Then be sure to find out what "endorsements" are available—these extra coverages can make your policy more robust with nominal upcharges.

Independent adjusters handle the contractors and the insurance. They also use their understanding of the industry to increase your claim payout, which may make their fee of 5 to 10 percent of the total claim worthwhile.

7. Some adjusters don't know what it takes

A good adjuster understands how houses are built, but few have

actually worked in the trades. That means when writing up the claim, they often miss legitimate materials needed to replace your damaged property. That's where a good contractor comes in.

8. Don't let a storm chaser touch your house

During the frantic hours post-storm, everyone wants to prevent further damage. A common tactic of storm chasers is to put a tarp on your damaged roof to prevent a roof leak.

If you can't get up on the roof yourself, hire a trusted handyman to do it. "Tarping" can be a tactic of storm chasers to attempt to lock you into hiring them because they have already done work to your home.

9. A good contractor can get you more money

A skilled contractor knows not only how to repair the damage but also how to speak insurance. Ideally, they've had experience persuading

TALES FROM THE INSIDE

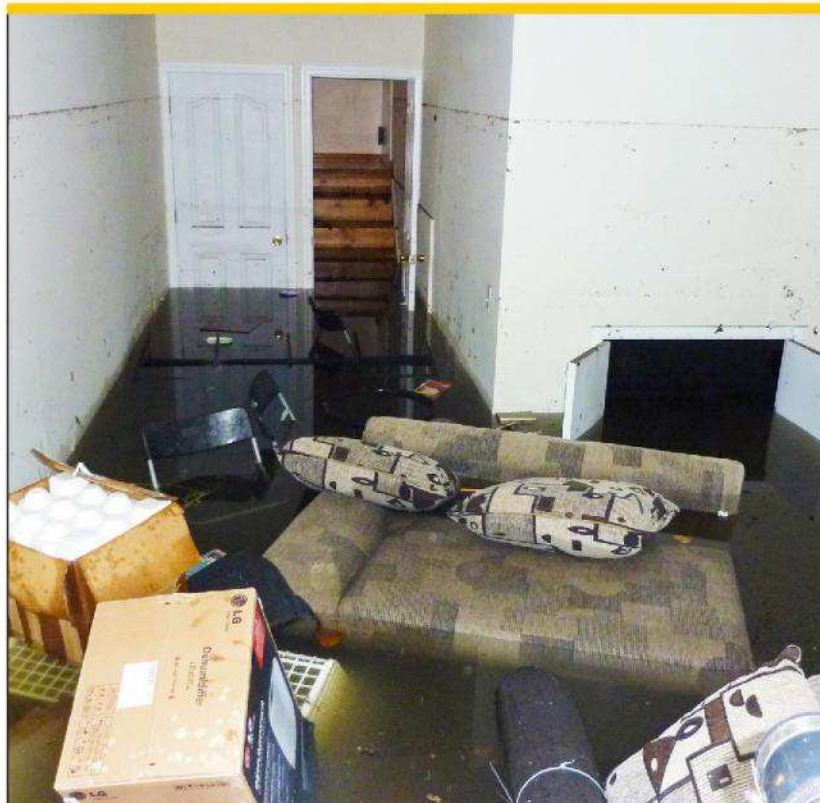
Hail-damage disappointment

When I got a call about a roof claim, I reviewed the policy and wasn't surprised to see a "roof over 15 year exclusion." Since the roof was more than 15 years old, this meant that only the actual cash value (ACV) was covered. Just like a car, an asphalt roof wears out and "depreciates," or loses value, over time.

Here's what the payout looked like:

Replacement cost	\$9,600
Minus depreciation	\$5,760
Actual cash value	\$3,840
Minus deductible	\$1,000
Net payment	\$2,840





TALES FROM THE INSIDE

Too much water, not enough coverage

Just last spring, a flooded-basement claim involved a breaker that had tripped during the winter. When the wet season came, the pump failed to turn on.

After my inspection, I sat down with the homeowners and explained that they had an endorsement for “limited water backup and sump discharge or overflow coverage.” This is a good endorsement to have if you have a finished basement. But in this case, the coverage was limited to the standard \$5,000, while their loss topped \$15,000. It was a tough conversation because the homeowners thought they were fully covered.

I always advise people in homes with finished basements to increase their endorsement coverage limit to at least \$10,000.

adjusters to include missed expenses needed to do the job right. A contractor can add up to 25 percent to your claim payout. The goal is to make sure your claim pays enough to let your contractor properly install your new roof without cutting corners.

10. When you have property damage, do something

As the homeowner, you have the responsibility to mitigate problems. If, for example, you have a plumbing or roof leak, don't let it cause

more harm to your home. The insurer can refuse to pay for a loss you could have prevented. If you can show that you took action that saved the company a larger payout, it will be more accommodating with your claim.

It's worth reading the section of your policy titled “The Duties of the Insured.” It spells out your obligations to prevent further damage. Keep your receipts, as you'll be reimbursed for costs incurred to avoid further harm. Also, photos are essential—before, after and in between!

MONEY-SAVING STRATEGIES

■ GET A LIST OF DISCOUNTS

Insurance companies offer discounts to homeowners for improvements that make their homes a better risk. These include safety features such as indoor sprinklers, smoke detectors and dead bolts. Discount programs change frequently. If you haven't spoken to your agent within the past year or you've made a major home improvement, you may be missing out on significant discounts.

■ INFORM YOUR AGENT ABOUT UPGRADES

Insurance companies like to insure homes with newer plumbing and electrical systems as well as burglar alarms and sprinkler systems because these features reduce the risk of fire and water damage. If you upgrade any of these systems in an older home, tell your insurance agent. One homeowner we spoke with called her agent to report recent plumbing upgrades, and after a short conversation, the agent raised her overall coverage by \$50,000 and cut her yearly premium by \$400.

■ THINK TWICE BEFORE FILING A CLAIM

Every time you file a claim, you risk higher insurance rates in the future. So in the long run, filing a claim can cost you more than you'd receive in a payout. Paying for a smaller loss yourself will almost always cost less than the premium increase you'll face later. A good rule of thumb: Don't file a claim if it's worth less than \$1,000 over your deductible. Statistically, if you file two claims in a three-year period, or make claims related to maintenance issues such as a chronic leak, you risk triggering a rate hike or worse. Your insurance company may even drop you. Just inquiring about a claim (without even filing it!) could raise your rates.

Grab & Go **CORD RACK**

By Matt Boley



WHAT IT TAKES

TIME	COST	SKILL LEVEL
1 hour	\$20	Beginner
TOOLS	Saw, drill/driver, clamps	

HomeCare+Repair

Fix it, maintain it, improve it. By Brad Holden

The root of the problem

Your sewer line is a particularly attractive water source to tree roots, especially if you live in an arid climate. Roots can bore right through the tiniest cracks and holes in any pipe.

Once inside the pipe, roots will eventually fill or even break a pipe. If you suspect you have roots in your drain, the best starting point is to hire a professional to run a camera down the drain to see the extent of the problem. Depending on the situation, you have four options.

