

# Be ready for an emergency!

Storms, floods, fires, even wild animals

THE FAMILY

#1 in DIY Home Improvement

# Handyman

## Build your Dream Deck

Make it fast,  
make it last, and  
cut the upkeep

Beat-up walls?

Skim-coating is the  
ultimate fix

Too-dark room?

Add a light fixture —  
the easy way

Sloped yard?

Easy walkway is a  
real problem-solver!

### Disaster Guide

- Home Emergencies — know what to do!
- Vehicle Emergencies — Glove box guide to get you out of trouble
- Disaster tools & gear that can save the day!

**Sick of deck care?**  
How to pick the right  
maintenance-free decking

May 2010

[thefamilyhandyman.com](http://thefamilyhandyman.com)

\$3.99 U.S.



A RENDEZVOUS PUBLICATION

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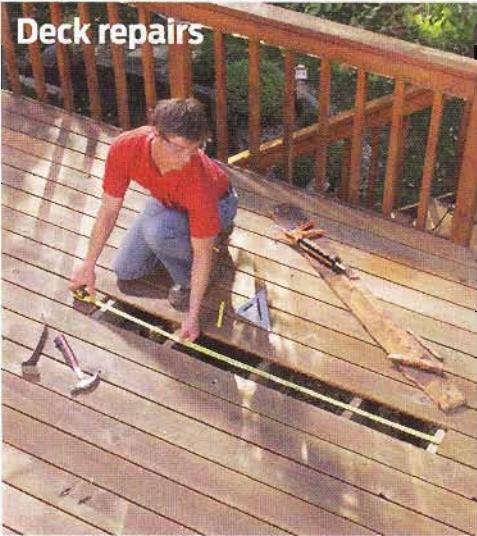
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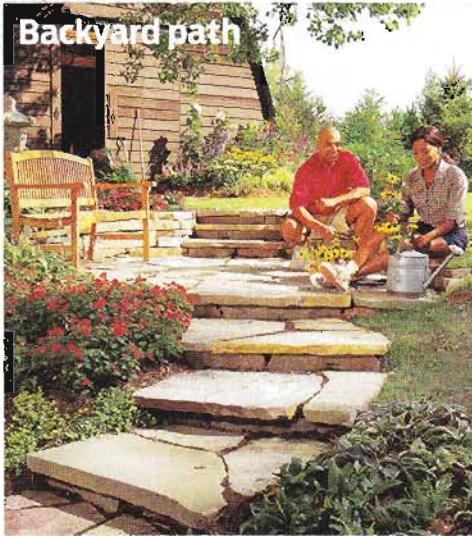
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thefamilyhandyman.com

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## Backyard path



## > Deck repairs

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## > Planning a path

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## > Prevent home fires

Most homes have at least one dangerous situation. Does yours?

## Fire prevention



## Rock-solid stair rails



## > Rock-solid stair rails

Safe, kid-proof handrails in one afternoon.

## > The Tool Blog

Our editors sound off on their favorite tools and materials.

## ► Meet a Field Editor

### Steve Schilling

Aberdeen, NJ

Steve is a computer network administrator—and one of the world's busiest DIYers. He and his wife, Suzanne, have remodeled every room in their home, most recently the kitchen. "When you're not paying for labor, you can splurge on materials," Steve tells us. "We could afford the pricey Italian tile in the kitchen because we weren't paying \$8 per sq. ft. to have it installed."

### Want to become a Field Editor?

We're always looking for volunteers willing to share their experiences. Whether you're a pro or a DIY beginner, e-mail us at [editors@thefamilyhandyman.com](mailto:editors@thefamilyhandyman.com).

## Contributor Guidelines

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## Comments and suggestions

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# On the House

With the Carey Brothers  
**Tips of the Month**



## Decking Makeovers

Is your deck a shipwreck? There are several solutions depending on the problem. For weathered and worn boards, bleach or sand or do both. For worn-out wood with splits, twists and rot, pull up the boards and flip them over or "top" them off with 5/8" engineered wood. For decking that's simply too far gone, you can selectively replace damaged material with new lumber and make it blend in by weathering it with a solution of one cup of baking soda in one gallon of water. Seal it up, and it'll stay ship-shape longer.

## Vacuum Maintenance

If your vacuum seems to be running fine, but just doesn't suck up dirt like it used to, unplug it and check the components. Change or empty your dust bag when it nears the "full" line, as a full bag reduces suction. If your model has a filter, clean or replace it to maintain full pickup power. Check the hose or wand to see if it's blocked with debris. If so, attach the hose to the exhaust and hold the other end to the intake. If no debris is dislodged, use a broom handle or garden hose to remove the blockage, pushing gently to avoid tearing the hose. Finally, check all rubber drive belts and replace if needed.

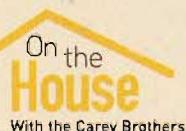
## Wiring Electric Outlets and Switches

Wire like a pro. Looping wires tightly and securely around screw terminals is crucial and a cinch to learn. First, strip about two inches of insulation from the ends of each wire. Then wrap the bare wire clockwise around the screw terminal, allowing the excess wire to extend well beyond the intended terminal. After tightening down the screw head, grasp the excess wire and bend it back and forth until it snaps off flush with the screw head. It makes a fast, secure and safe connection every time.

## Storage Box Greenhouse

It may be a small greenhouse, but it's a big idea. To make a nifty mini-greenhouse from a large plastic storage box, first drill holes in the bottom and lid. Then, turn over the lid and lay it upside down. Load it with young seedlings for vegetables and flowers or herbs and spices to be grown indoors. Then cover with the large opaque plastic bottom, which is also placed upside-down. Your drilled openings act as air holes at the top and drain holes in the bottom (which is actually the lid.) It's tough, fully waterproof, filters sunlight, and is easy to open, replenish and clean — all for just a few dollars.

brought to you in part by:



Ask the Carey Brothers a home improvement or remodeling question on their live radio broadcast every Saturday from 9:00 a.m. to 1:00 p.m. Eastern Time. Call toll-free at 1-800-737-2474 to ask your question.

Visit their website at [www.onthehouse.com](http://www.onthehouse.com) for recaps of the show & other helpful info.

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# THE STUFF WE LOVE

Tools & Gear, DIY and Beyond

# Ryobi paintbrush cleaner

We receive tons of painting gadgets here at *The Family Handyman*. Some are dumb, but not this one. If you do lots of painting, or even if you just hate cleaning brushes, this \$30 paintbrush cleaner is for you. You stick a dirty paintbrush down its throat, switch it on and the brush will be clean in about one minute. Stiff, counterrotating brushes scrub both sides at once. Cleaning the machine is as easy as unsnapping the lid and rinsing it out in the laundry tub.

Just remember this. You can't use flammable solvents to clean brushes that were used with oil-based paints or varnishes. Electric motors and flammable vapors are a bad combo. Soy-based solvents like Klean-Strip White Formula Paint Thinner are your only option.

The directions aren't the best, so just throw them away and try it. You'll get the best results by moving the brush around during cleaning. Check out model No. BC400 at ryobitools.com and/or go pick one up at Home Depot.



» FROM THE BUILDERS' SHOW

## New from Ridgid

Every year in January we go to the International Builders' Show, where manufacturers unveil their latest and greatest tools, snazzy kitchen and bath fixtures, and innovative building materials. This year, Ridgid had an amazing array of new tools. Here's a heads-up on two that impressed us. We'll be testing them this building season.



### 12-volt lithium-ion drill

The older model of this drill is one of my favorites: powerful, small enough to fit in a tool belt, and with the great lithium-ion technology. The new model, No. R92008, has two speeds, a normal 3/8-in. chuck and the handy little LED light. I liked the look of the combo kit with a flashlight and two batteries for \$139, which is due out now.



### Compact circular saw

Lugging around my 10-1/2-lb. sidewinder saw or my 14-lb. worm drive gets less appealing every year. So this summer I'll be trying out this baby; it's only 8 lbs. With its 6-1/2-in. blade and 12-amp motor, it's midsize in capacity but oh, so easy to imagine being the saw of choice for 90 percent of DIY and pro carpentry. Model No. R3203, it'll be in stores soon for \$119.

Ken Collier

Ridgid tools are available at Home Depot, amazon.com and independent tool suppliers. All Ridgid power tools come with that unbelievable lifetime service agreement: free service, parts, even batteries. Wow. (But only if you send in the registration card!)

RIDGID (2)



» BETTER SAFE THAN SORRY

## Peeker protectors

If you rely on your everyday specs for eye protection, you're rolling the dice. Even if the lenses are rated for eye protection, they don't have side shields, and about one-third of eye injuries are caused by debris or chemical splashes from the side. If you want complete eye protection, lay down \$18 for DeWalt's Concealer Goggles. Comfortable and ventilated, the goggles fit over *small* glasses. The lens has an anti-fog coating to keep it clear, but don't expect the goggles to be fog-proof. Choose a clear or tinted lens. When conventional safety glasses get scratched up, you have to toss them. But the Concealer lenses are replaceable. Search for Concealer Goggles online if you're a bargain shopper. You'll find them priced from \$10 to \$20. If you still prefer bricks-and-mortar shopping, try Sears.

**1 in 5** eye injuries at home are caused by home repair or by power tools. And a whopping 40 percent of those injuries occur in the yard and garden. So don't blow off the eye gear when you're out there tending the sod farm.

Lenox Quick Change Retractable Knife, \$15



8-year-old Lenox knife

» LONG-TERM TEST

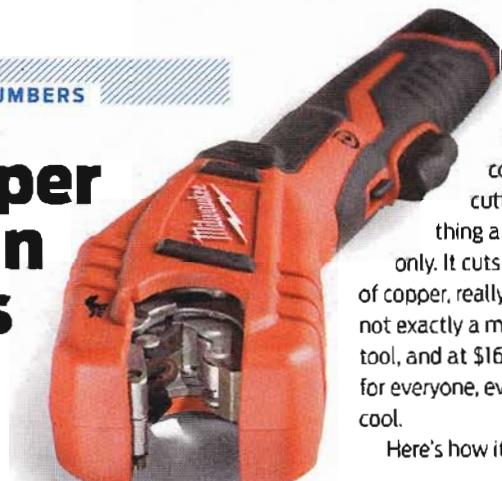
## Go-to blade

We ran an item about the Lenox Edge back in '03, and this tool has been in my nail apron ever since. I've worn out, thrown out and lost dozens of utility knives in the past 30 years, but this is the first one I've loved. The large hourglass-shape body is rugged and easy to hold, and the push-button opening mechanism still works flawlessly for quick blade changes. I do a lot of roofing, and when you're cutting cold shingles with a hook blade, it often takes two hands and a tough blade-holding mechanism. Lenox's new version is a bit smaller and has a very clever blade-changing system. I wish it still had a rubber grip for gloved work, but it's still a heckuva knife. Get it at Home Depot or [amazon.com](http://amazon.com) for \$15.

Travis Larson

» FOR SERIOUS PLUMBERS

## Cut copper tubing in seconds



The Milwaukee M12 cordless copper tubing cutter does one thing and one thing only. It cuts copper, lots of copper, really fast. So it's not exactly a multipurpose tool, and at \$165, it's not for everyone, even if it is ultra cool.

Here's how it works. You

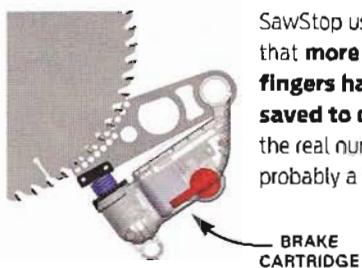
push the open jaws over the pipe, line up the window on your mark and pull the trigger. The jaws clamp over the pipe—any size between 3/8 in. and 1 in.—and the cutting wheel scores all around the cut until it cleanly shears through. The whole operation takes about two seconds. It really shines in close-quarters work, where tubing is near framing or drywall. So who

would pay a whopping \$165 for it? Certainly not "occasional" plumbers. If you're a DIYer tearing out tons of old copper for replumbing a whole house, yes. If you're a pro who still uses lots of copper, yes. And of course, you tool junkies with no self-control qualify too. Check it out at [milwaukeetool.com](http://milwaukeetool.com) if you're any of the above.

Rick Muscoplat

## What's your finger worth?

In just a few short years, SawStop has become the largest supplier of cabinet saws in the United States. Here's why. These saws save fingers. The saw has an aluminum brake cartridge that grabs the saw blade and drops it below the table the instant a finger contacts the blade. This thing isn't a gimmick. It's a powerful saw with a great fence, a true table and fine controls. We tested the one in our shop by gingerly sliding a salami into the spinning blade—barely a scratch. After replacing the cartridge and



SawStop users report that **more than 600 fingers have been saved to date**. But the real number is probably a lot higher.

blade, we got more aggressive by slamming our lunchmeat into the spinning blade. Wow, only a small, 1/16-in.-deep gouge that wouldn't have even merited an ER visit! The only problem is the cabinet saw's price: about \$3,000.

In 2008, SawStop came out with a contractor saw (shown) that's much more affordable: \$1,800, which includes a deluxe fence and an extension table. Order an extra stop module

when you buy the saw. It's sensitive—just bumping the guard when you're running the saw will cause a false trip. And if you don't have an extra module and blade on hand, you're shut down. If your finger caused the trip, at least you'll be installing the replacement with all 10 digits. Go to [sawstop.com](http://sawstop.com) to learn more, watch a hot dog get nicked and find a dealer in your area.



SAWSTOP (2)



### Plant a tree with roots!

Why plant an ordinary tree when you can plant one with a historic ancestry? [HistoricTrees.org](http://HistoricTrees.org) has a sizable catalog of trees to choose from. Some are the progeny of historic trees; others are linked to famous Americans. Shown are the red maples of Walden Woods, made famous by Henry David Thoreau. Choose from trees associated with Abraham Lincoln, Elvis the Pelvis, the Wright Brothers and more. The trees are 1 to 3 ft. tall and cost \$40. Go check it out.

HISTORICTREES.ORG

### Is that a level in your pocket?

If you have an iPhone or an iPhone Touch, download the free Stanley Level app. This is a pretty basic level with slope degrees and your standard leveling bubble. (There are fancier level apps, but they cost.) Just think of it—a torpedo level in your pocket and a way to wow your friends. But go easy—or you'll drive everyone nuts checking everything you come across for level.



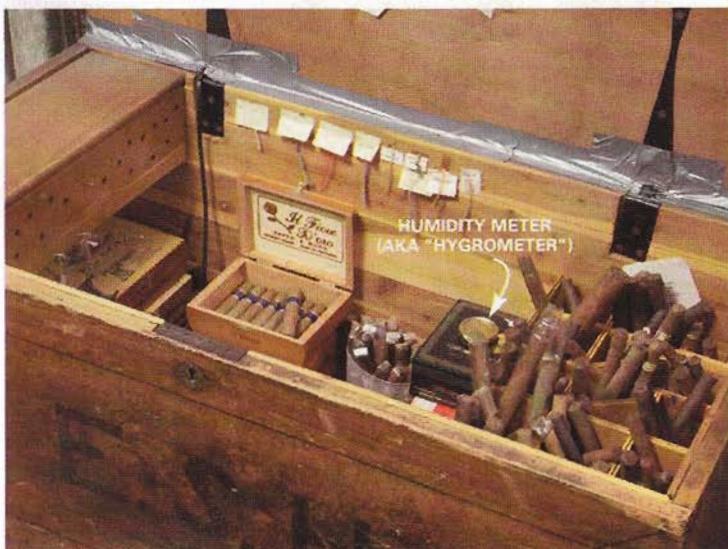
### A product that really sucks

We got this funny little vacuum cleaner a few years ago courtesy of Dyson. Called the Dyson Ball, it has a big ball instead of two front wheels, making it much more maneuverable. We stuck it in the closet and didn't think much about it. We big-shot DIYers (aka "slobs") don't mess with vacuum cleaners. Then one day I came in early and discovered that our night janitor, Troy, had been pushing the well-used unit around our office for the past two years. He loves it! He uses it in all those tight spots under desks because the big ball makes it so maneuverable. If you have a bunch of small spaces to vacuum, I guess this thing is for you. The four different Uniball units sell for \$400 to \$550. You can order a vacuum or [find a retailer at dyson.com](http://dyson.com).

# CIGARS

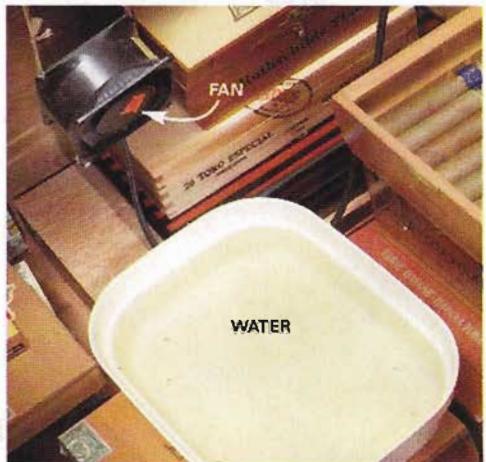
By day, Larry Roepke is a remodeling contractor, but by night, he's a cigar aficionado. New ones, old ones, historic ones, whatever. His passion for cigars made him convert a 19th century steamer trunk into a humidor for his collection. He rigged it with a small fan on a timer. In front of the fan, a vessel of water keeps his little friends from getting thirsty.