1 Line replacement

This costs \$1,500 to \$5,000, determined by the length of the line. If you're on a city sewer system, it could easily be more than that; hand-digging may be required if there are other utility lines nearby.

2 Spot repair

With the use of a camera, an isolated damaged area can be located, cut out and replaced for \$500 to \$600.



MEET THE EXPERT
Michael Kura has more than 30 years of plumbing experience in the residential, commercial and biotechnical fields. He is a franchise owner with Mr. Rooter Plumbing of Mendocino and Lake Counties in California.



Clay Pipe

PHOTO: MR. ROOTER (TOP)

3 Lining or pipe-bursting

These options cost \$5,500 to \$10,000. A pipe, either MDPE (medium-density polyethylene) or HDPE (high-density polyethylene), is forced through the old pipe, breaking the old pipe as it progresses. The upside of this method is that you only need a hole at each end of the pipe, instead of having to dig a trench to replace the old pipe with a new one.

4 Cabling

This method uses a spinning steel cable with cutters on the end, which snakes through the line, cutting out the roots. It's a temporary solution that is done regularly for about \$200. You can rent or buy a machine, but it can be dangerous to do cabling yourself. The cable can whip and back-lash, causing cuts or even lost fingers. Cuts from dirty cable can cause serious infections.

SEARCH AND REMOVAL

A pro can use a cable with a camera attached to determine the exact location and extent of the problem. The cable can also be used to cut out roots.



AVOID AN EXPENSIVE MISTAKE

Get the right LED for your fixture

Most LED bulbs need good airflow around them because heat buildup can greatly shorten their life span. That's why most LEDs aren't rated for enclosed fixtures. Any fixture with less than 1/2 in. of clearance around the bulb's circumference is considered an enclosed fixture, even if it has an opening. So be sure you buy LED bulbs rated for use in an enclosed fixture. You'll find the rating on the package. Available at home centers, these bulbs cost about the same as other LED bulbs.



Enclosed-Fixture Symbol

LIFESAIVING ADVICE

Where to keep fire extinguishers

Common sense dictates that you keep fire extinguishers wherever there's a potential for an accidental fire, such as in kitchens and garages. But some fire experts also recommend keeping them in places like laundry rooms and workshops and at the tops of basement stairwells.

Extinguishers should never be more than 75 ft. away from a Class A (ordinary combustibles) hazard, and no more than 50 ft. from a Class B (flammable liquids) hazard. When you mount a fire extinguisher to a wall, keep it high enough so kids can't reach it, near an exit, and away from any kind of heat source. Also place the extinguisher a safe distance from items and areas with the highest risk for fire so you can get to it when you need it most.





[BROUGHT TO YOU BY] **TROY-BILT**

SMALL IS BEAUTIFUL

If you live in suburbia and you're thinking of buying a riding lawn mower, here's something to consider. A lawn tractor may be your first instinct, but a wiser choice might be a much smaller riding mower, like this Troy-Bilt TB30R Hydro Neighborhood Rider.

Here's why. With this riding mower, the engine is under the seat, not in front of you, so its wheel base is much shorter than a lawn tractor's. That gives you a tight, 18-in. turning radius—better for maneuvering around trees and gardens. It also has a much narrower mowing deck, 30 in., so you can easily drive through 3-ft.-wide gates. And consider the space you'll save in your garage or shed.

The TB30R (about \$1,400) also features a hydrostatic transmission with smooth speed control and adjustments. To learn more, visit lawncare.familyhandyman.com.

[PROBLEM SOLVER]

CONTROL YOUR GARAGE DOOR WITH YOUR PHONE

Did you remember to close the garage door? Did it stay closed? Would you like to have your garage door(s) automatically close at a certain time? You can with a retrofit Wi-Fi controller kit.

Installation is easy

You can install the system yourself in about 30 minutes. Retrofit Wi-Fi kits come with only one door sensor. You can buy additional sensors if you have more than one opener (about \$37 each). We chose the Chamberlain MyQ Garage unit for this application (about \$80 at electronics stores) because it controls two garage doors and doesn't require any additional wiring. Search "Wi-Fi garage door controller" online to see other brands.

Check the signal strength

Use your smartphone or tablet to check the Wi-Fi signal in your garage. If you get a good signal, jot down the makes and models of your openers and check the controller manufacturer's website to be sure they're compatible.

Download the app

Download the app, plug in the controller and synch it to your home's Wi-Fi. Next, install a sensor on each garage door (**Photo 1**). Mount the controller on the ceiling above one of the openers (**Photo 2**) and plug it



1. MOUNT THE DOOR SENSOR

Attach the door sensor to the top panel using screws or double-face tape. The sensor tells the controller whether the door is open or closed.



2. MOUNT THE CONTROLLER

Locate the controller near the AC outlet and screw it to the ceiling. The controller receives commands from your phone or tablet and relays them to your garage door opener.

in. Follow the app commands to pair the controller to the sensors and to each garage door. Once paired, the MyQ Garage controller opens and closes the garage door wirelessly using the app.

ADVANCED HEARING AID TECHNOLOGY

For **82.2% Less***

***"I was amazed! Sounds I hadn't heard
in years came back to me!"***

— Don W., Sherman, TX

**How can a hearing aid that
costs 82.2% less** be every bit as good
as one that sells for \$3,000 or more?

The answer: Although tremendous strides
have been made in Advanced Hearing Aid
Technology, those cost reductions have
not been passed on to you. Until now...

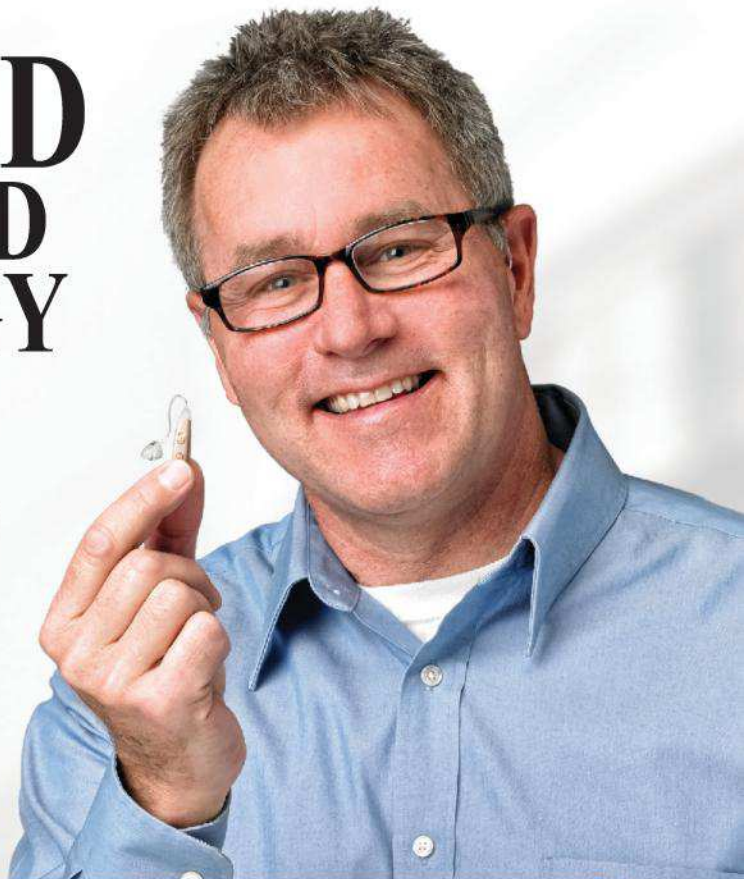
MDHearingAid® uses the same
kind of Advanced Hearing Aid Technology
incorporated into hearing aids that cost
thousands more at a small fraction
of the price.

Over 300,000 satisfied **MDHearingAid**
customers agree: High-quality,
FDA-registered hearing aids don't
have to cost a fortune. The fact is,
you don't need to spend thousands
for a hearing aid. **MDHearingAid**
is a medical-grade hearing aid
offering sophistication and high
performance, and works right out
of the box with no time-consuming
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can contact a licensed hearing
specialist conveniently online or
by phone — even after your
purchase at no cost. No other
company provides such extensive
support. Now that you know...why pay more?

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*82.2% less when comparing MDHearingAid AIR to the average price of a mid-level
hearing aid of \$2,250, according to a survey recently published by the *Hearing Review*.



Can a Hearing Aid Delay or Prevent Alzheimer's and Dementia?

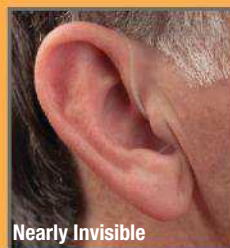
A study by the National Institute on Aging
suggests older individuals with hearing loss are
significantly more likely to develop Alzheimer's
and dementia over time than those who retain their
hearing. They suggest that an intervention — such
as a hearing aid — could delay or prevent this by
improving hearing!

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[EXPERT ADVICE]

CHOOSING THE BEST THIN-SET FOR THE JOB

Thin-set is the cement-based go-to adhesive for most tile projects. As you're perusing your options, you'll notice a price range of \$8 to \$30 per 50-lb. bag. The least expensive thin-set is just Portland cement and graded sand, and it has worked for centuries. It's appropriate for porous tile over concrete substrates.

However, most modern floor tile is porcelain. The more expensive "modified" thin-sets have various levels and types of polymer additives, which increases their adhesion and flexibility—as well as their price. They were developed to bond impervious tile, such as porcelain or glass, to most any substrate.

I use the best possible thin-set available for any given circumstance. Coverage for a 50-lb. bag is about 50 sq. ft., and a typical bathroom takes one bag. An extra 20 bucks to ensure that the tile will stay stuck is cheap insurance.



MEET THE EXPERT

Dean Sorem, our tile expert, has been installing tile for nearly 40 years.

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3 Models available—
21" Self-Propelled shown



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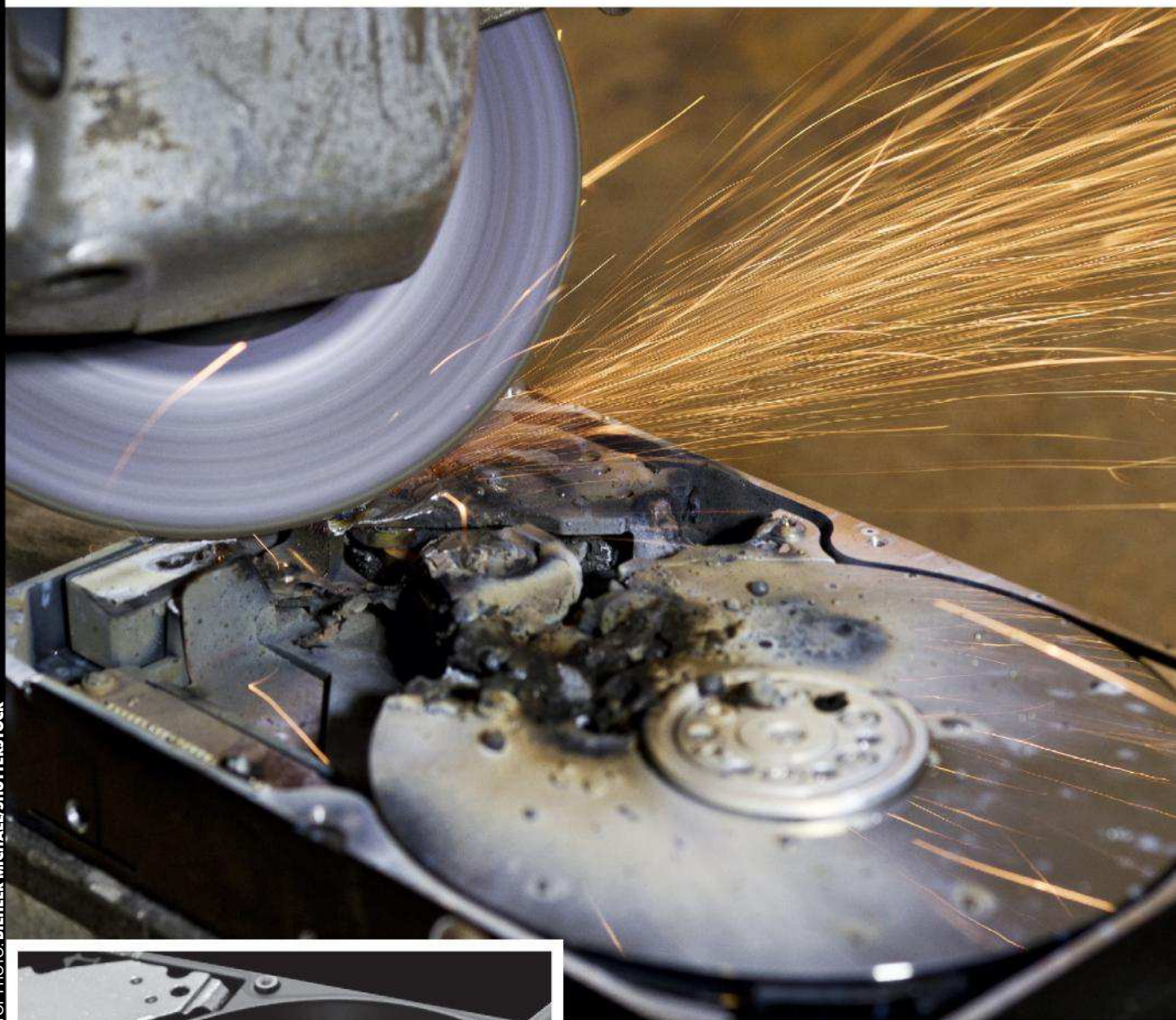
DRbatterytools.com



18D71X © 2018

Home Smarts

The knowledge you need to be a better homeowner. By Gary Wentz



RECYCLING YOUR COMPUTER? DESTROY YOUR HARD DRIVE

Before you scrap your old computer, it's smart to physically damage the hard drive. It probably holds recoverable personal information, even if it has been "erased." You can obliterate the drive with an angle grinder as shown above, but all you really need to do is scratch, dent and batter the disk. A screwdriver and hammer will do the job. Removing the drive from the computer is a bit trickier and varies by model. For help with that, search online by typing in your computer model together with "remove hard drive."