Larry says you have to use all five senses to truly appreciate a cigar: "Roll it between your fingers to feel and hear if the filler is too dry. Smell it to gauge the scent before lighting. Look at the casing to see if there are any cracks. And of course, taste the smoke after lighting." He claims to remember every cigar he's ever smoked, and he selects them for the occasion based on those memories. His next project is to persuade his wife to let him smoke them in the parlor instead of the garage. Good luck with that, Lar.



## Larry's advice for selecting a proper cigar:

Avoid machine-rolled cigars; go hand-rolled. They're made from superior "long cut" tobacco. How do you tell? That's easy. If it has a little hole in the mouth end, it's machine-rolled; if not, someone hand-rolled it.



## CALL FOR DIYers

If you're a DIYer with a passion (besides DIY), we'd love to hear from you. Especially if you've built something in the pursuit of your passion. Send along a few pictures and explain your pastime. If we use your submission, we'll pay you \$250. Include your e-mail, phone number and address so we can contact you. Send to [editors@thefamilyhandyman.com](mailto:editors@thefamilyhandyman.com). Be sure to put "passion" in the subject line.

## Expensive, excellent sawhorses

Paying \$120 for a pair of sawhorses might be stark-raving insane, but I recently did just that, and I'm a tightwad. And after using the Trojan TS-35 sawhorse legs, I don't regret forking over the cash. Here's why:

- The legs lock onto any 2-by lumber. So I can grab any available 2x4 and instantly set up horses of any length. With a couple of 10-ft. 2x6s, these horses make a great drying rack when you're finishing trim and take the place of six horses.
- They take up very little storage space in my always-crowded shop.
- They're built for battle. They'll outlast all my other horses (and probably me, too).
- The 35-in. height is kinder to my back than most horses, which stand less than 30 in. high. Trojan also makes 27-in. legs (TS-27).

The legs are sold in pairs (enough for one sawhorse) for about \$60. To find a local dealer or shop online, go to [trojantools.com](http://trojantools.com). If you know of a better sawhorse, just e-mail me: [editors@thefamilyhandyman.com](mailto:editors@thefamilyhandyman.com).

Gary Wentz



# DOLLAR SAVVY HOMEOWNER

by Elisa Bernick  
editors@thefamilyhandyman.com

TIMBERTECH



Art direction BECKY PFLUGER • Photography TOM FENENGRA unless otherwise noted

## Shop smart for composite decking

Composite decking is a great low-maintenance alternative to wood. The industry had some growing pains in the past decade, but the materials continue to improve and the number of quality products on the market increases each year. Ten years ago, there were only 10 choices, and now there are more than 50 different composite decking products available.

You'll also find cellular PVC and plastic lumber (HDPE—high-density polyethylene) decking, both of which install similarly to composites. We'll focus on composites in this article, but much of this information applies to PVC and plastic as well. The biggest frustration you'll encounter is choosing among all the styles, colors and brands. This article will help you narrow down your options and simplify your shopping.

### In a nutshell

- Choose composite decking based on your budget; style and color preferences; fastener choice; and site and code requirements.
- Quality composite decking costs two to three times more than pressure-treated wood but lasts two to three times longer.
- The fact that your local home center carries a product doesn't mean it's been approved for use where you live or for every application. Check with local building officials before you buy.
- Each system has different fastening and installation requirements. If you don't follow the manufacturer's installation instructions, the warranty will be void.



## Are you on a tight budget?

Composite decking costs \$3 to \$7 per sq. ft. (\$1.50 to \$5 per lin. ft.). Most lumberyards and home centers stock at least one or two brands and can special-order others. Most brands of the basic composites are similar and will perform just fine. The differences come down to variations in design, colors, mix of plastic and wood, installation systems and texture. If you're OK with a limited palette of colors; a simple, repetitive grain pattern; and a smooth or combed finish, you'll find a variety of low maintenance, lower-cost products that meet your needs.

Composite decking usually comes in 12-, 16- and 20-ft. planks, and railing components in 12- and 16-ft. increments. Planning your deck design around these measurements can save you money and cut waste. You can also keep your costs down by using a system that installs with face screws (rather than hidden fasteners) and building rails from wood.

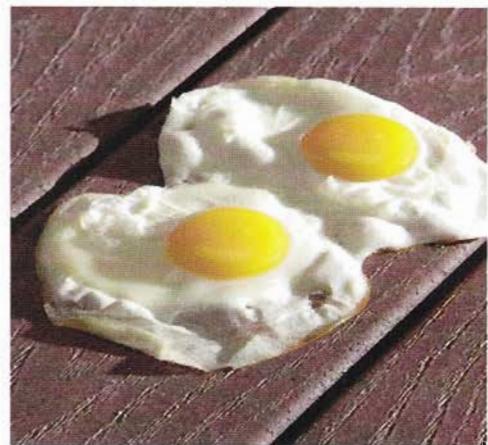


## Is a "wood look" critical?

Higher-end composites have a superior grain and the most "woodlike" appearance and feel. Some of the priciest brands have subtle shadings and individual "grain" variations so that no one board is an exact replica of another. Some manufacturers buff each board at the factory to remove any "plastic" sheen. High-end composites also have a wider range of colors and matching add-ons such as railings, balusters, posts, post caps, skirts and decorative trim. These add-ons give your deck a beautiful look, but they don't come cheap. They can easily be triple the cost of the decking boards.

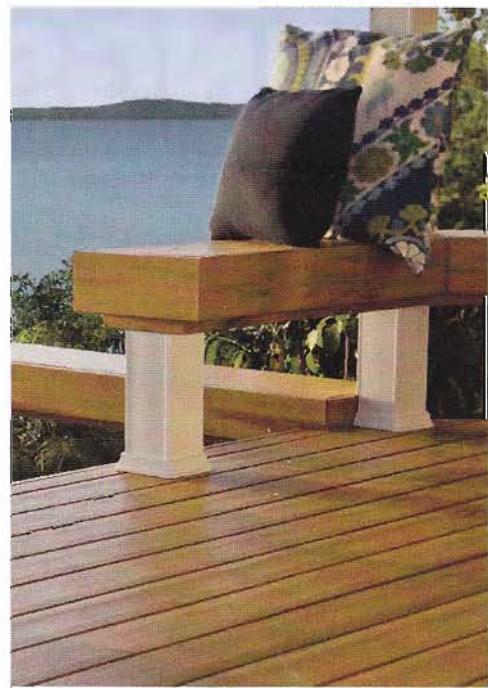
## Is your deck used in the hot sun?

Dark-colored and very dense composites can really heat up in the sun. If you're sitting in a deck chair on top of all that plastic, the heat reflected up to you can make you sizzle like the burger on your grill. Get composite samples in different colors and set them outside on your deck site. If they're hot enough to fry an egg after a day in the hot sun, consider a lighter color or a different composite material.



## How wet will it get?

Smooth-textured composites can get slippery. If your deck is going to be used near a pool, or if you live in a climate where ice is an issue and the deck is going to be used as a main entry to the house, search for a style with a pronounced texture.

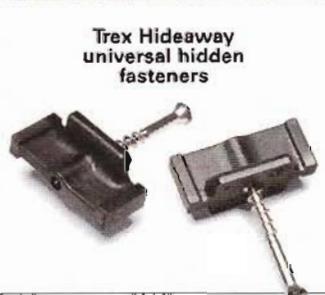


## Are hidden fasteners important?

Many people couldn't care less if they see the fasteners when they look at their deck. But if it bothers you, choose a system that works with hidden fasteners. For example, tongue-and-groove systems eliminate gaps and allow you to hide the screws and drive fewer of them. Clip systems work with grooved decking that's lightweight and has a thinner profile than face-screw styles. However, these systems can have open ends that collect leaves and dirt if you don't install end caps or a special trim piece or use an installation design that covers them. Hidden fastener systems are pricier than systems that install with face screws. The hidden fasteners themselves can bump up the price by 30 percent.



FastenMaster's IQ hidden fasteners



Trex Hideaway universal hidden fasteners



GRK fasteners

## Are you including all the extras in your budget?

You won't need to pop for specialized tools because composite planks install using the same basic tools as any wood deck. But the decking itself is only a piece of your overall budget. Each system requires either hidden fasteners or deck screws (for best results, use screws specifically for composite material).

In addition, depending on the system, you may need end caps, reinforcement pieces, special trim or skirt pieces, and add-ons like railings, posts and post caps. Research the installation and the add-ons so you have a complete picture of the costs before you buy the decking.

## We want your feedback!

Help us improve *The Family Handyman* by sharing your opinion of this and other articles. See p. 4 for details.

## Are you sure it meets local building codes?

Call your local building officials to make sure the material you're considering is approved in your city. Some composite systems have limitations on the materials for use as stairs or require specific framing in certain applications. Also, be sure you know what kind of fastener spacing is required so you don't encounter any surprises during inspection.

## Learn about decking materials online

Synthetic decking materials are required to have a valid Evaluation Service Report (ESR) to be considered approved for use by many local building departments. ESR reports are issued by a nonprofit code-compliance testing agency. They show the results of tests for moisture absorption, abrasion resistance, fastener spacing, allowable spans and stresses and more. Visit decks.com or icc-es.org, or type the ESR number for each product (ask the manufacturer or check the product literature) into your Web browser.



TIMBERTECH

# Emergency Guide



© KADMY DREAMSTIME.COM

## How to handle roadside trouble

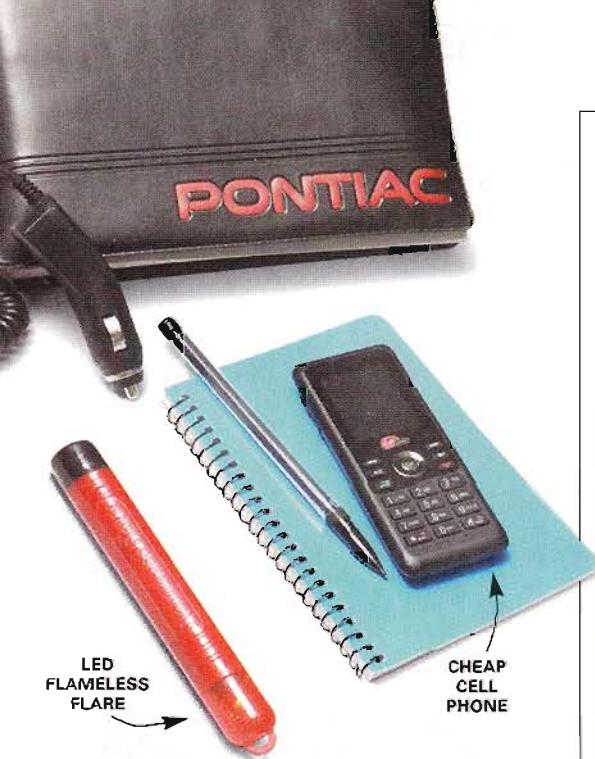
**W**hen you're dealing with roadside emergencies, it's always better to have a plan of attack than a panic attack. A few simple preparations, including an inexpensive emergency kit, will get you through most breakdowns and accidents. You're already familiar with the standard kit you hear about every fall, which includes a blanket, candy bars, a

candle and all that other stuff. That kit is a good idea. But there are a few additional items you should stock in every vehicle you own, along with this guide. By the way, seriously consider joining a roadside assistance plan. Even seasoned mechanics aren't too proud to belong to one. One tow or a jump start on a freezing day and the \$80 annual fee will pay for itself.

Photocopy this guide and put a copy in each of your vehicles. Tell family members to refer to it in an emergency. But first, build the emergency kit shown on p. 24 and store it in your glove box.



BILL ZUEHLKE



## Build This Emergency Kit

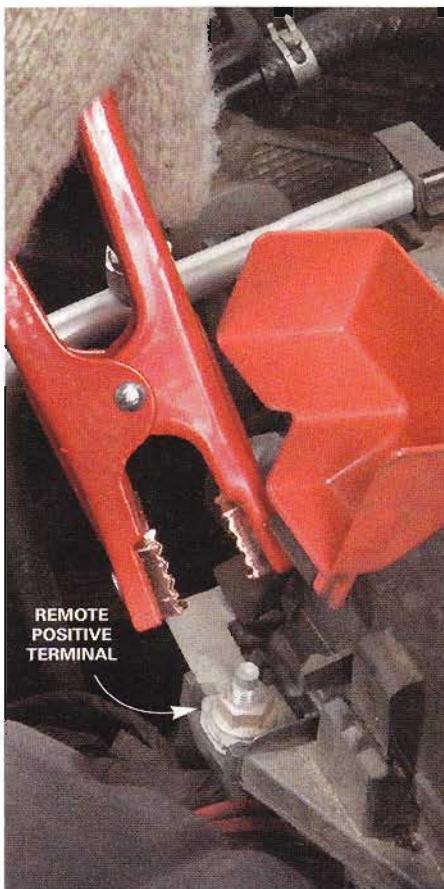
- Your car's owner's manual. If you don't have one, get one from your dealer. It'll show you how to change a tire, explain what all the warning lights mean, list part numbers for lightbulbs, and provide the fluid types and capacities so you can refill with the right stuff.
- This LED Flameless Flare (\$7 at [vat19.com](http://vat19.com)) lasts much longer than an ordinary flaming road flare. Attach the magnetic base to your vehicle and set it to flashing mode to warn other drivers.
- Spiral notebook and mechanical pencil (writes in any position or weather and needs no sharpening). Use to record accident information, police report numbers, phone numbers, etc.
- A cheap prepaid cell phone and a car charger. Even if you already own a cell phone, get one to keep in your glove box. This Virgin Mobile setup (phone and charger) cost less than \$25 at Walmart and can be reloaded with minutes from the side of the road.

# Jump-Start a Dead Battery

### DON'T SKIP THIS WARNING:

Connecting the jumper cables in the wrong order or attaching the spring clamps in the wrong location *can damage expensive electrical components and even cause an explosion*. Your owner's manual leads you through the procedure step by step. Follow it to the letter! If you don't understand the procedure, *call a tow truck*. Automotive batteries can vent explosive hydrogen gas when they are discharged. Do not smoke when jump-starting, and don't use jumper cables with cracked or missing insulation.

- 1 Turn off the ignition and all electrical accessories in both vehicles.



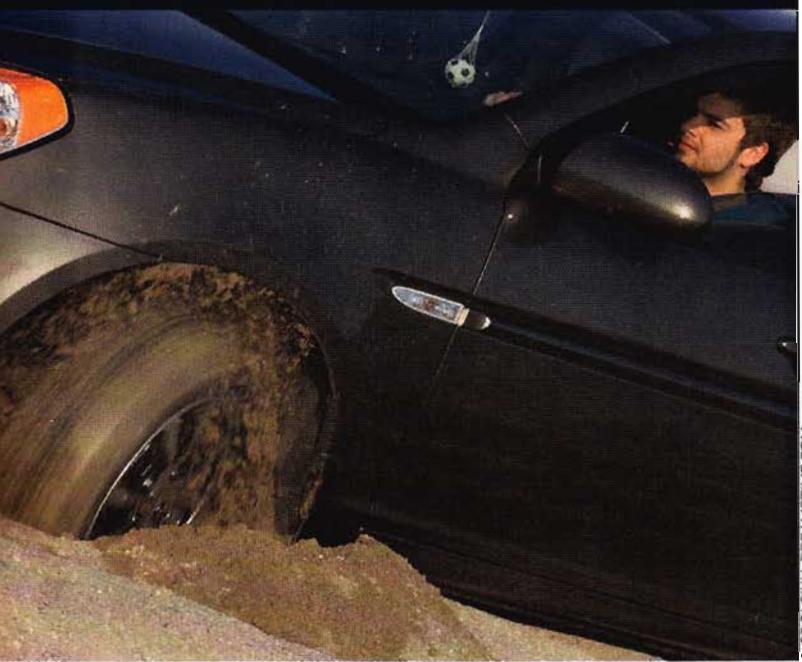
- 2 Connect the positive jumper clamp (marked "+" or colored red) to the remote terminals on the good vehicle. They're located away from the battery. If you cannot find the remote terminals, connect the positive ("+") jumper clamp to the positive ("+") battery terminals. Then do the same on the dead vehicle.



- 3 Connect the negative jumper clamp (marked "-" or colored black) to the remote negative terminal on the dead vehicle. Then connect the clamp to the good vehicle. If the vehicles don't have remote terminals, connect the negative jumper clamp to an unpainted metal surface at least 18 in. away from the battery.