ELIZABETH FLAHERTY

BOTTOM PHOTO: DAVID CARILLET/SHUTTERSTOCK TOP PHOTO: BIEHLER MICHAEL/SHUTTERSTOCK

Installs easily

Each 5-ft section comes with 3 brackets & 6 screws. Do entire home in 3 or 4 hours.

Prevents Erosion

Runoff is changed to a 3 foot wide band of soft rain-sized droplets.

Self-Cleans

Unique louver design allows leaves and debris to blow or wash away. Self-cleaning system protects you from climbing ladders.

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Protects Property

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INSPECT PLUMBING VENTS

Next time you're up on the roof, take a look at the rubber gaskets around plumbing vent pipes. Those gaskets sometimes crack, tear and let in rainwater. If you have all-metal vent flashing, you're in luck. It's much less likely to leak and often outlasts the shingles.

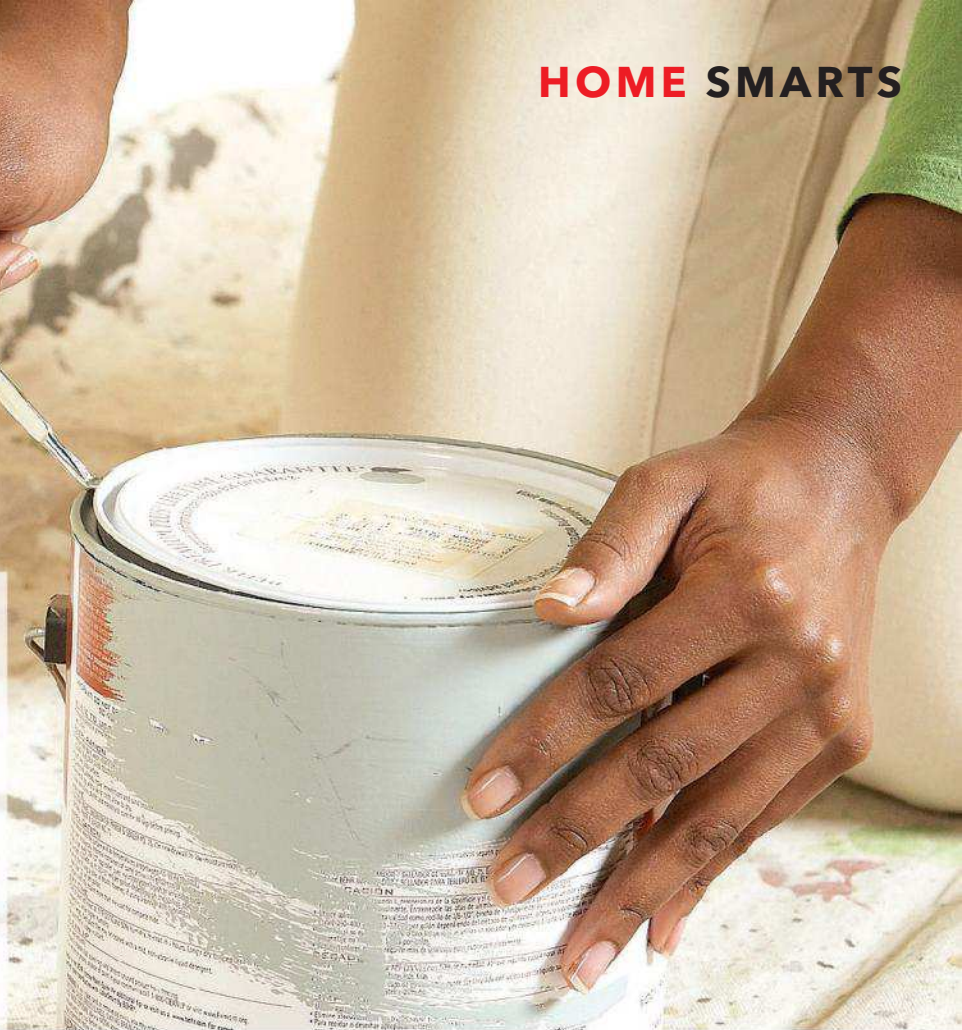


SIMPLIFY BATH CLEANING

Stop using four to six products to clean your bathroom. The pros use one multipurpose cleaner that does it all. Our pros recommend Mr. Clean Multi-Surface Cleaner with Febreze.

DON'T OPEN PAINT CANS WITH A SCREWDRIVER

Sure, a screwdriver works, but it leaves dents in the seal. And that leads to gooey chunks in the paint. Pick up a paint can opener when you buy the paint.



Hide cabinet damage with back plates

New cabinet hardware that includes back plates can hide the wear that occurs around cabinet knobs and pulls. You'll find a small hardware selection at home centers and an endless selection online.



IT'S WHAT THE REAL PRO'S USE

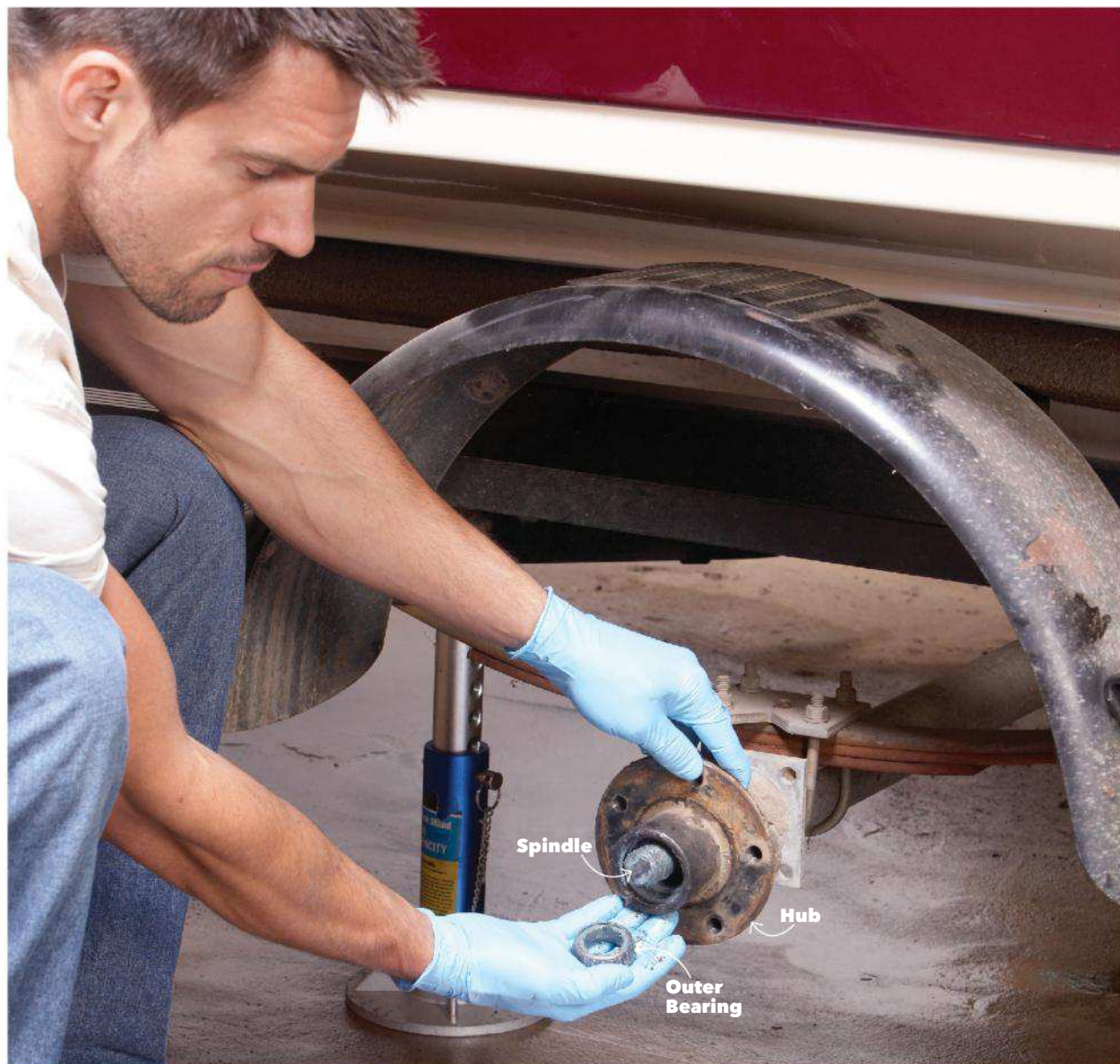
THE REAL PROS KNOW THEIR REPUTATION IS ON THE LINE WITH EVERY PROJECT.

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Car + Garage

Expert advice on repair, maintenance and gear. By Rick Muscoplat



Repack Trailer Wheel Bearings

You know you're supposed to repack the wheel bearings on your boat, horse or utility trailer. But do you do it? Well, probably not as often as you should. Fried wheel bearings are the No. 1 cause of trailer breakdowns.

You can avoid being stranded by repacking your wheel bearings on a regular schedule. If you use your work or utility trailer daily or

1. Remove the outer bearing

Jack up the trailer and support the frame or axles with jack stands. Remove the wheel and then the hub dust cap with slip-joint pliers. Unbend the cotter pin, grab the head with side cutters and leverage it out of the castle nut. Spin the nut off with the pliers. Then pull the hub forward until the washer and outer bearing fall into your hand.

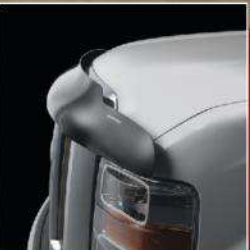
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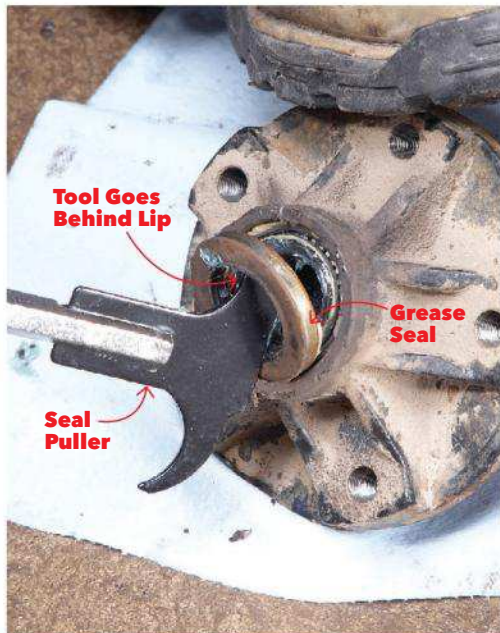
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2. Remove the inner bearing

Pull the entire hub off the axle and place it on the floor. Hold it with your foot and pry out the grease seal with the seal puller. Keep the inner and outer bearings separate—they have to go back in their original locations.

drive it long distances, repack them every six months. Repack annually if it gets occasional use and/or the trips are short. For boat trailers, repack the wheel bearings at the start and end of the boating season. Use marine wheel bearing grease.

Repacking wheel bearings is cheap (less than \$15) and you can do it yourself in a few hours. Pick up new grease seals, cotter pins and the wheel bearing grease at any trailer supply shop. Grease seals come in various sizes based on the inside dimension of your

wheel bearings. So after you pull off the bearings (Photo 1), take them to the store to match them with new ones. You'll also need a seal puller (Grip No. 22180 Seal Puller; about \$8 online), degreaser solution, parts cleaning brush, washing tub, slip-joint pliers, side cutters, floor jack and jack stands. Follow these simple steps.



MEET THE EXPERT
Rick Muscoplat has decades of automotive repair experience and a great website: ricksfreeautorepairadvice.com.



3. Clean the bearings

Soak the bearings in the degreaser and use the parts brush to clean out all the old grease and dirt. Set the bearings on a clean cloth to dry, or use compressed air. But don't spin them with compressed air—they can fly apart and cause serious injuries.



4. Repack with new grease

Spoon a glop of new grease into the palm of your hand. Then set the edge of the bearing into the grease. Force the grease into the bearing cage like you're scooping dip with a potato chip. Rotate the bearing and repeat until the bearing cage is filled with grease. Smear the rest of the grease over the face of the bearing rollers.

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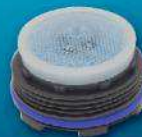


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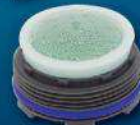
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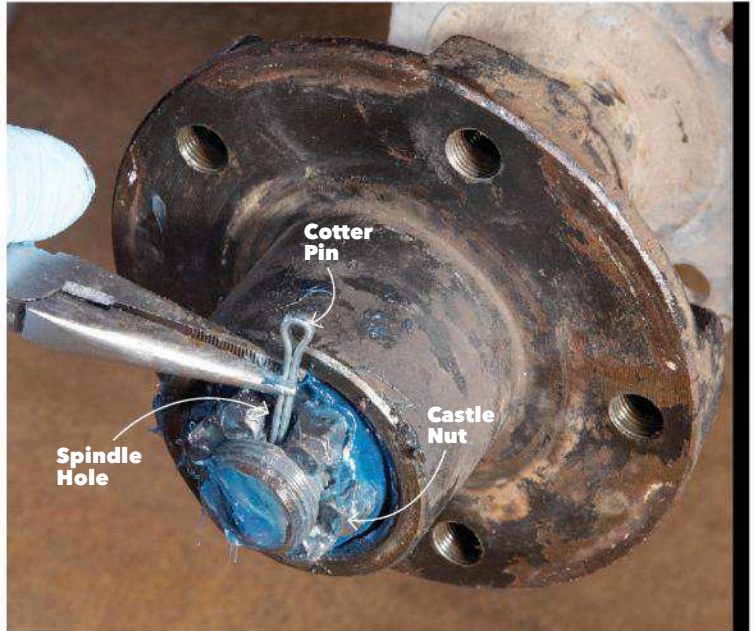
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CAR + GARAGE



5. Install the new grease seal

Clean all the old grease out of the hub. Then wipe fresh grease on the inner race and set the bearing into place. Position the new grease seal with the open edge of the lip facing in toward the bearing. Place a flat steel plate or wood block over the seal and smack it into position until the seal is fully seated. Then wipe a light coat of grease around the inside of the new seal.