- 4 Start the good vehicle and let it charge up the dead battery for at least five minutes. Then try to start the dead vehicle with the cables still in place. If it doesn't start, call for service.

# How to get unstuck



## Warning lights—what they mean

**OIL** **Oil light on.** The engine has low oil pressure. Check the oil level and add oil if you have some with you. Otherwise, have the vehicle towed to a repair shop. Driving a vehicle with low oil pressure can cause catastrophic engine damage.

**Brakes** **Brake light on.** Check the operation of the brake pedal. If it feels spongy or goes to the floor, stop driving and have the vehicle towed to a service facility. If the pedal feels firm and the brakes stop the vehicle, check the brake fluid level in the reservoir. If it's low, add more brake fluid. If the light stays on after you've added fluid but the pedal is still firm, have the vehicle serviced as soon as possible.

**AIRBAG** **Airbag/SRS light on.** The airbags have shut down and will not work if you get into an accident. Get the vehicle serviced soon.

**TRACTION CONTROL** **Traction control/stability control light on.** There's a problem with the system. You can still drive the vehicle, but exercise extra caution on slippery roads and in turns. Have the system serviced soon.

**SERVICE ENGINE SOON** **"Check engine" light on.** If the engine's running smoothly and the transmission is shifting properly, you can continue to drive the vehicle until you can get it checked by a mechanic. If it's flashing, pull over at the nearest safe spot. Have the vehicle towed to a repair shop immediately. Driving with a flashing "check engine" light can destroy expensive (\$1,200 and up) emissions components.

**CHARGING SYSTEM** **Charging system light on.** There's a major failure with the charging system. Drive immediately to the nearest repair shop.

**ABS** **ABS light on.** There's a fault in the anti-lock brake system. You can drive the vehicle and operate the brakes. But exercise more caution on slippery roads. Get the problem checked out soon.

**HOT** **High temperature.** Pull over at the nearest safe spot and turn off the engine. DO NOT open the radiator or the coolant reservoir. Have the vehicle immediately towed to a repair shop. Driving an overheated vehicle can cause serious engine damage costing thousands of dollars to repair.

**Place the gearshift in "1" or "low."** Press the accelerator and allow the spinning wheels to move the vehicle forward a bit (do not exceed 15 mph on the speedometer). Then release the gas and let the vehicle roll backward. Immediately apply the gas to roll forward again. Continue this procedure to build enough momentum to rock your vehicle out of the rut.

**Do NOT shift the transmission back and forth between "D" and "R."** That can destroy your transmission and result in a repair bill of at least \$1,500. If you cannot rock the vehicle out using the procedure above, call a towing service—it's cheaper than a new transmission.

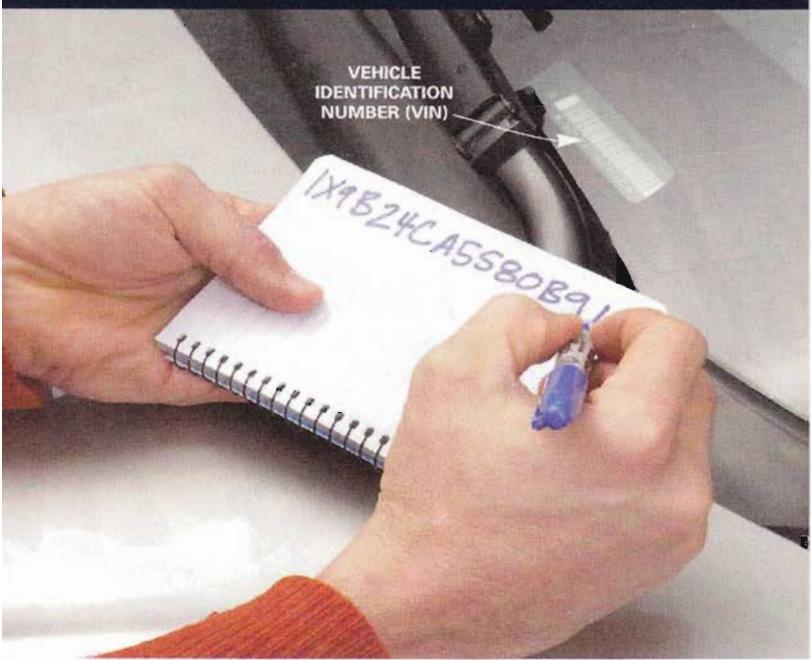


### Get help online

**Find a towing service.** If you have Internet access on your cell phone, enter [towing.com](#) and then your location. Or call a friend who has computer access and ask him or her to enter your location information at [towing.com](#).

**Find a local mechanic.** Use your cell phone's Internet function or call a friend with Internet access. Then enter [iafn.net](#) and click on the "Having car trouble?" tab. Or enter [cartalk.com](#) and search for "mechanics files."

# What to do if you're in an accident



**1.** Check for injuries. If anyone is injured, call 911 immediately. Do *not* move injured occupants unless you see fire, suspect the risk of fire, or are instructed to do so by 911 operators.



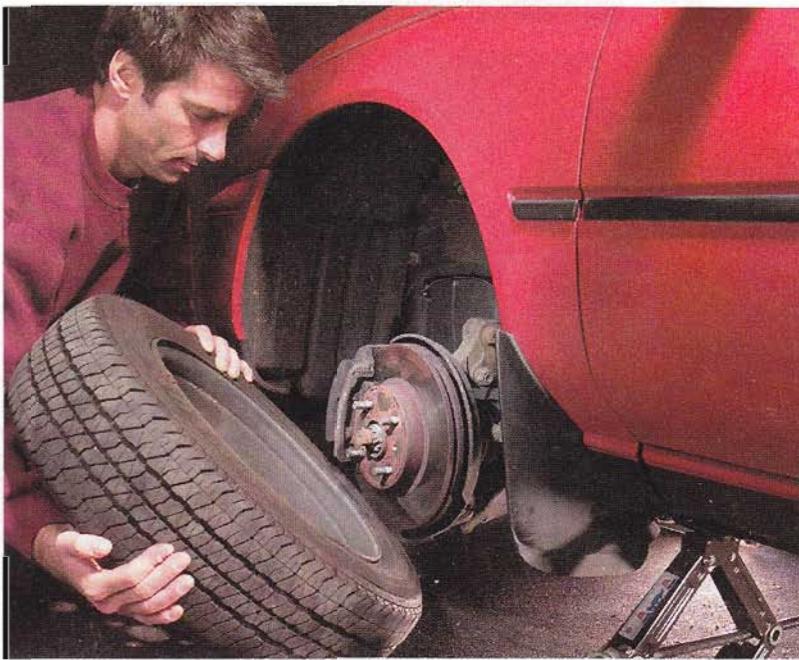
**2.** Find out your location. Note the street address, highway mile marker, destination sign or nearest billboard. Emergency personnel and your insurance company need this information.

**3.** Note the weather conditions, skid marks and the damage to the other vehicle. Sketch the accident scene.

**Get the other driver's license number, Insurance company name and policy number, the vehicle's plate number and its VIN (vehicle identification number, located in the lower corner of the windshield).**

- 4.** Locate any witnesses and get their account of the accident and their name, address and phone numbers.
- 5.** Don't admit to any fault.
- 6.** Get a copy of the police report or find out how to obtain a copy.
- 7.** Don't make any "deals" to pay out-of-pocket in order to avoid notifying your insurance company. Your policy requires you to report the accident *even if you choose not to file a claim*.
- 8.** Contact a towing service (see p. 26) to move your vehicle to a repair shop, and make arrangements to get home.
- 9.** Call your insurance company to report the accident and file a claim.

# When it's safe to change a tire

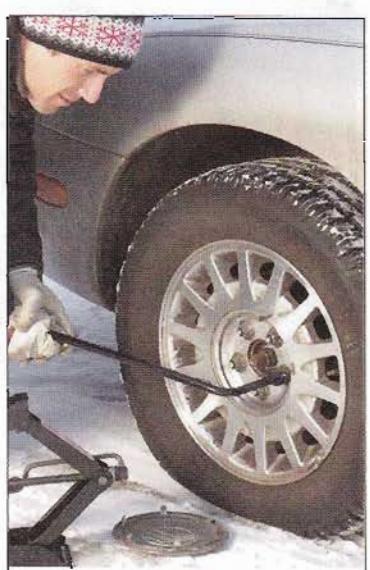


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**C**hanging a tire is fairly straightforward. You'll find all the instructions on a decal near the jack and in the owner's manual. But in some situations, *you should not change your own tire*.

If you have a flat tire on a highway or narrow residential street *and the flat tire is on the driver's side of the vehicle*, call for roadside assistance. Even if you pull off onto a paved shoulder, the risk of being struck by another vehicle is extremely high—especially at night.

If the highway has a narrow or unpaved shoulder and there's a nearby exit, you can drive the vehicle to the exit and call for help once you're off the main road. Turn on your hazard flashers and drive slowly. Be warned that you will most likely destroy the tire and possibly the wheel by driv-



**TIP:** Break the lug nuts loose before you jack up the vehicle. Once the spare is in place, spin on the lug nuts and tighten them partially. Then lower the vehicle and perform a final tightening. Drive to the nearest service station and check the air pressure in the spare (it's often low).

ing to the exit. But that's smarter than changing a flat tire on a busy shoulder.

# HOME CARE & REPAIR

by Jeff Gorton  
editors@thefamilyhandyman.com



Art Direction: MARCIA ROEPKE • Photography: TOM FENNGA • Technical Illustration: FRANK ROHRBACH III

## Light up a dark room

**I**S your bathroom dimly lit? Do you have a hallway that could use more light? Here's how to add a wall-mounted light directly above a light switch.

This project requires an understanding of how a switch is wired and a few basic tools. You'll need a noncontact voltage detector (\$10), a wire-stripping tool (\$6 to \$15), a screwdriver and a drywall saw. Then, with our instructions and a few hours' work, you'll be able to add a sconce to any room that has an appropriate switch.

Not all electrical boxes with a light switch in them contain the necessary ground, hot and neutral conductors. To find out, first shut off the power to the switch at the main electrical panel. Then remove the switch cover, and hold the noncontact voltage detector against the wires attached to the switch. This is to ensure the power is off before you remove the screws and pull the switch from the box.

To locate the required neutral, look for two or more white wires joined with a wire connector. If the only white



You can add a sconce above nearly any light switch in about three hours.

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## REMOVE THE KNOCKOUT

- 3** Punch out one of the knockouts in the top of the box with a screwdriver.

You'll push the cable through this hole.

wire entering the box is connected to the switch, then there's no neutral and you can't power a sconce from this box. If your switch wiring looks different from what we show here and you don't understand how it's connected, put everything back together and abandon the project or call a licensed electrician.

There's one more important test you must complete while the power is still turned on. With the light switch turned off, hold the noncontact voltage detector against each of the wires connected to the switch. Take note of which wire causes the tester to light up. This is the hot wire and the one you'll connect to the "hot" side of the



## TEST FOR POWER

- 1** With the power turned off at the main electrical panel, unscrew the switch and pull it out. Turn the power back on and use a noncontact voltage tester to locate the hot wire.

## CUT THE HOLE

- 2** Trace around the box. Then draw a second line inside the first to indicate the cutout. Cut notches for clamps and other protrusions.

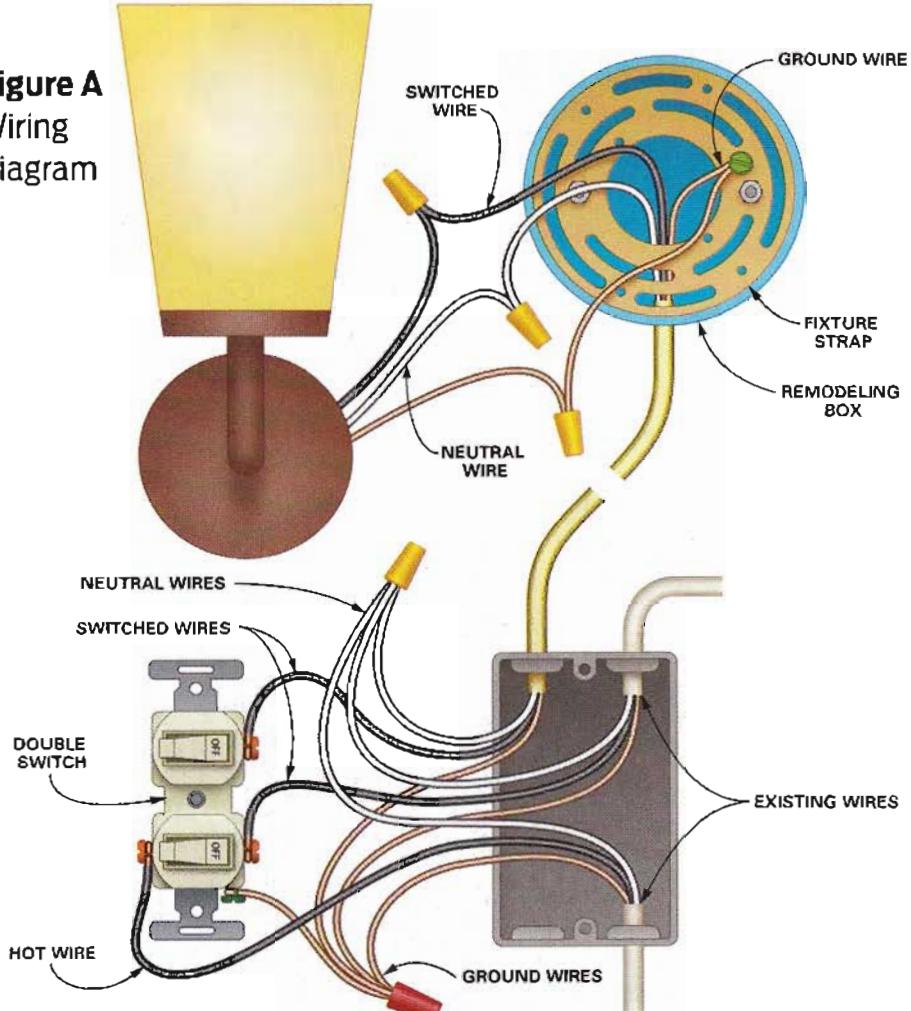


## REMOVE THE KNOCKOUT

- 3** Punch out one of the knockouts in the top of the box with a screwdriver.

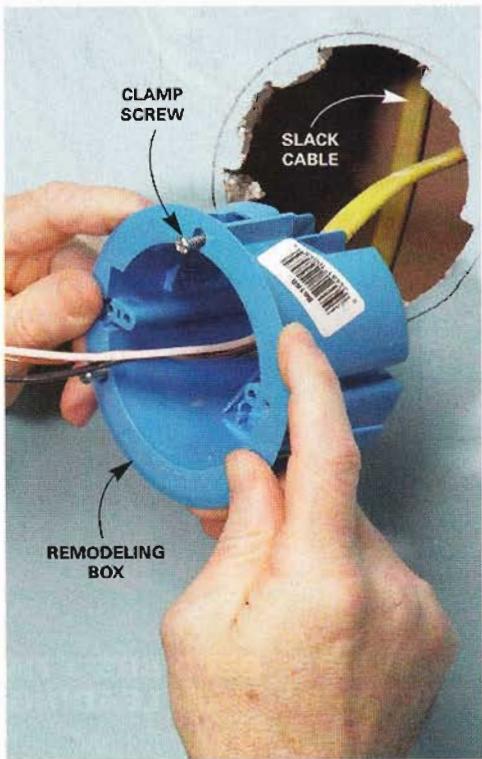
You'll push the cable through this hole.

**Figure A**  
Wiring Diagram



#### PUSH IN THE CABLE

**4** Push the cable through the knockout and up toward the hole. If you're lucky, it'll come into sight. Otherwise, reach through the hole to grab it.



#### MOUNT THE BOX

**5** Strip the sheathing from about 12 in. of cable. Push the wires through the built-in wire clamp at the back of the box. Make sure at least 1/4 in. of sheathing is visible inside the box. Push the box into the hole and tighten the clamp screws.

## What if you have to go fish?

We're showing how to run a cable through the same stud space that contains the switch. Positioning the light in an adjacent stud space is more difficult. For information on how to do this, go to [thefamilyhandyman.com](http://thefamilyhandyman.com) and type "fishing electrical wires" into the search box.

new double switch. If you're adding a separate single switch, this is the wire you'll use to power both switches. Now turn off the power to the switch at the main electrical panel. Back at the switch box, *test once again to make sure the power is off* and mark the hot wire with a wrap of black electrical tape.

Finally, complete a simple calculation to see if the existing switch box is large enough to accept more wires. For instructions, go to [thefamilyhandyman.com](http://thefamilyhandyman.com) and type "electrical box size" into the search box.