6. Reinstall the hub

Remove the old grease from the axle. Slide on the hub, outer bearing, washer and castle nut. Tighten the castle nut until it's snug. Spin the hub to spread the grease and seat the bearings. Tighten the castle nut, then back it off a quarter turn to line it up with the hole in the axle. Insert a new cotter pin and bend the ears. Tap in the dust cap.

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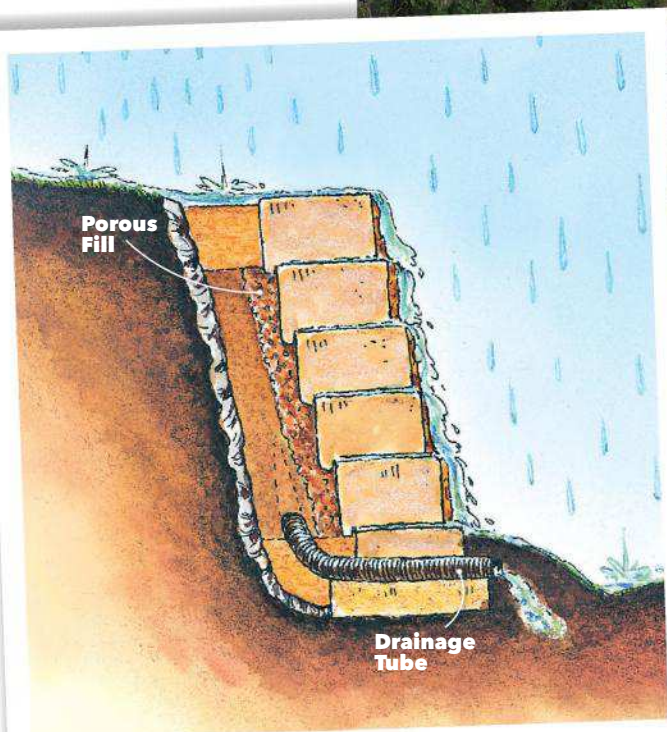
WHAT'S **WRONG** WITH THIS PICTURE?

We'll show you the problem—and the fix. By Jeff Gorton

THE WAY IT CRUMBLES

An Epic Collapse

A retaining wall that needs to hold back this many tons of soil requires a well-engineered design. Our guess is that this wall didn't have drainage built in. It looks as though water from a big rain event, with nowhere else for it to go, may have exerted too much pressure on the back of this aging wall.



THE RIGHT WAY:

A properly designed retaining wall requires a solid, level foundation, properly stepped-back blocks and backfill that drains well.



Thanks to our friends at Structure Tech Home Inspections for sharing these photos. For more home inspection insights, visit structuretech1.com/blog

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ITEM 64281/64134 shown

42249034

LIMIT 2 - Coupon valid through 9/11/18*

CHICAGO **ELECTRIC** **SUPER COUPON**

Customer Rating ★★★★★

12" SLIDING COMPOUND DOUBLE-BEVEL MITER SAW

• Laser guide

Blade sold separately.

NOW \$129.99

SAVE \$169

COMPARE TO \$299

KOBALT MODEL: SM3065SLW

ITEM 61969/61970/69684 shown

42300594

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• Lightweight

ITEM 61319

62614/63598

64073/45807 shown

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ENERGIZER MODEL: H0832EH

42301853

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RAPID PUMP® 3 TON STEEL HEAVY DUTY LOW PROFILE SERVICE JACK

• Weighs 73 lbs.

NOW \$97.99

SAVE \$69

COMPARE TO \$149.98

HUSKY MODEL: H000120

ITEM 61253/62326/61282 shown

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drillmaster **SUPER COUPON**

Customer Rating ★★★★★

1/4" TRIM ROUTER

NOW \$19.99

SAVE \$79

COMPARE TO \$99

MAKITA MODEL: RTU701C

ITEM 61626/62659 shown

42303617

LIMIT 7 - Coupon valid through 9/11/18*

PREDATOR **SUPER COUPON**

Customer Rating ★★★★★

8750 MAX. STARTING/7000 RUNNING WATTS 13 HP (420 CC) GAS GENERATOR

ITEM 68530/63086/63085 shown

ITEM 68525/63087/63088, CALIFORNIA ONLY

NOW \$529.99

SAVE \$2170

COMPARE TO \$2,700

HONDA MODEL: EH6500E20AT

Wheel kit and battery sold separately.