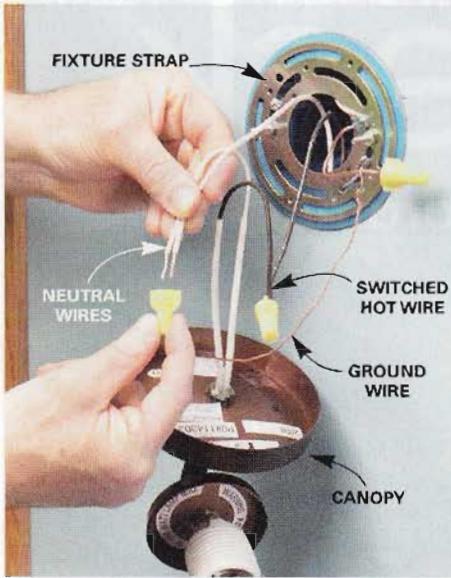
After you've determined that the existing switch box will work to power the new light, it's time to shop for the sconce and pick up the remodeling box, cable and electrical connectors you'll need. Choose the fixture first. Then pick a rectangular or round remodeling box that is small enough to be covered by the light fixture canopy. You'll need enough cable to reach from the switch to the box plus about 3 ft. Match the cable, either 14-2 or 12-2, to the existing wire gauge. Fourteen-gauge wire is as thick as a dime and 12-gauge wire is as thick as a nickel.

#### Cut the hole and run the cable

Locate the studs. Then hold the fixture against the wall somewhere between the studs to determine the best location and lightly mark the top and bottom of the canopy with a pencil. Center the remodeling box on the marks and mark the box cutout carefully, taking note of notches needed for the clamps and other protrusions. Cut out the hole (Photo 2). Next, punch out one of the

knockouts in the top of the switch box and push the cable up to the hole (**Photos 3 and 4**). Prepare the remodeling box for mounting by stripping about 12 in. of sheathing from the cable and pushing it into the box through one of the cable entry points on the back.

Make sure at least 1/4 in. of sheathing is visible inside the box. Leave some slack cable inside the wall to allow some leeway when you connect the switch (**Photo 5**). Then fit the remodeling box into the hole and tighten the clamps.



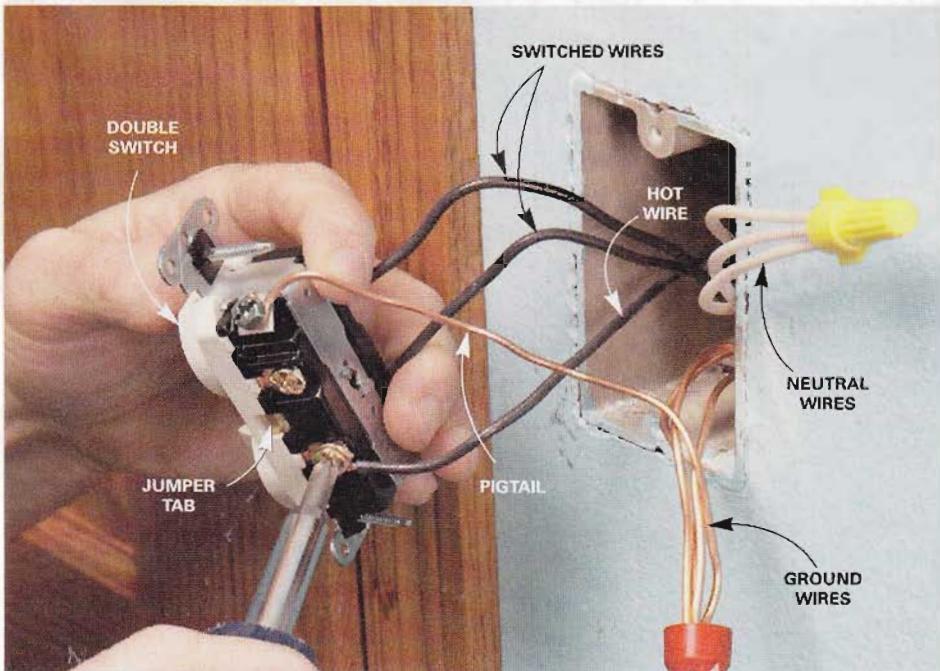
#### INSTALL THE FIXTURE

**6** Trim the black and white wires to 8 in., leaving the ground wire long. Strip the ends of the wires. Connect white to white, black to black and bare copper to bare copper. Loop the bare copper wire clockwise around the grounding screw on the fixture strap before connecting it to the fixture ground wire.

#### Connect the fixture and switch

**Photo 6** and **Figure A** show how to connect the light fixture. Start by mounting the fixture strap to the box. Strip the ends of the wires and connect them to the fixture.

At the switch, cut the cable about 12 in. beyond the box. Strip 8 in. of sheathing from the wires and push the cable through the knockout, leaving 1/4 in. or more sheathing visible inside the box. Trim the black and white wires to the same length as the wires they will connect to. Then strip the ends of the wires. Connect the white neutral wires with a wire connector. Connect the wires as shown in **Figure A**. Connect the hot wire to the side of the double switch that has the "jumper tab" between the terminals (**Photo 7**). Complete the project by mounting the light fixture, screwing the switch to the box, and installing the cover plate.



#### CONNECT THE SWITCH

**7** Strip the ends of the wires at the switch box. Connect the neutral white wires with a wire connector. Connect the ground wires with a 6-in.-long pigtail wire leading to the switch. Loop the black wires clockwise around the screws and tighten the screws.

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# Build your dream deck

Our best tips to make it extraordinary!

by Jeff Gorton  
editors@thefamilyhandyman.com

Here at *The Family Handyman* magazine, we've been building decks for more than two decades, and in that time, we've learned a lot about what makes a deck a special place. In its most basic form, a deck is just a platform. It's the unique features you add that turn a simple structure into a perfect spot to while away the hours. In this article, we'll show you some of the features we've built into our dream decks over the years and give you some construction tips to help you incorporate them into your next deck. If you already have a deck, most of these projects can be added on with only minor changes to your existing structure.

## Green up your deck with planters

Add a planter or two to your deck design and take advantage of your green thumb to provide color and greenery in your deck environment. You could even grow fresh veggies

for the grill. Planters can take the place of low rails and double as seating. The photos here show a few construction details to keep in mind when you're building planters.



### BUILD THE ULTIMATE MAINTENANCE-FREE PLANTER

Stack stones to build planters along the sides or in front of the deck. Here we covered the spaces under the deck with stone planters. We laid these stones with mortar but kept the mortar away from the face of the stones for a dry-laid look. Fill the lower section of the interior with stones or gravel to allow drainage.

### DON'T FORGET THE BRACING

Even a little soil can add a lot of pressure to the sides of a planter. For large planter boxes like these, tie the sides together with crossbraces that are screwed to the upright framing on both sides. We finished off this planter with cedar siding.

## DIY Success Story

When our deck was built, the piers were left exposed above the concrete patio. They stuck up about 3 in., and the paper from the forms was exposed as well. Because the deck provided nice shade, my wife suggested that I build flower boxes for impatiens that would surround the piers and post. I built forms out of pressure-treated 2x2s and then used cedar 1x3s to cap the boxes. I also wrapped the posts with landscape fabric to keep the topsoil in the box and prevent the outside of the boxes from getting dirty. Don't do this if your posts aren't treated wood.

— Michael Hanson



## Build elegant cascading steps

If your deck is low to the ground, consider building wraparound steps rather than a conventional 3-ft.-wide stairway. Wraparound steps visually anchor the deck and tie it to the landscape. They also provide access from all directions, freeing up traffic patterns and spreading out wear and tear on the lawn. Finally, these steps serve as bleachers for extra seating at a party or a place to just sit back and watch the grass grow. For information on how to calculate the rise and run of deck steps, go to [thefamilyhandyman.com](http://thefamilyhandyman.com) and type "deck stairs" into the search box. If you decide to add wraparound steps to your design, here's a tip to help simplify construction.



### STACK BOXES FOR WRAPAROUND STEPS

It's easy to build cascading steps like these if you just build boxes and stack them up. You may have to shim each layer to get the correct rise, but it's still simpler than cutting a bunch of notched stringers.

## Keep cool in the shade

When it's 20 degrees F outside, the prospect of relaxing on your deck in the warm sun sounds wonderful. But on a scorching summer day you may have a different opinion. When you're planning your deck, don't forget about shade. Unless you buy a freestanding shade awning or canopy, you can't just build on top of the deck. Depending on the covering, you may need extra support under the posts to hold the weight or extra bracing to prevent the wind from lifting or racking the structure.

Shade structures can be a simple pergola design or more elaborate fabric-covered frames. Pergolas let in more light and can double as a lattice for vines. Fabric covers provide complete shade and offer some protection from rain. Keep in mind that in snowy climates you'll have to bring the fabric cover in for the winter.



### PLAN AHEAD TO ANCHOR THE POSTS

One good way to lock the posts into the deck is to build a "socket" into the deck framing, then sandwich a 2x4 between 2x6 lumber for the post. Extend the center member of the "sandwich" so it will fit into the socket. Drop the post in and secure it with construction screws to keep the shade structure from lifting off during windy storms and help prevent sway. Then add decorative braces between the posts and the beams at the top.

### NOTCH POSTS FOR EXTRA SUPPORT

Another method for providing strong support at the top and bottom of posts is to notch them to fit around the joists and the beams. Then drive construction screws through the notched posts to ensure a strong connection for maximum strength.

## Deck tips from our Field Editors



Ken Huntington,  
Burleson, TX

### Oversize your joists

If your deck plan calls for 2x8 joists, consider using 2x10s instead. That might add \$100 or more to your materials cost, but it would also eliminate that bouncy feel you get when you use "just-big-enough" joists.



Kevin Zook,  
Bellingham, MA

### Keep a router handy

A router equipped with a 1/4-in. round-over bit is an essential deck tool for me. That 1/4-in. radius matches the rounded factory edge on most decking, so I can quickly put a matching edge on a ripped deck board. And you'd be surprised how often you can dress up a deck or railing part with a rounded edge.



Kevin Lind,  
Northport, AL

### Save time with a palm nailer

I'll never build another deck without a palm nailer. It's noisy but saves tons of time when nailing joist hangers. Great for nailing in tight spots too. (Name brand palm nailers start at about \$80.)



### Want to become a Field Editor?

We're always looking for volunteers who are willing to share their experiences. To learn more, e-mail us at [editors@thefamilyhandyman.com](mailto:editors@thefamilyhandyman.com).

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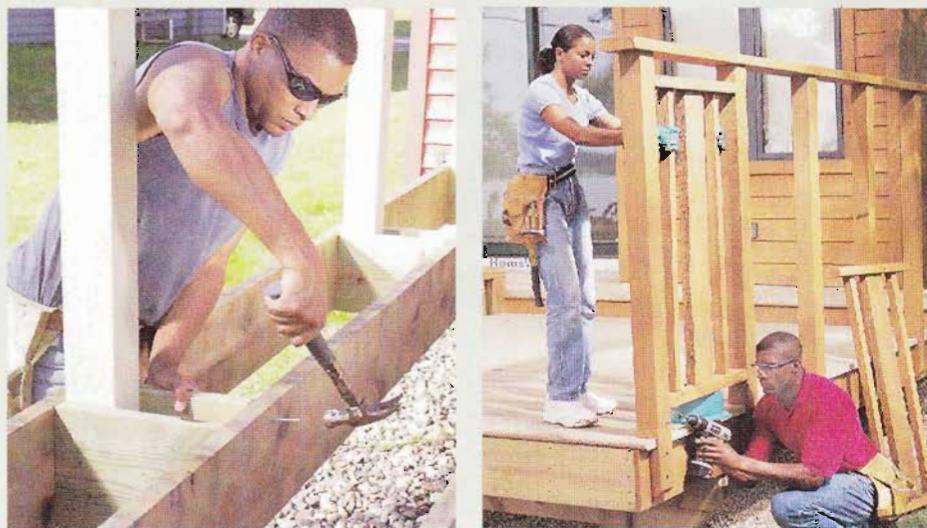
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## Create a cozy hideaway with a privacy screen

If you need a little break from your chatty neighbor or just want your deck to feel more intimate, add a privacy screen. The basics are simple. You build a frame and fill it in with something—slatted wood, lattice, fabric stretched over a frame, bamboo curtains or even a vine-covered trellis. Consider whether you want to block wind or allow it to pass through, whether your privacy screen can do double duty as a shade structure in the late afternoon, and whether you want to totally block the view or just create a sense of separation, and then choose the appropriate material. Here are a couple of privacy screen designs and a few construction details to keep in mind when you build the screen.



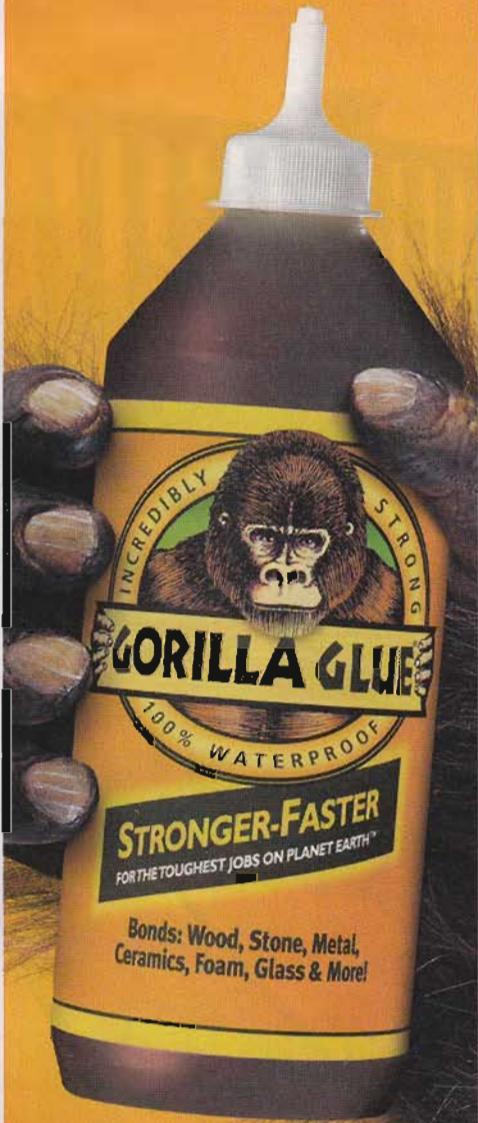
### REINFORCE THE JOISTS

Privacy screens have to withstand natural forces like the wind and people who like to lean on them. Where the joists run parallel to the screen, strengthen them by cutting tight-fitting blocks to fit between the outermost joists every 2 ft. Nail the bridging to the joists. The bridging will prevent the joists from twisting and keep the screen strong, whether the posts are placed inside the framing as shown here or outside as shown above right.

### PREBUILD THE PANELS

Notch 4x4s and bolt them to the rim joist. For a design like this, measure the exact distance between 4x4s after you bolt them on and build panels to fit between them. Slip the panels into place and attach them with angled screws.

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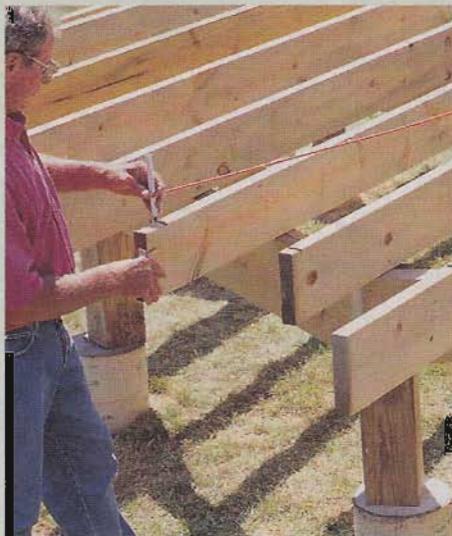
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© 2010 Gorilla Glue Company

## Curves add class

Looking for that little something to set your deck apart? Work a sweeping curve into the design. Building a curve into the deck framing is

straightforward. It's a little trickier to build curved rails and benches. But if you're up to the challenge, here are some tips to make the job easier.



### SWING AN ARC FOR CURVED DECK FRAMING

The easiest way to frame a curve is to run joists long. Then hook a marker to the end of a wire, chain or non-stretchy cord and swing an arc from the center of the circle. Cut the joists at the marks and you're on your way to a curved deck.



### BEND PLYWOOD FOR A CURVED RIM

You're not going to bend a 2x10 around a curve. But strips of 1/2-in. treated plywood will bend easily. Glue and screw three layers together to form your curved rim joist.



### LAMINATE SIDING FOR A CURVED RAIL

Standard 3/4-in.-thick boards are too stiff to bend around a curve. But 1/2-in. x 3 1/2-in. cedar lap siding will work. Rip 1/4 in. from each edge to make square edges. Spread waterproof wood glue over the meeting faces and use lots of clamps to hold it together while the glue sets. In this photo, we ripped the center pieces narrower to create a groove for the rail parts.