42317038

LIMIT 4 - Coupon valid through 9/11/18*

CENTRAL PNEUMATIC **SUPER COUPON**

Customer Rating ★★★★★

3 GALLON, 100 PSI OIL-FREE AIR COMPRESSORS

A. HOT DOG ITEM 69269/97080 shown

B. PANCAKE ITEM 60637/61615 shown

NOW \$39.99

SAVE \$98.62

COMPARE TO \$98.62

PORTER-CABLE MODEL: PCP20003

SAVE 59%

\$57.99

Air delivery: 0.6 CFM @ 90 PSI, 1 CFM @ 40 PSI

42318757

LIMIT 2 - Coupon valid through 9/11/18*

WARRIOR **SUPER COUPON**

Customer Rating ★★★★★

29 PIECE TITANIUM DRILL BIT SET

NOW \$9.99

SAVE \$60

COMPARE TO \$60

DEWALT MODEL: DW1369

ITEM 62281 shown

42319786

LIMIT 9 - Coupon valid through 9/11/18*

CENTRAL MACHINERY **SUPER COUPON**

Customer Rating ★★★★★

8" 5 SPEED BENCHTOP DRILL PRESS

NOW \$49.99

SAVE \$53

COMPARE TO \$102.99

BUFFALO BLACK MODEL: DP54L

ITEM 62520/60238 shown

42319934

LIMIT 2 - Coupon valid through 9/11/18*

CENTRAL PNEUMATIC **SUPER COUPON**

Customer Rating ★★★★★

20 OZ. GRAVITY FEED SPRAY GUN

• 1.4mm tip included

NOW \$9.99

SAVE \$15.99

COMPARE TO \$49.98

KOBALT MODEL: SBY-AIRBRITZ

ITEM 67181/62300/47016 shown

42321458

LIMIT 8 - Coupon valid through 9/11/18*

CENTECH **SUPER COUPON**

Customer Rating ★★★★★

2/10/50 AMP, 12 VOLT BATTERY CHARGER/ENGINE STARTER

NOW \$29.99

SAVE 57%

COMPARE TO \$49.99

SCHUMACHER ELECTRIC MODEL: SE-1250

ITEM 60581 shown

42326035

LIMIT 4 - Coupon valid through 9/11/18*

CHICAGO **ELECTRIC** **SUPER COUPON**

Customer Rating ★★★★★

10", 15 AMP BENCHTOP TABLE SAW

NOW \$119.99

SAVE \$59

COMPARE TO \$179

PORTER-CABLE MODEL: PCX362010

ITEM 68827 shown

42336478

LIMIT 4 - Coupon valid through 9/11/18*

PITTSBURGH **SUPER COUPON**

Customer Rating ★★★★★

24" CLAMP AND CUT EDGE GUIDE

LIFETIME WARRANTY

NOW \$7.99

SAVE \$88%

COMPARE TO \$69

BORA MODEL: S4300K

ITEM 66126 shown

42334042

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Bauer **SUPER COUPON**

Customer Rating ★★★★★

15 AMP, 12-1/2" PORTABLE THICKNESS PLANNER

NOW \$249.99

SAVE \$149

COMPARE TO \$399

DEWALT MODEL: DW734

ITEM 63445 shown

42337067

LIMIT 5 - Coupon valid through 9/11/18*

VOYAGER **SUPER COUPON**

Customer Rating ★★★★★

12" TOOL BAG

NOW \$4.99

SAVE 75%

COMPARE TO \$19.98

WALSH MODEL: S075000

ITEM 62163/62349 shown

423374470

LIMIT 9 - Coupon valid through 9/11/18*

WINDSOR DESIGN **SUPER COUPON**

Customer Rating ★★★★★

11 PIECE WOOD CARVING SET

NOW \$5.99

ITEM 60655/62673 shown

423381717

LIMIT 7 - Coupon valid through 9/11/18*

KRAUSE & BECKER **SUPER COUPON**

Customer Rating ★★★★★

AIRLESS PAINT SPRAYER KIT

NOW \$169.99

SAVE \$129

COMPARE TO \$299

GRACO MODEL: 262800

ITEM 62915/60600 shown

423391433

LIMIT 3 - Coupon valid through 9/11/18*

HaulMaster **SUPER COUPON**

Customer Rating ★★★★★

STEP STOOL/WORKING PLATFORM

• 350 lb. capacity

NOW \$19.99

SAVE \$57.55

COMPARE TO \$77.50

GPL MODEL: H-21

ITEM 62515/66911 shown

423391850

LIMIT 6 - Coupon valid through 9/11/18*

drillmaster **SUPER COUPON**

Customer Rating ★★★★★

4-1/2" ANGLE GRINDER

NOW \$9.99

SAVE 61%

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PERFORMAX MODEL: 2011-1

ITEM 69645/60625 shown

423392984

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WHAT'S WRONG



SHOCKING!

A HAIR-RAISING SWITCH

To meet code, switches and outlets belong inside a correctly sized electrical box. With the setup shown here, a slip of the finger could get you a nasty shock or worse.

THE RIGHT WAY:

Adding a cord to your disposer and then plugging it into a GFCI-protected outlet allows you to quickly disconnect the unit for servicing or replacement. For easy control of the disposer, wire the outlet to a switch located in a convenient location above the countertop.



SLICK SHORTCUT

GREASY KITCHEN STUFF

We understand that venting the range hood into a wall cabinet saved a lot of labor, but we admit that we're puzzled by the louvers.



THE RIGHT WAY:

The exhaust duct from vent hoods should lead outside. In single-story homes, it's usually easiest to go through the roof. But the vent duct can also run horizontally through an exterior wall.

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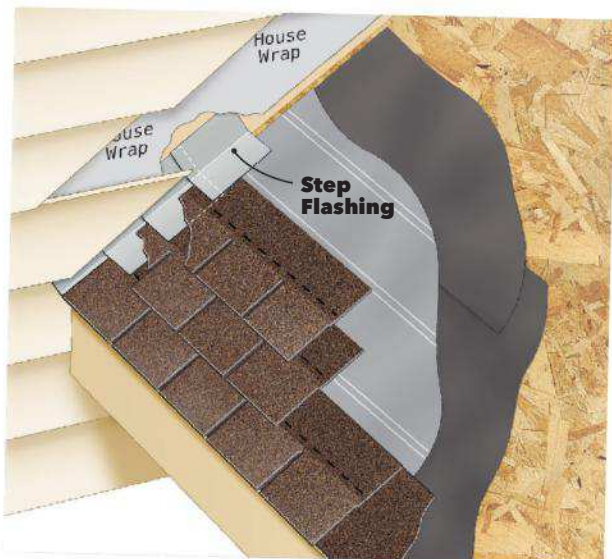
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WHAT'S WRONG

IT'S UNDERWEAR, PEOPLE!

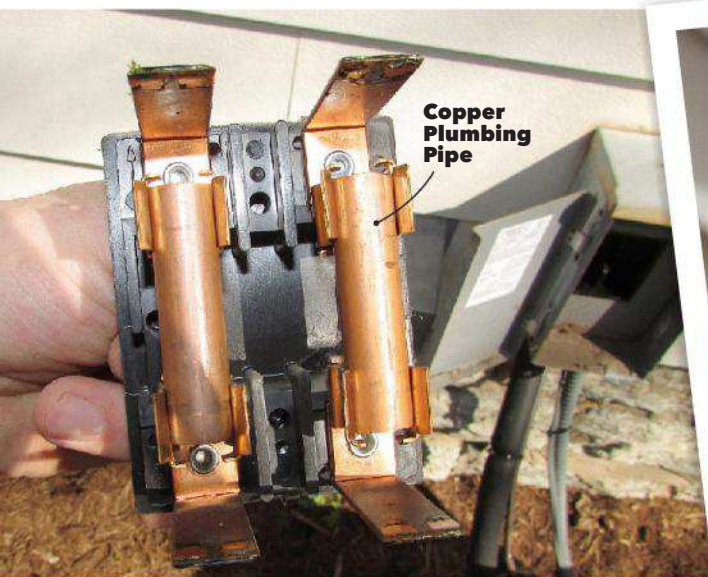
RIGHT IDEA, WRONG LAYER

Shingles that abut a wall do require step flashing, but the flashing isn't installed on top. And relying on caulk to seal step flashing is a formula for disaster.