# Build a dream deck that lasts

## Lessons from a 10-year old deck

by Travis Larson  
editors@thefamilyhandyman.com

When we built this dream deck 10 years ago in Little Canada, MN, we made the promise that it would last as long as the house. That's a pretty bold statement. After 10 nasty Minnesota winters, we decided to hold our own feet to the fire and go back to see how the deck was holding up.

### Trex composite decking

Yes, it looks great in the photo and indeed, looks nearly as good in person. No sagging, no rot, nothing bad. And despite heavy use, there's no sign of any wear. The decking doesn't look quite as fresh as new; falling leaves, dirt and party plate spills have all conspired against it. But it wouldn't take much more than a good cleaning to spruce it up.

### The lesson:

If you want split-proof, rot-proof, low-maintenance decking, skip the wood and go with composite decking. It's come a long way in the past 10 years, with much better colors and more realistic grain patterns. We endorse it.

### Stain

All of the exposed cedar got two coats of semitransparent stain during construction. Some of the stain has worn off. There aren't any huge swaths of peeling going on. If you squint your eyes, it still looks pretty fresh, but it's about ready for a recoat.

### The lesson:

If you want stain, put on at least two coats and buy the best, even if it is expensive.

### Cedar siding and trim

The cedar and the joinery have held up well, with one exception. The corner boards on the planters have begun to rot where they contact the decking.

### The lesson:

Seal any end grain with stain before installation. Space end grain above horizontal surfaces at least 1/2 in. to keep it from wicking up moisture.

### Framing

We crawled under the deck to do some probing with a screwdriver to check for rot. Not a sign of it. The pressure-treated framing was absolutely solid everywhere. We even dug down around the wooden posts to check those below grade. They were rock solid too. But since we used foundation-grade lumber for the posts, that was no surprise.

### The lesson:

Choose or special-order 2x6 and 2x4 foundation-grade treated lumber if you're planning on using below-grade wooden posts like ours. Build "sandwiches" with the lumber—it'll never rot. 



TATE CARLSON



TATE CARLSON

## Do you know what to do first?

According to disaster experts, 9 out of 10 people either panic or freeze during an emergency; only one is able to jump into effective action. We have no doubt that TFH readers are part of the 10 percent who deliver—you're hands-on kinds of folks. To make sure you're ready for anything, here are 12 big and little home emergencies and the steps you should take *first* to tackle these disasters head on.

### Wild animal invasion

A squirrel or raccoon in the house may not seem like an emergency, but those critters can do a lot of damage quickly. If all else fails, you may have to call in a wildlife removal service or your town's animal control officer.

**What to do first:** Isolate the varmint by closing the doors to all the other rooms in the house. Then open a window. Leave the room and shut the door. The animal will eventually find its way out the window.

**What not to do:** Don't try to chase the invader out. It'll just panic and hide. If it crawls into a hidden spot and poops, has babies or dies...that's a smelly set of different problems.

**The worst thing to do:**

Don't let your dog or cat help with the eviction. That could result in an expensive trip to the vet or a gory mess.



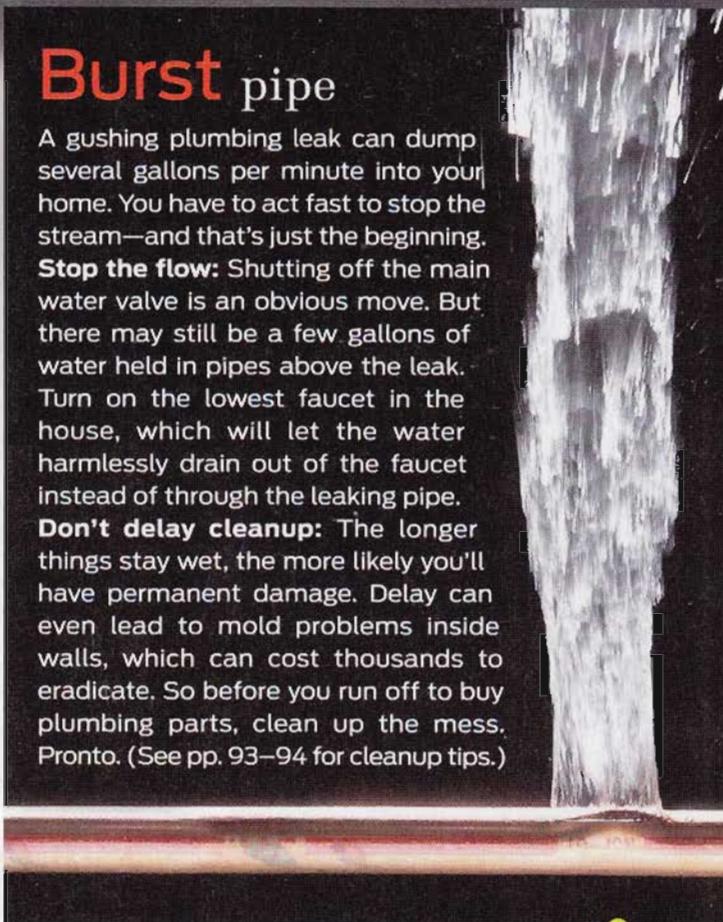
SIEDE PREIS/PHOTODISC/GETTY IMAGES

# Home

### Burst pipe

A gushing plumbing leak can dump several gallons per minute into your home. You have to act fast to stop the stream—and that's just the beginning. **Stop the flow:** Shutting off the main water valve is an obvious move. But there may still be a few gallons of water held in pipes above the leak. Turn on the lowest faucet in the house, which will let the water harmlessly drain out of the faucet instead of through the leaking pipe.

**Don't delay cleanup:** The longer things stay wet, the more likely you'll have permanent damage. Delay can even lead to mold problems inside walls, which can cost thousands to eradicate. So before you run off to buy plumbing parts, clean up the mess. Pronto. (See pp. 93–94 for cleanup tips.)



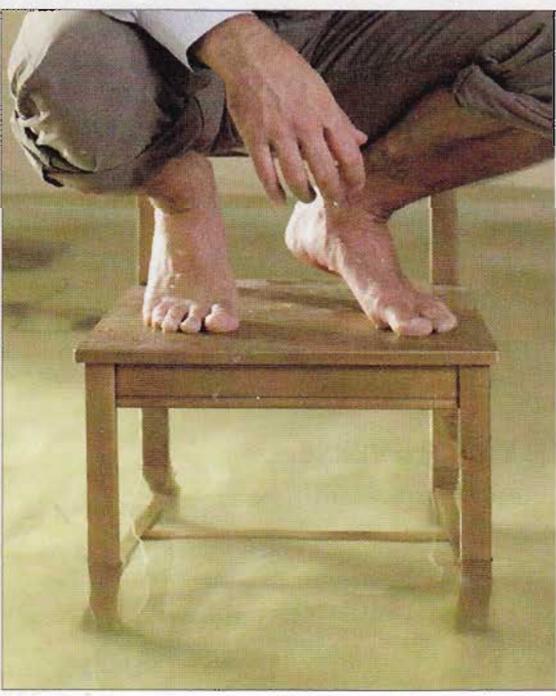
Art Direction BECKY PFLUGER • Photography TOM FENENGA unless otherwise noted

### Flooded basement

Your first impulse will be to wade in and rescue your stuff. But that water might be dangerous, so put on your boots and take these precautions.

**Don't get fried:** Any water in contact with electricity might be deadly. Even a shallow puddle could be electrified by a cord on the floor. Stay out of the water until you've turned off the power to your basement. If you can't reach the circuit breaker box, call an electrician or your utility to cut the power to your home.

**Don't get sick:** If the flooding is due to flash floods or your belongings are leaching toxins, the floodwaters may contain toxic chemicals and will almost certainly breed dangerous bacteria. Protect cuts and open sores from floodwaters and wear plastic gloves when handling your possessions.



MICHAEL BLANN/DIGITAL VISION/GETTY IMAGES



If the damage to your home isn't covered by your homeowner's insurance, don't report it to your insurance company. The report may still go on your insurance record and look like a claim when you shop for new insurance in the future.

# Emergencies

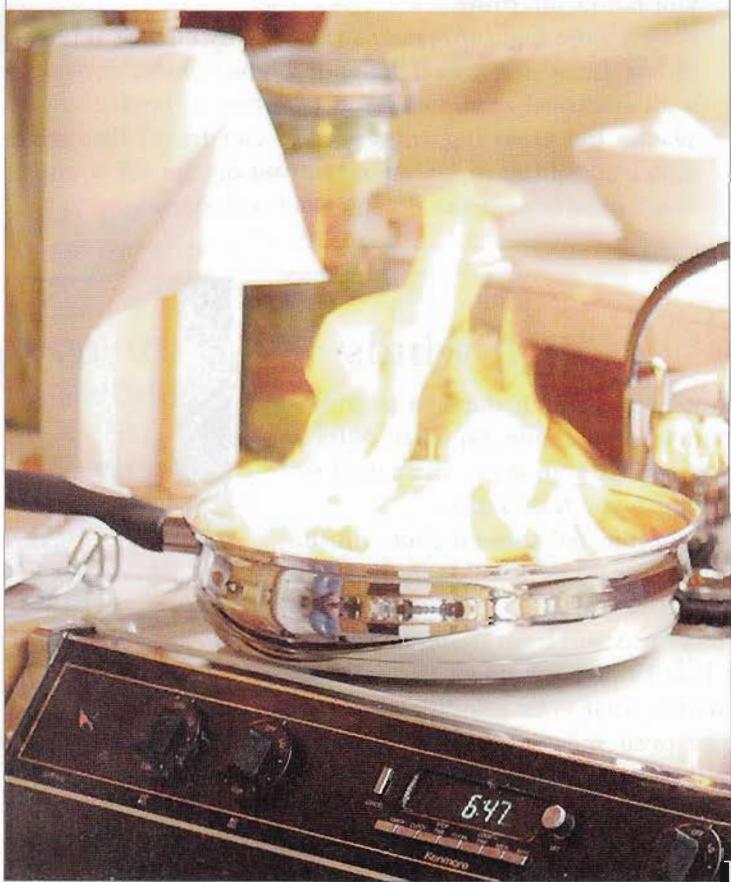
## Kitchen fire

More than any other emergency, fire makes people panic and do dumb things. But armed with a few basic rules, you'll reduce the panic and respond effectively. **React fast:** If it's a toaster fire, unplug the cord and use an ABC (dry chemical) fire extinguisher or pour baking soda into the toaster (and then get a new toaster). If it's a stove-top fire, turn off the burner and smother the flames by dousing them with baking soda or putting the lid on the pan.

**Or do nothing:** If it's an oven fire, the most dangerous thing you can do is open the door. Just leave the oven door closed and turn off the heat to the oven. The fire will eventually smother itself.

**Bad move:** Don't use water to put out a grease fire. It can splash the burning grease and cause burns.

**Worse move:** Never carry a burning pan outside. It can cause a full-scale house fire if flaming grease spills and ignites something else.



BILL ZUEHLKE

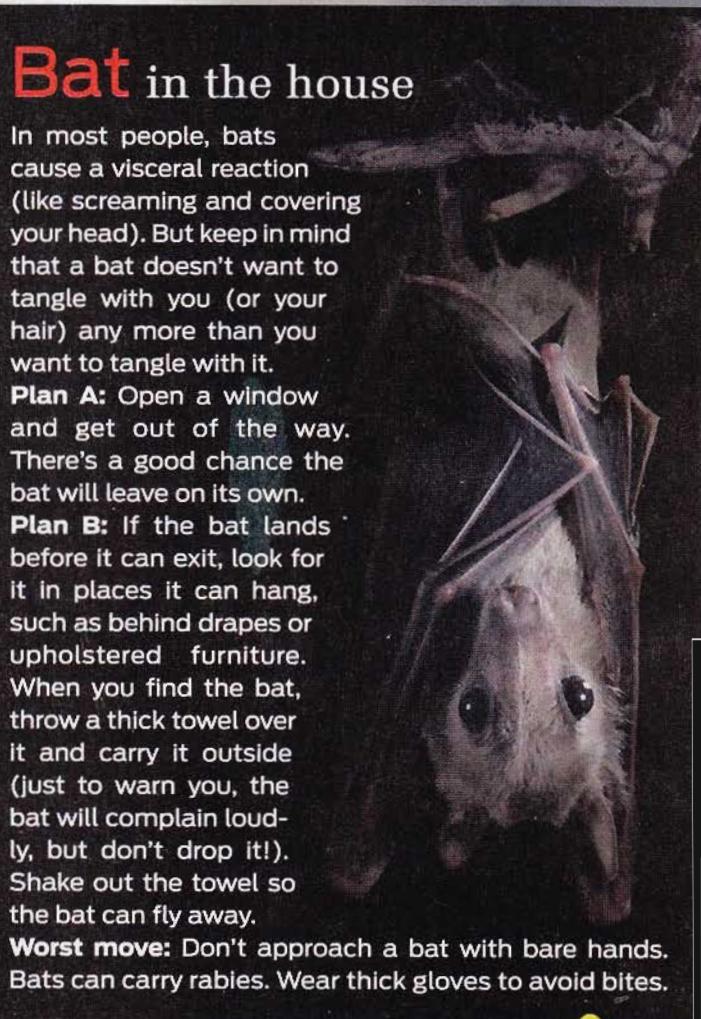
## Bat in the house

In most people, bats cause a visceral reaction (like screaming and covering your head). But keep in mind that a bat doesn't want to tangle with you (or your hair) any more than you want to tangle with it.

**Plan A:** Open a window and get out of the way. There's a good chance the bat will leave on its own.

**Plan B:** If the bat lands before it can exit, look for it in places it can hang, such as behind drapes or upholstered furniture. When you find the bat, throw a thick towel over it and carry it outside (just to warn you, the bat will complain loudly, but don't drop it!). Shake out the towel so the bat can fly away.

**Worst move:** Don't approach a bat with bare hands. Bats can carry rabies. Wear thick gloves to avoid bites.



TORNADO: RYAN MCCANNIS/Flickr/Getty Images

GATE: DIGITAL ZOO/Digital Vision/Getty Images

## Top 5 causes of home fires

- Cooking fires
- Heating equipment
- Smoking
- Electrical (wiring, lamps, outlets, etc.)
- Children playing with lighters and matches

### DID YOU KNOW?

Each year, one out of every eight homes has a kitchen cooking fire.

[thefamilyhandyman.com](http://thefamilyhandyman.com)

Prevent the seven most common causes of home fires. To find out how, visit [thefamilyhandyman.com](http://thefamilyhandyman.com) and search for "home fires."

# Home Emergencies

## Power outage

Surprisingly enough, the worst trouble caused by power outages often occurs when the problem is resolved and the power comes back on.

**Prepare for surges:** Turn off and unplug all electrical equipment, including your tools, appliances and electronics, and turn your heating thermostat down (or cooling thermostat up) to prevent damage from surges when the power returns. (Major appliances can be turned off at the breaker box.) Leave one light on so you'll know when the power is restored.

**What not to do:** Once the power is restored, don't turn everything back on at once, which can create internal power surges. First restore the thermostat setting on the heating or cooling system and turn on your larger appliances. Give the electrical system a few minutes to stabilize before plugging in your remaining appliances and electronics.

**Watch for more trouble:** If your lights are noticeably dimmer or brighter after the power is restored, turn off all the power at the breaker or fuse box and call your electric utility.



### DID YOU KNOW?

Lightning is the second-leading weather-related killer in the United States. More deadly than hurricanes or tornadoes, lightning strikes kill an average of 70 people and injure 300 others each year.

## Electrical storm

Lightning strikes can burn out circuit boards in appliances, computers and telephones, doing thousands of dollars in damage in less than a second. If you hear thunder, power surges are possible, even if you don't see any lightning.

**Protect your gadgets:** Unplug computers and phone lines, and unplug corded telephones and sensitive electronics to prevent damage from power surges.

**Don't wait for flames:** If your home gets hit, call the fire department immediately. Lightning strikes can cause small fires inside walls that smolder for hours before you notice anything.

**Play it safe:** Lightning may strike nearby electrical and phone lines and travel to your home. Avoid contact with electrical appliances and telephones (landlines).

**Wacky but true:** Lightning strikes can travel through metal plumbing pipes. Avoid sitting on the toilet and don't shower or bathe during electrical storms.

## Tornado or high winds

Straight-line winds cause as much damage as tornadoes, but they're more unpredictable. So when a storm with high winds approaches your area, don't wait for the sirens to sound before you take action.

**Take cover:** Move to a protected interior room on the lowest floor of the house, as far as possible from exterior walls and windows. Use pillows, cushions, blankets or mattresses to protect yourself from flying debris.

**Ignore the myths:** Don't open windows to "equalize the pressure" no matter what your grandparents told you. This can cause even greater damage. And the southwest corner of the basement may not be the safest spot to hunker down, especially if it's near an outside wall or window.

### DID YOU KNOW?

About 1,000 tornadoes are recorded each year in the United States—over 10 times more than in any other country.