THE RIGHT WAY:

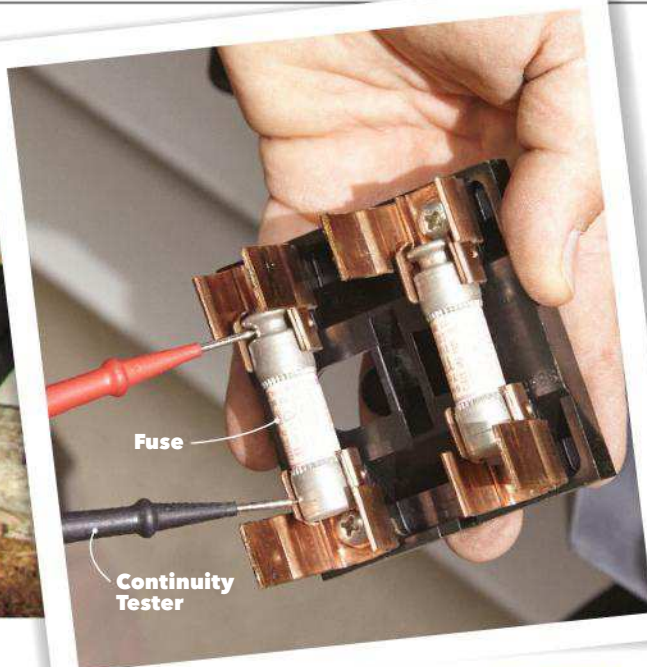
Step flashing consists of bent rectangles of metal that prevent water from entering where roofs meet walls. The flashing pieces are installed along with the shingles and must overlap one another and fit behind the siding. If the step flashing can't be installed behind the siding, then an additional piece of counterflashing should be installed over the top edge of the step flashing.



CHEAP FIX

TRIP-PROOF FUSES

Saving a few bucks by replacing your bad air conditioner fuses with copper tubing may seem like a good idea—that is, until you burn out your overloaded compressor. Copper tubing will complete the circuit, but it doesn't provide the protection of a fuse.



THE RIGHT WAY:

Use a continuity tester to see if fuses are burned out. Replace spent fuses with new ones of the same amperage.

3 Foods Doctors Are Now Calling “Health Killers”



There are many foods that we should be avoiding in order to stay healthy and look our best.

Being healthy and looking good is a big priority for many of us, especially during the summer season where we want to look our best.

The problem is that there are 3 harmful foods in particular, one of which has been banned in many countries, yet still legal here in the U.S. These foods may cause us to gain weight and may actually be harming you from the inside. These foods could be the cause of why you are not losing weight, no matter what you have tried - diet, exercise, ect.

These foods are in many Americans' homes and you are most likely consuming them every day.

If you ever feel like you are tired and fatigued from your workouts, or daily life routines, the culprit might be these foods that you are consuming. These foods may affect your everyday life by literally sucking the energy from you.



Some of these foods have been disguised as “health foods.” These foods could be causing what is called “gut yeast” to be growing inside of your stomach. The truth about these foods is that they may be harming you from the inside. Some doctors are even calling these 3 things “health killers.” These are foods that you should stop eating right now!

Go to **www.BadFood25.com** now to find out more about these potentially dangerous foods and why you should stop eating them.

There is one food additive in particular which may be extremely harmful to your health and is banned in almost every first world country except here in the U.S.

The problem is that many food manufacturers market some of these foods as “health foods” and you may be thinking that you are eating healthy, but in reality, you may not be. This may be the furthest from the truth. Please watch this shocking presentation at **www.BadFood25.com**

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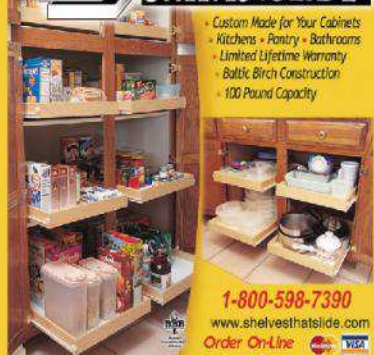
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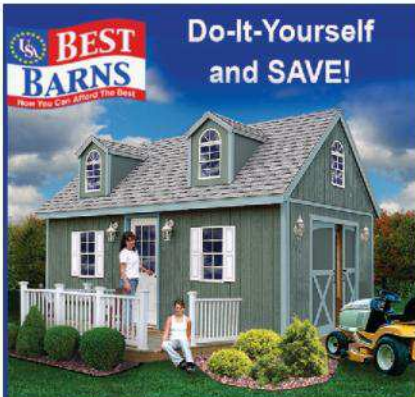


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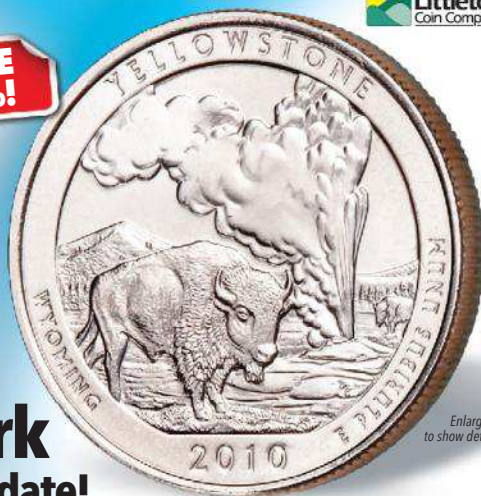


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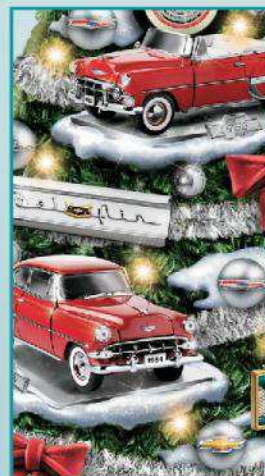
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Laughs and lessons from our readers



SUMMER SHOWER

The drain line on my air conditioner was clogged. I called an air conditioner contractor, and he decided to clear it by blasting compressed air down the line from upstairs. My job was to wait outside at the end of the drain line to see if anything came out.

I stationed myself to watch, as instructed, but I didn't stand back quite far enough. In an instant, I was showered with putrid water and debris! Shocked, I stood there unable to move—just long enough for him to send another blast of air, showering me again. Next time, I'll be in charge of the air and someone else can wait outside!

MELODEE MORELL

CUTTING THE DECK

I was demolishing a 1950s built-in buffet in my basement as part of a remodel and decided to cut it into pieces for easy removal. I didn't have any extra cash to buy a reciprocating saw, but I felt my trusty chain saw would do the trick.

First I ripped off the plastic laminate top and took a quick look inside to avoid hitting any nails. With my next cut, I noticed paper flying out with the wood chips. I found that I had cut through five vintage baseball cards! They included 1954 editions of Willie Mays and Roy Campanella—valued at over \$400!

That money could have bought a nice reciprocating saw or helped pay for the remodel ... I guess I'm just really unlucky at cards.

WILLIAM F. PRICE IV



A SWING AND A HISS

My friend and I had spent most of the day digging the footing for a retaining wall, which involved hacking through tree root after tree root. Then we came to a fat one that seemed a little tougher than the rest. After two or three swings, my friend had barely scratched it. Channeling his frustration, he took one final swing Paul Bunyan-style, which was met with a shrill "hiss."

The firefighters said we were lucky that nothing worse had happened when he sliced into the high-pressure gas line.

JAREN ALTMAN

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