# Home Emergencies

## Carbon monoxide alert

Carbon monoxide is the leading cause of accidental poisoning deaths in the United States. Take it seriously and make sure you have working CO detectors in your home.

**Check for symptoms:** The early symptoms of carbon monoxide poisoning resemble those of the flu. If the alarm sounds and anyone is experiencing headaches, dizziness, fatigue or vomiting, get everyone out of the house and call 911. **Never ignore the alarm:** Don't assume all is well if no one feels ill. Open your doors and windows to thoroughly ventilate the house. Turn off all potential sources of CO—your oil or gas furnace, gas water heater, gas range and oven, gas dryer, gas or kerosene space heater, and any vehicle or small engine. Have a qualified technician inspect your fuel-burning appliances and chimneys to make sure they're operating correctly and that there's nothing blocking the vents that let fumes out of the house.

## We want your feedback!

Help us improve *The Family Handyman* by sharing your opinion of this and other articles. See p. 4 for details.



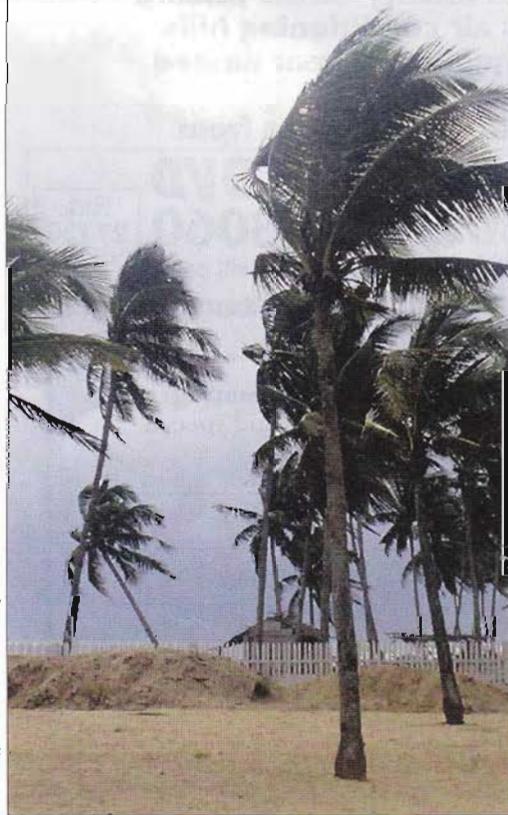
## Leaking roof

High winds that tear off shingles or send broken tree branches through your roof are usually accompanied by rain, so you have to act fast to minimize water damage.

**Quick fix:** For damage larger than a shingle or two, the fastest bandage is a plastic tarp. Secure a tarp over the damaged area with 2x4s or lath nailed to the roof. If possible, secure the tarp over the roof ridge; it's difficult to make the tarp waterproof at the upper end.

**Don't kill yourself:** Trying to patch a slippery, wet roof during a storm is dangerous. Add in high winds or lightning and the situation is deadly. So think twice before you head up there.

EMMA LEE/LIFE FILE/PHOTOGRAPHER'S CHOICE/GETTY IMAGES



## After a hurricane

High winds and storm surges cause a lot of property damage during a hurricane. But more people die in the aftermath of a hurricane than during the storm itself—primarily from carbon monoxide poisoning and electrocution.

**Act wisely:** Don't use generators, charcoal grills or propane camping stoves indoors. And don't clear debris from your home and yard without surveying the area carefully. Downed or damaged power lines can send electrical currents through tree branches and metal fences.

**What not to do:** Avoid an "every man for himself" mentality. Once officials have signaled the "all clear," survey the damage to your home and reach out to your neighbors. It will be difficult to drive anywhere for supplies (if stores are even open), and you'll conserve resources by pooling them. Assess your neighbors' stocks of food, water and other resources. Eating meals collectively will reduce the amount of food that spoils (use fresh foods first) and will conserve cooking fuel.

### DID YOU KNOW?

Hurricanes, tornadoes and winter storms are the top three causes of catastrophic home insurance losses.

Emergencies are dramatic, but far more people are injured in ordinary household accidents. To find out how to make your home safer, visit homesafetycouncil.org.

# Home Emergencies

**Emergency tips** from our Field Editors



#### Backup water supply

If your water supply shuts down, remember that your water heater holds enough drinking and cooking water to last several days. Let the water cool for a few hours before you open the drain valve at the bottom of the tank.

— Tim Hossfeld,  
St. Charles, MO



#### Emergency drain

If your basement is flooding, remove the basement toilet to create an instant, high-capacity floor drain. That will also let in nasty sewer gases, so don't leave the drain unplugged any longer than necessary.

— Jeremy Rath,  
Parker, CO



#### Bucket flush

You don't have to live without a toilet just because the water supply is off. If you have a pool or other water source, you can flush with a bucket. Pour about 3 gallons into the bowl (not the tank) to get a fine flush.

— Dan Noar,  
Santa Rosa, CA



#### Don't get locked in

Garage door openers lock up when the power goes off. Make sure everyone in your home knows about the cord that releases the door from the opener. That way, they can lift the door open and get the car out in an emergency.

— Mark Hinton,  
Clarion, IA



BILL ZUEHLKE

S2 May 2010 [thefamilyhandyman.com](http://thefamilyhandyman.com)

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# Home Emergencies

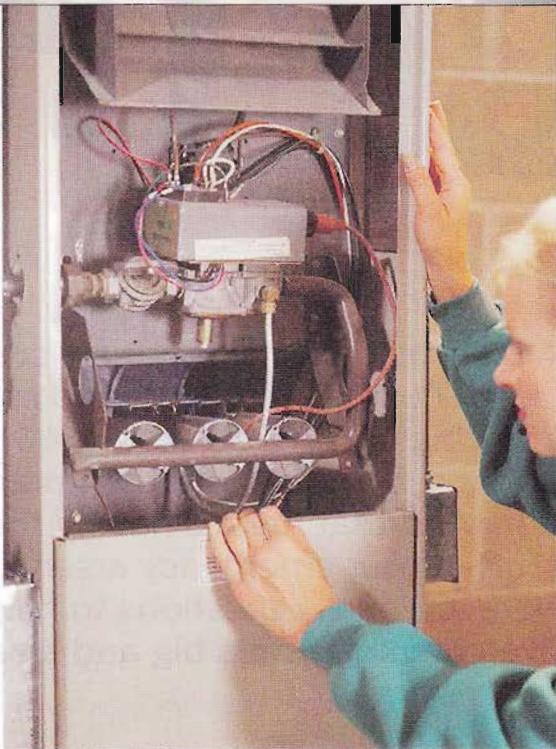
## Dead furnace

As the temperature drops inside your house, your first worry may be the budget-busting cost of an after-hours service call. But there are things you can troubleshoot before you pick up the phone.

Check the simple stuff first:

- Is the filter filthy? A clogged filter can cause the furnace to shut down.
- Is it getting power? There's a switch (just like a standard light switch) near the furnace. Make sure it's on. Check the circuit breaker or fuse box, too. A natural gas furnace won't work without power either—the thermostat, fan motor and gas valve all need electricity to operate.
- Is the gas valve on? The handle should be parallel to the gas pipe.
- Is the exhaust pipe clear? Sometimes heavy snow can cover up the exhaust vent to the outside.
- Does the thermostat need to be reset? Turn it down, then turn it back up.

**Prepare for the worst:** If the inside temperature continues to fall, take action to prevent burst pipes. Turn off the main water valve and drain the pipes by turning on the faucets to let out the remaining water. Use a plunger to drive water out of the toilets and drain traps.



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# BETHE HERO!

A disaster can make you a victim or a victor. Luck plays a part, and so does knowing what to do (see p. 46). But nothing matters more than preparation. And that means having the right stuff in your emergency arsenal. Here are our suggestions to help you overcome disasters big and small.

by Brett Martin  
editors@thefamilyhandyman.com

## » Life support for your house

A backup generator isn't just a convenience that keeps the TV and coffeemaker going when the power is out. It can protect your most valuable investment. A generator will power the space heater that keeps pipes from freezing, the sump pump that prevents a flood, or the power tools that let you button up a damaged roof. That's why some insurance companies offer discounts to homeowners who have generators.

You can spend less than \$500 for a generator or more than \$5,000, depending on the type and size. For a handy online sizing tool, visit [generac.com/residential/sizer](http://generac.com/residential/sizer). If you have a large freezer, factor it into your generator sizing. A freezer full of spoiled food is costly (and stinky). If your setup will require long extension cords, factor them into your budget; a couple of 12-gauge, 100-ft. cords will cost you at least \$100. For more on choosing and using a generator, see March '08, p. 54.

Gear and gadgets that let you save the day



GENERAC

### Don't wait until you need it!

When we got clobbered by a storm in '06, our area had no electricity for three days. By the time the storm hit, the home centers and rental centers had already sold or rented their generators. But because I'd planned ahead and bought my generator long before that, my house had power—the only one on the block that did.

—Tom Flanagan

## » Protect your threads

Don't be like that poor schmuck you've seen at the side of the road, changing a tire and ruining his suit. Toss a pair of disposable coveralls into the trunk, plus some gloves and an old pair of shoes. You may look like a lost lab technician beside the road, but when you reach your destination, you'll look like James Bond. Disposable coveralls cost about \$6 at home centers (in the paint aisle) or you can buy them online at amazon.com and many other online sources.



## » Duct tape evolution

Ah ... the ultimate emergency tool. Who could live without it? But duct tape isn't as simple as it used to be. For one thing, you'll find a wide range of cost and quality out there. Get the good stuff—extra strength and stickiness are worth a few bucks more, especially in an emergency.

And there are new versions, like a 1-in.-wide roll from Gorilla Tape ([gorillaglue.com](http://gorillaglue.com)) for small fixes and transparent duct tape by Scotch (3M.com). They cost about \$6 at home centers and at [amazon.com](http://amazon.com).

### Duct tape kept me afloat

While on a fishing trip, my friend and I hiked through a mosquito-infested forest to reach a secluded lake. The only boat available was a leaky aluminum tub. But that wasn't going to stop us. Trusting our lives to duct tape, we bandaged the hull, and soon we were fishing in paradise!

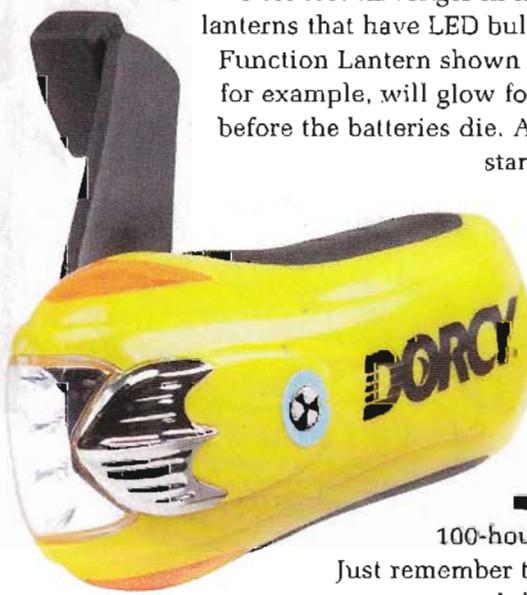
—John Reynolds

## » Long-term lighting

If you can find your old flashlight in the dark and if the batteries work and if you're lucky, you might get a few hours of light. For lasting illumination, there are better options:

- Batteries last far longer in flashlights and lanterns that have LED bulbs. The Multi-Function Lantern shown (\$25; [energizer.com](http://energizer.com)), for example, will glow for about 500 hours before the batteries die. A similar lantern with standard bulbs would shine for less than 10 hours.
- Hand-crank flashlights never die; they just fade away. And then you can revive them with a one-minute wrist workout. In our unscientific experiments, most models shone for about 30 minutes before needing a recharge. Get one at a hardware or discount store for about \$15.
- For low-tech, low-cost lighting, light up 100-hour candles (\$4.50 plus shipping at [amazon.com](http://amazon.com)).

Just remember that candles cause lots of house fires during power outages—and that's more light than you want.



Have you ever saved the day? We want to hear about it. Send an e-mail to [editors@thefamilyhandyman.com](mailto:editors@thefamilyhandyman.com)

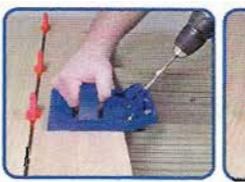
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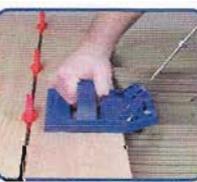
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## » Jump-start your car (or your TV)

Jumper cables are useless if there's no one around to give you a boost. For solo starting, you need a power pack. The simplest power pack is basically a rechargeable battery in a plastic case (\$50).

### Charge lasts for months

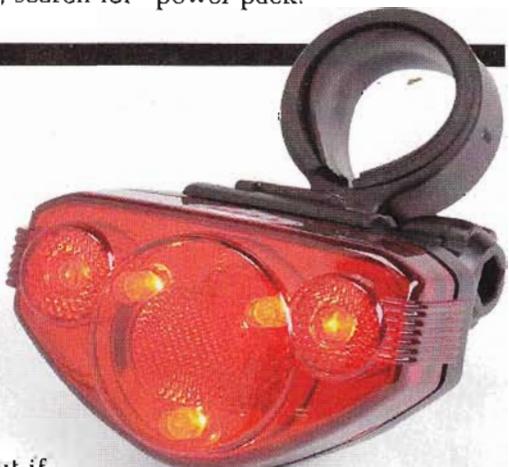
I charged my booster and put it in my trunk in March. When I needed to use it in October, it still had a charge and jumped my car.

—Chris Hauser

But some power packs do a lot more. The Powerpack 300 shown here (\$110; [dura-cell.com](http://dura-cell.com)) includes a flashlight and a compressor to revive flat tires. It even has AC outlets, so you can recharge tool batteries or watch Oprah for about an hour during a power outage. You'll find power packs at auto parts and discount stores. To browse a wide selection online, search for "power pack."

## » Emergency trailer lights

If you own any type of trailer, there's taillight trouble in your future. And if you're lucky, you'll only get a ticket some dark night instead of an F-350 up your rear. But if you're smart, you'll keep a battery-powered bicycle taillight in your trunk (under \$10 at discount stores). When a tail-light fails, strap the bike light to your trailer, where it will alert tailgaters (and hopefully ward off cops). Don't push your luck, though. Fix the problem ASAP.



And one more thing: Be sure you have a spare tire and a wrench for the lug nuts on your trailer wheels—don't expect your car's lug wrench to fit.

## » Instant tire fix in a can

This stuff is like canned magic for flat tires. Just connect the can to your valve stem, push the button and drive away. The can reinflates the tire and seals the puncture. But this is a temporary fix. Get the tire repaired soon (you may pay an extra \$10 to have the sealant removed from the tire). Then head for a discount or auto parts store to pick up a new can (\$6). If your vehicle has tire pressure sensors, be sure to choose sealant that's labeled "sensor safe" or you might ruin a \$200 sensor.

### Better than a spare

When I've driven through construction sites, my tires have picked up nails, screws and things I can't even identify. Tire sealers have stopped the leak every time. If I had to choose between carrying a spare tire and a can of the stuff, I'd choose the can.

— Gary Wentz, *TFH* editor



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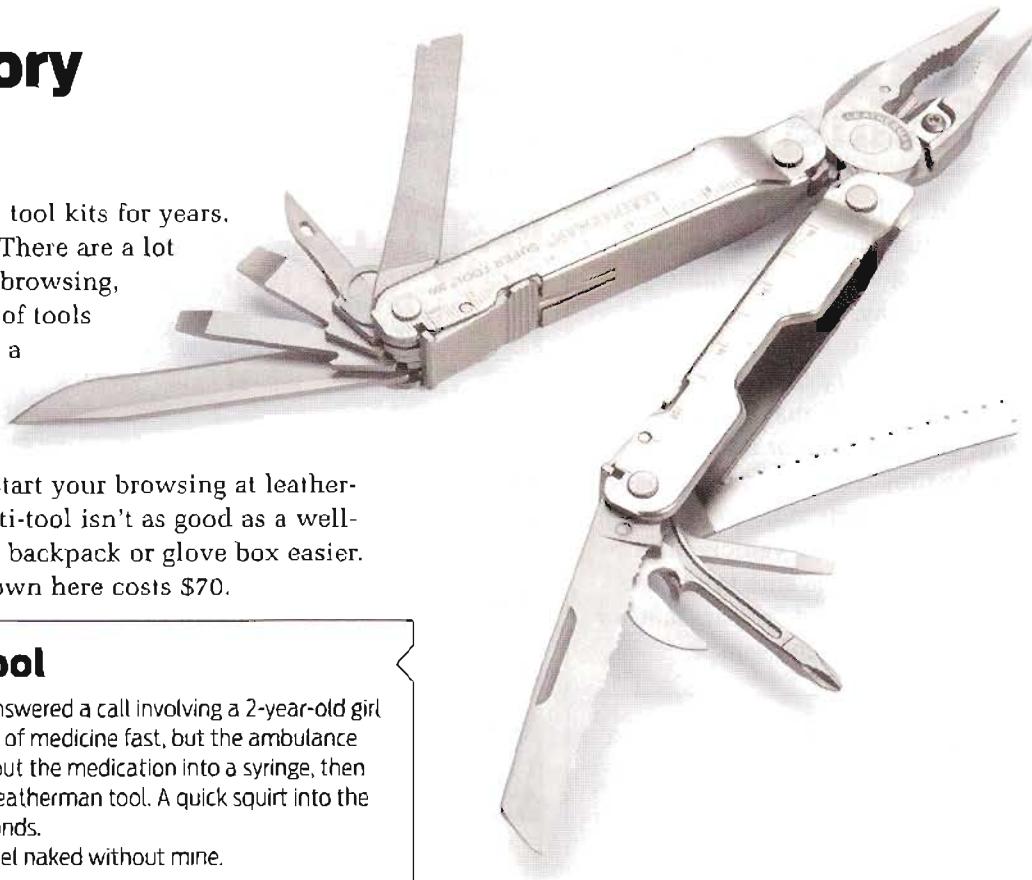
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# »The mandatory multi-tool

If you've owned one of these pocket tool kits for years, you might be ready for an upgrade. There are a lot more options now, and with a little browsing, you can find the exact combination of tools you want, whether you're a hiker or a hunter, a truck driver or a firefighter. You'll also find lots of mini multi-tools, some of them small enough to hang on your keychain. Start your browsing at leatherman.com or gerbertools.com. A multi-tool isn't as good as a well-stocked toolbox, but it fits into your backpack or glove box easier. The Leatherman Super Tool 300 shown here costs \$70.



## Emergency medical tool

I work as a paramedic. One morning we answered a call involving a 2-year-old girl having a seizure. She needed a nasal dose of medicine fast, but the ambulance didn't carry an intranasal applicator. So I put the medication into a syringe, then cut off and crimped the needle with my Leatherman tool. A quick squirt into the girl's nose, and the seizure stopped in seconds.

Most paramedics carry a multi-tool. I feel naked without mine.

— Robert Vahle

60 May 2010 [thefamilyhandyman.com](http://thefamilyhandyman.com)

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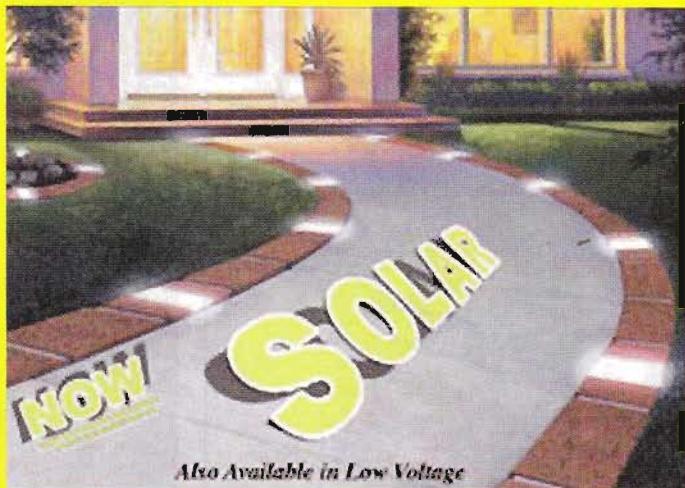


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# » Be Prepared

Emergency advice from  
our Field Editors



David Gibson,  
Kittery Point, MD

## Spare sump pump

Most people don't discover that their sump pumps are dead until after a major storm or flood. And that's when the stores are sold out. So buy a spare now (prices start at about \$60). If possible, buy a pump that's similar to your existing pump so you won't need to mess with different fittings in an emergency.



Pete Plumer

## Stash away cash

A few years ago, our region suffered an extended blackout. Our most important lesson learned: Keep an emergency cash reserve. When the power goes out, ATMs shut down and stores may not be able to process credit cards.



Jim Stapleton,  
Cherry Hill, NJ

## Instant leak stopper

After a record-breaking rainstorm, my basement sprang a leak. I mixed up a batch of hydraulic cement, stuck a handful over the leak and held it there for a couple of minutes until it hardened. Problem solved. Now I always keep a small pail of the stuff around—just in case. (A 3-lb. bag of fast-setting hydraulic cement costs about \$7 at home centers.)



Jim Boyle,  
Houston, TX

## Generator pass-through

Power cords from a portable generator can enter the house through a door or window, but I created a passage that doesn't let in bugs, noise or rain. It's just a pair of 3-in. threaded PVC fittings that pass through my garage wall. I unscrew the plugs, run the cords through and then stuff rags in the hole.



Bill Deitenbeck,  
Troup, TX

## Turn your car into a generator



If you want light-duty backup power, consider an inverter that connects to your car's battery. For less than \$100, you can power a few lights or a small TV. For about \$200, you can get an inverter that will handle bigger loads like a microwave or space heater. The 750-watt power inverter shown here (\$75; blackanddecker.com) is available at auto parts and discount stores. There's more to using an inverter than just connecting it to your car's battery, so do some research before you buy (donrowe.com is a good place to start). And if you want serious power, a backup generator is a much better option.

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# Wooden Walkway



- Faster, easier and cheaper than brick, stone or concrete paths
- The perfect solution for wet or sloped sites

by Travis Larson  
editors@thefamilyhandyman.com

**P**aths built with concrete, stone or pavers are expensive and labor intensive. They require a lot of digging, hauling of tons of materials and the disposal of tons of soil. If you're looking for an easier path, consider a wooden walkway, especially for wet or sloped sites. Building with wood is far less backbreaking. You'll have just a few holes to dig, and you'll be hauling wood instead of stone. It's much cheaper, too. The walkway shown, topped with cedar decking, cost only \$400. (With treated wood decking, it would have cost \$60 less.) A wooden walkway also goes together much faster; this 40-ft. path took two of us two days to build. But enough chitchat—here's how to build a walkway of your own!

## Plan your walkway

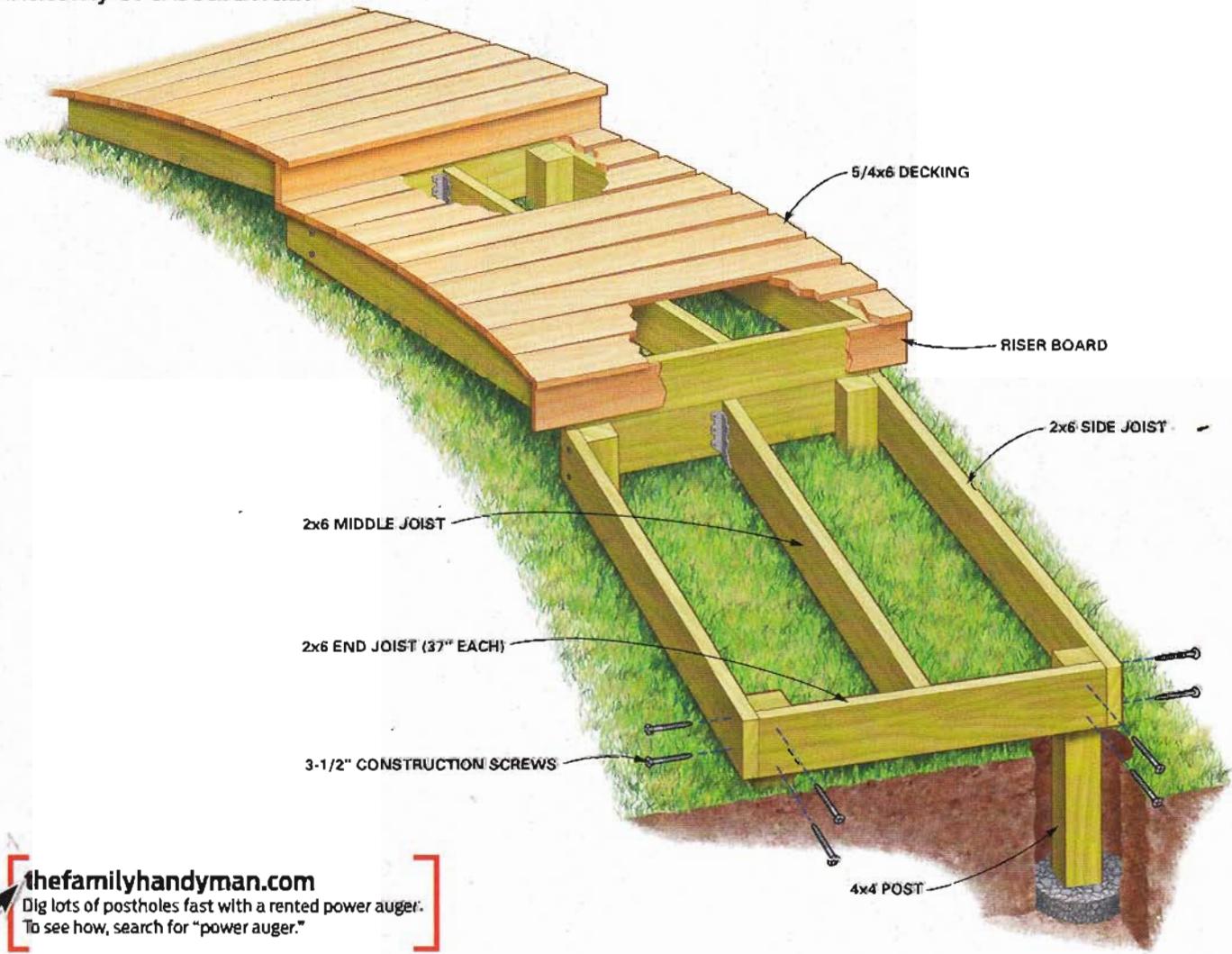
This walkway design works best for a gradually curving or straight path—whatever length you need it to be. Generally, if it's possible for you (or some kid) to pump your way up the proposed walkway route on a bicycle, you can build this project there. If the path has a steep slope in the middle and

you're skilled enough to build deck stairs, end your walkway at the top and bottom of the hill and bridge the hill with steps. If you just want a straight path, your job is simple. Just follow our instructions and skip all the business about curves. Place stakes at both ends and sides of the path, spaced 30 in. apart. Next, string a line and mark your post-holes every 8 ft. Then frame up each section using the same steps we show for a curved path.

This is true plan-as-you-go construction. Layout and construction start at one end of the boardwalk and proceed to the other. You determine the length and the number of level changes needed as you go. There's no hard-and-fast materials list or cutting list; you'll do a fair amount of shooting from the hip. Start by picking up a 16-ft. length of hardboard siding and laying out the path. If you can't find hardboard, screw together strips of any 1/2-in. sheet good. Then you'll be able to make up a preliminary materials list and get started.

**Figure A**

Anatomy of a boardwalk



**thefamilyhandyman.com**  
Dig lots of postholes fast with a rented power auger.  
To see how, search for "power auger."



**1** Mark one side of the walkway with hardboard siding, then screw it to stakes to hold the shape. Mark the path with marking paint.

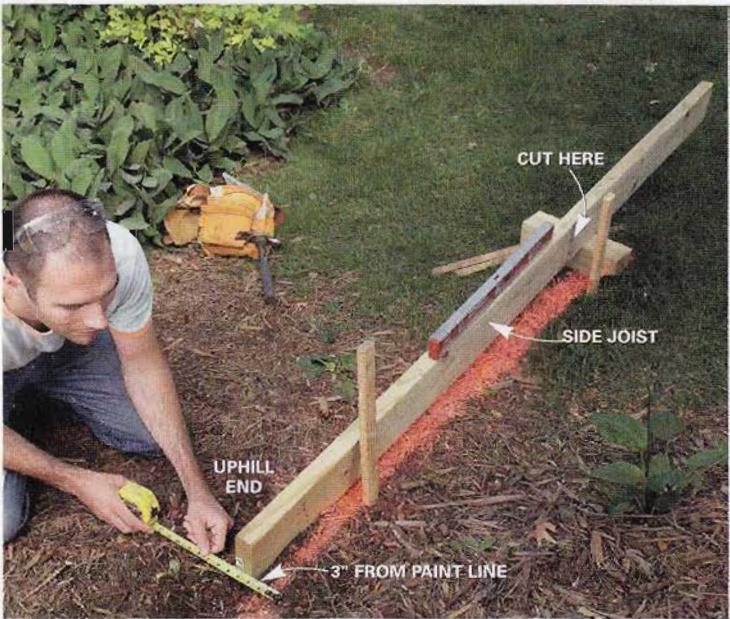
Rip the 12-in. siding into two 6-in.-wide pieces and get some help to bend it to form the shape of your path (**Photo 1**). If you need longer lengths, overlap the siding a few feet and screw the pieces together to ensure a smooth curve. Only lay out one side of the walkway for this step. Start at the downhill end at the highest sloped side of your pathway, screwing the siding to stakes to hold the shape. Avoid tight curves if possible; gradual ones will simplify construction. When you're satisfied, mark the inside of the form with marking paint and then pull it free. Store the siding indoors or moisture may ruin it. You'll need it later.

This is a foot-traffic-only design—no Harleys or golf carts, please! For that reason, the footings are only 2 ft. deep, and the posts rest solely on gravel.

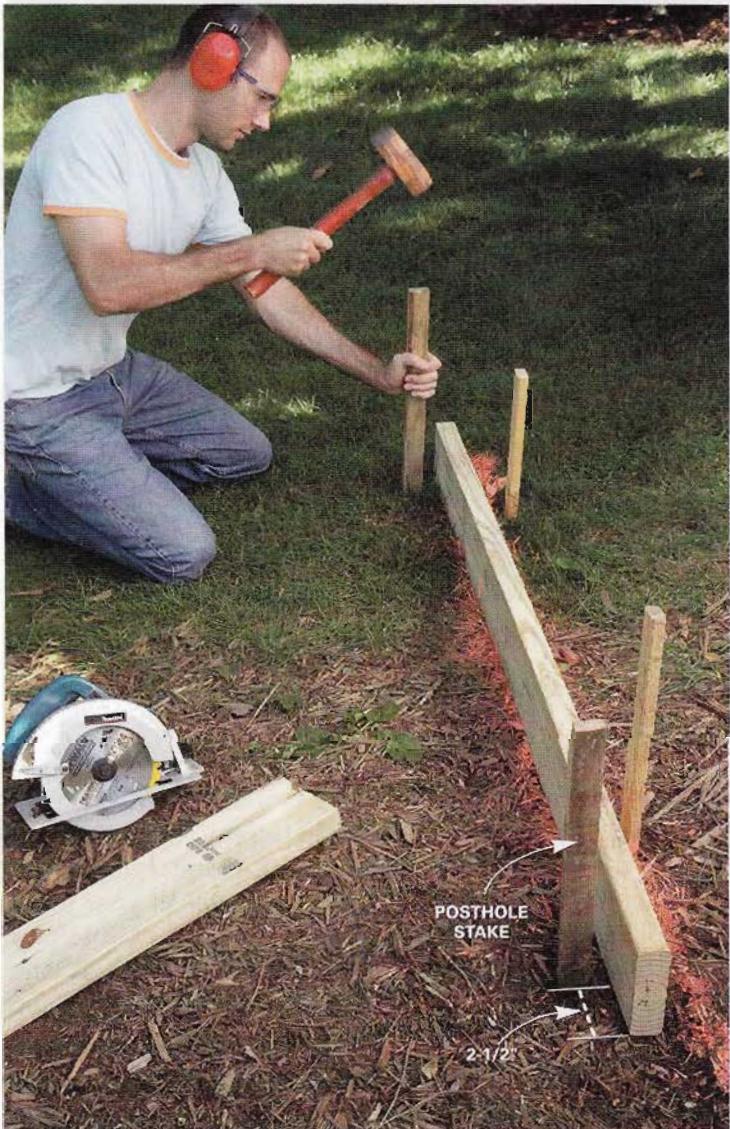
## Buy the materials

This walkway is made completely from treated 2x6 framing and 4x4 posts capped with 5/4x6 cedar decking, but you can use treated or composite decking if you choose. After you establish the length and shape of the walkway, it's time to put together a rudimentary materials list. Because every site is different, we can't provide a precise materials list. We can only give you a rough idea of what to get on your *first* trip to the lumberyard. We recommend spanning 8 ft. or less with every section even if you have longer runs that don't require steps. The truth is that you'll be constantly adjusting the length of each section, and you'll just have to try to use odd lengths of framing material as wisely as you can. But to get started, for every 8 lin. ft. of walkway, pick up:

- one 4x4 x 10-ft. (treated) post
- three 2x6 x 10-ft. (treated) boards
- eight 5/4x6 x 8-ft. deck boards
- two 2x6 joist hangers
- one 60-lb. bag of pea gravel



**2** Establish the length of the first section by keeping the joist level and within 3 in. of the paint line. Mark the post positions and cut the side joist to length.



**3** Mark the posthole using the joist as your guide. Set aside the joist and dig 2-ft.-deep postholes, add 6 in. of gravel, then rest the uncut posts in the holes.



**4** Level the joist to mark each post height and cut the posts to length. Level and screw the side joist to the posts with two 3-1/2-in. construction screws.

You'll also need a box of screws or nails for joist hangers and special 3-1/2-in. construction screws to anchor the framing to the posts. We used the GRK brand, but you can use whatever construction screw is available at your home center or lumberyard. If you can't find any, it's OK to tack things together with 3-in. deck screws and then go back later and install two 3/8 x 3-1/2-in. lag screws wherever side and end joists rest at each post. And pick up decking fasteners. If you're using synthetic decking, use whatever type is recommended. If you use wood, we recommend 2-1/2-in. stainless-steel finishing screws. They're easy to drive and last forever, and the small heads will be almost invisible when you're through.



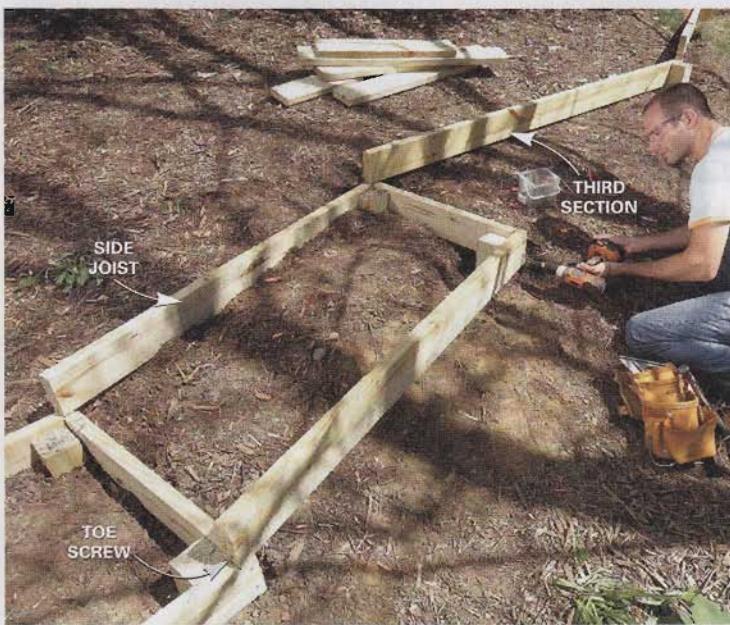
**5** Rest the next stepped side joist on the 4x4 spacer over the first section's side joist. Then adjust the position and cut it to length, allowing for a 1-3/4-in. overlap. Mark and cut the joist and assemble as before.



**6** Install the end joists, estimating their placement to achieve equal angles with the side rims. Mark and dig the footings. Then set each post and end joist.

## Start at the bottom

Use a 4x4 block to support one end of the first 10-ft. 2x6 side joist. Shift the joist up and down the hill until it's level and spaced no more than 3 or 4 in. away from the paint line—anywhere (Photo 2). It's OK to dig the uphill end of the board into the hill a few inches to make the section as long as possible. But don't go above the top or your decking will be in the dirt. The uphill end of the board will define one end of the section; the 4x4 defines the other end. Cut the side joist to length and then replace it to mark the post locations. Stake posthole centers about 2 in. in from the board sides and 3 in. away from ends. Then move the joist aside and dig 2-ft.-deep postholes (Photo 3).



**7** Cut and attach each side joist for each section before continuing to the next level.



**8** Support the middle joists with joist hangers after centering and tacking them into place.



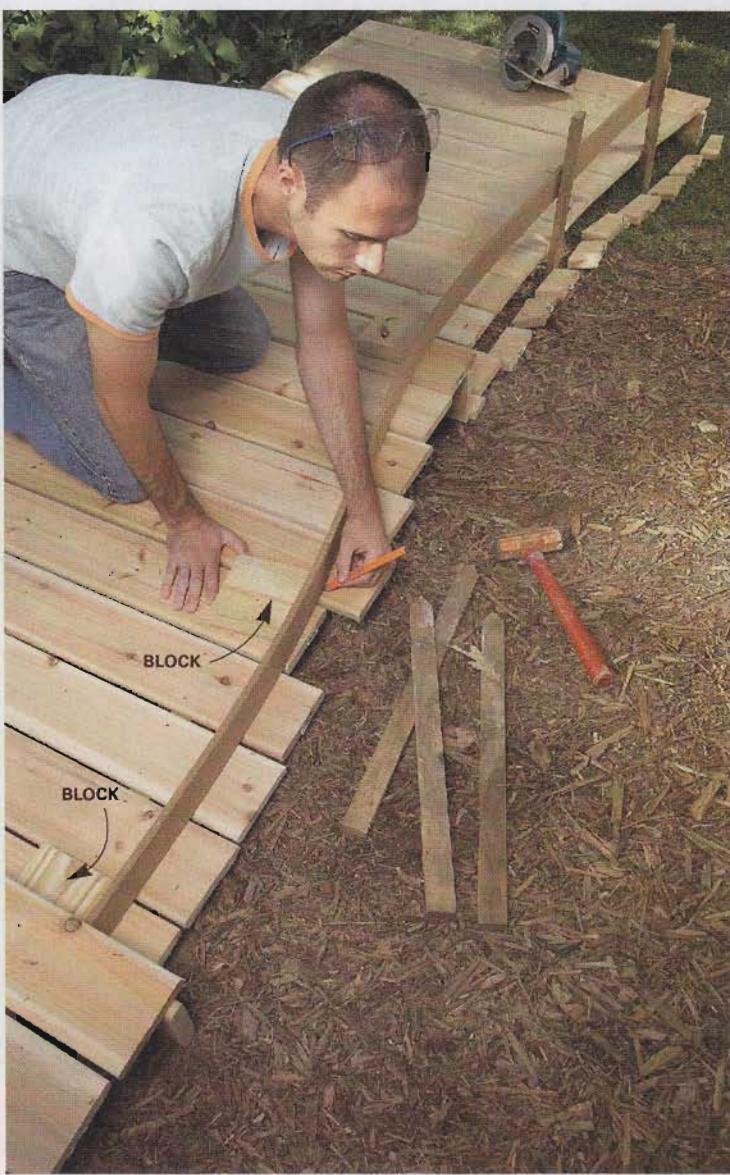
**9** Space the decking, tapering the gap as needed, then screw the boards to the joists.

Dump about 6 in. of gravel into each hole and place the first post in the hole to mark the cutting height. (Rough-cut long posts shorter to make them easier to work with.) Remove the post, cut it to length and then fill around the post and screw on the side joist. Then level the side joist and use it as a guide for marking and then cutting the uphill post (**Photo 4**). Screw the side joist to the posts and then start the next section.

Work your way up the hill using the same 4x4 block and leveling and spacing techniques. But when you cut the downhill end of each side joist, leave a 1-3/4-in. overlap and toe-screw this end into place (**Photo 5**). Finish framing this entire side of the walkway before beginning the other.

## Finish the framing

Start on the other side of the walkway by cutting a 27-in.-long end joist for each step. Then use the joists to set each



**10** Mark the curves on decking using the hardboard siding. Hold the siding in place with stakes or blocks or by hand.

post location (**Photo 6**). At both ends of the walkway, set the posts so they're square with the opposite side joist (**Photo 6**). On the others, position the posts so the angle between the end joist and the two side joists is roughly the same. You can just "eyeball it" to compare the angles. They don't have to match perfectly, just close. Then dig each hole and cut and set the posts and end joists as you did on the other side. Then cut and screw the side joists to the posts and end joists (**Photo 7**). Finish up each section by adding the center joists and anchoring them with 2x6 joist hangers (**Photo 8**).

### Install the decking

Cut the 8-ft. decking into 4-ft. lengths. Screw one board to each riser at level changes (**Photo 9**). The first board should overhang the riser by 1 in. and overhang equally at both ends. Then dry-fit the other boards, spacing them as needed to handle the curve. You'll have to play with this for a bit on each section. Most of the time you'll be able to simply open up the decking gaps at one side a bit more than at the other (see "Decking Tight Curves," p. 70). Once you're satisfied, screw the boards down. You may have to taper-cut the last filler piece at the step to even everything out. Don't beat yourself up striving for perfection. You'll be the only one who'll notice small variations in the size of the gaps.

### Cut the curves

Shape the curves by bending the siding and scribing against it. Do one section and one side at a time. Try to keep the curve 1 to 3 in. away from the joist below. Use blocks or grab a helper to hand-hold the curve while you scribe the first section. Cut off the ends with a circular saw for gradual curves or a jigsaw for tighter ones. At each step, you'll need to remove the riser and the last deck board or two so you can cut them individually (**Photo 11**). Drive stakes against the cutoff ends of the first section. Screw the siding against them to form an even, flowing curve, then anchor the siding onto the next



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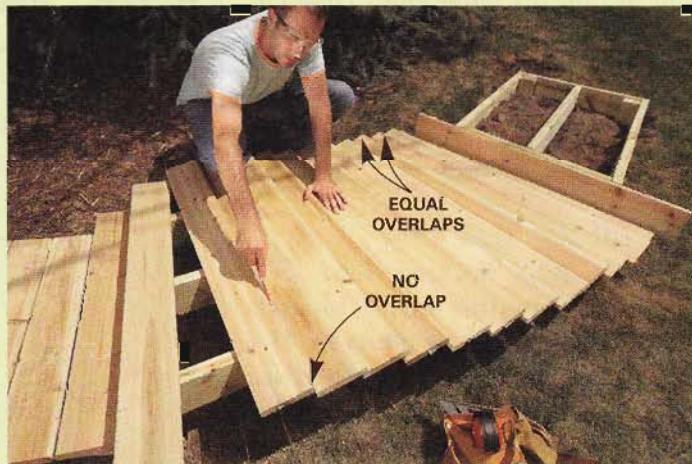
**11** Transfer the curve to the other side by making a series of marks 36 in. from the other side. Connect the marks with the siding to establish the curve, then scribe and cut.

section with blocks while you trace the curve (Photo 10). Cut those ends off and repeat the process along the entire side.

When one side is complete, make a series of 36-in. marks on the other side. (Marking every other deck board is enough.) Then use the siding to "connect the dots" to scribe the cutting line on the other side. The last step is to cut the curves. Now your walkway is ready for finishing. 

## Decking tight curves

If it takes huge tapered gaps to follow a curve, the best-looking solution is to custom-rip each board. But this will require a lot of extra time. Start by laying out the decking in a "fanlike" fashion. Overlap all the decking equally at one end with the edges flush at the other. You'll have to tinker with the overlapped ends until all the overlaps are nearly equal, then scribe the tapers and cut each board. It'll look best if you belt-sand the cut edges to eliminate saw marks and then rout the edges with a round-over bit (we used a 3/8-in. bit) to match the profile on the other side.



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# HANDY HINTS® FOR YARD & GARDEN

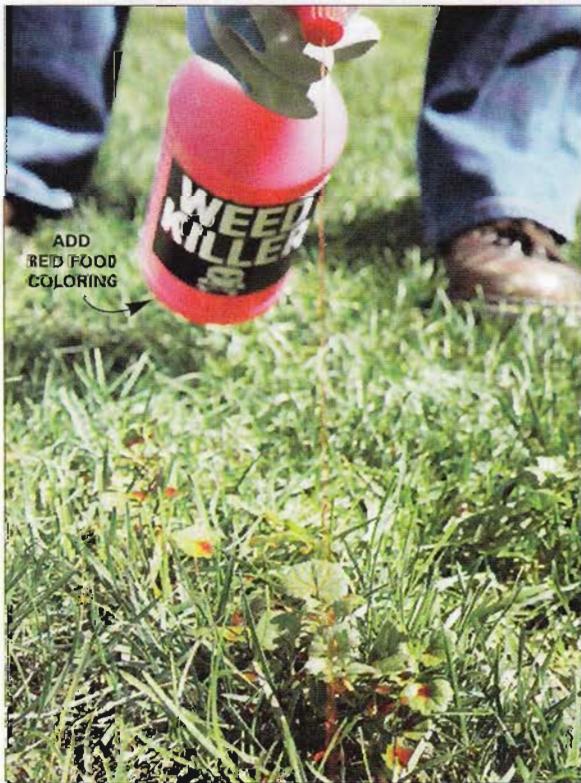
Birds and bees do it—hang out in the yard, that is. We hope this great collection of clever hints and simple projects, sent to us by readers, will lighten your yard and garden chores—so you'll have more time to hang out too!

## Decorate a lamppost

You can train an annual like morning glory or hyacinth bean vine to crawl up a handsome lamppost on the boulevard (or lawn light). Wrap the post with chicken wire and then plant seeds (or seedlings you started indoors) at the base of the lamppost each spring. By midsummer, the vine will have encircled the lamppost. By August, it will have reached the top and be in full flower.



**Get \$100 for your Handy Hint!** See p. 4 for details.



## Weed I.D.

Each spring, I battle the pesky weeds in my yard with a spray bottle of herbicide. But I can never tell which weeds I've sprayed and which ones I've missed. This year I mixed a tiny amount of red food coloring into the herbicide. Now when I spray those evil creatures, I can actually see their "bloody" wounds and I know I've hit 'em where it hurts. I save time and money, and it actually gives me hope that I might someday win the war against all that creeping Charlie!

Dorothy Hull

from our readers  
[editors@thefamilyhandyman.com](mailto:editors@thefamilyhandyman.com)



## Tippy baths aren't for the birds

To keep your birdbath from tipping over and to keep the water in the bowl level, install a level paver stone under your bird feeder. Round or square paving stones like the one we're using are readily available at garden centers (\$3 to \$6 each).

Dig a hole about 2 in. deeper than the thickness of the paver and pack the loose soil to prevent settling. Spread and roughly level a 2-in. layer of sand in the hole. Set the paver on the sand and check it with a level. Lift one edge of the paver and add or remove sand to level it.



MIKE KRIVIT (2)

thefamilyhandyman.com May 2010 73



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## Soft sapling protection

When you plant a new tree, wrap the trunk with a piece of foam pipe insulation before you attach the support wire. The foam is already split, so it's easy to wrap around the trunk. Then twist the wire around it and around the stake. That way, the wire won't cut into the sapling's fragile bark.

Serge Duclos



## Ouchless rose deadheading

Deadheading my roses was a real pain because all the thorns would prick me through my gloves. Now I use long-handled tongs to hold the rose heads while I snip them off with the other hand. It's also easier on my back and cuts my deadheading time in half.

Shirley Calamia



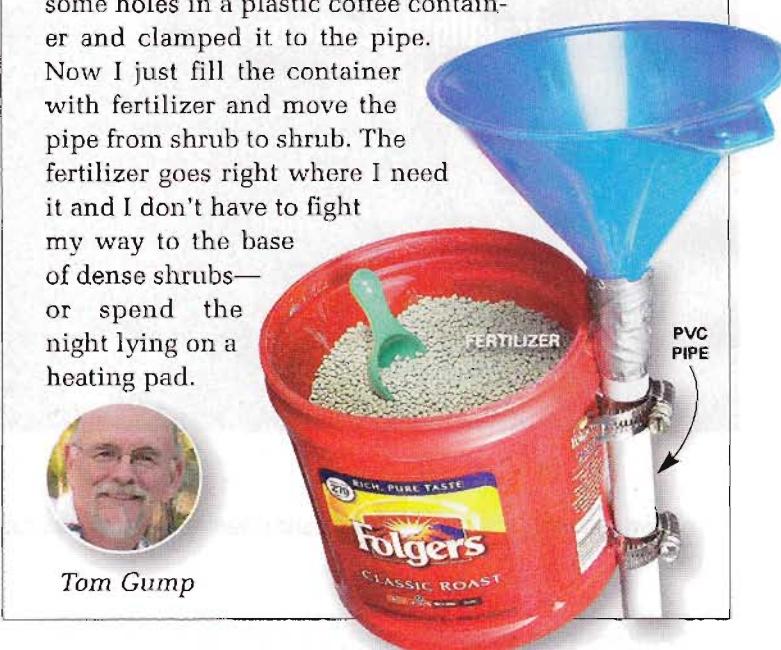
## Back-saving fertilizer funnel

I have a large yard with a lot of shrubs, and fertilizing them each year was a real backbreaker. Granular fertilizer doesn't do any good unless it's spread at the base of the plant near the root zone, and leaning over to fertilize each shrub was killing me. To make this chore easier, I invented the "fert shooter." I duct-taped a funnel to a length of PVC pipe and slit some holes in a plastic coffee container and clamped it to the pipe.

Now I just fill the container with fertilizer and move the pipe from shrub to shrub. The fertilizer goes right where I need it and I don't have to fight my way to the base of dense shrubs—or spend the night lying on a heating pad.

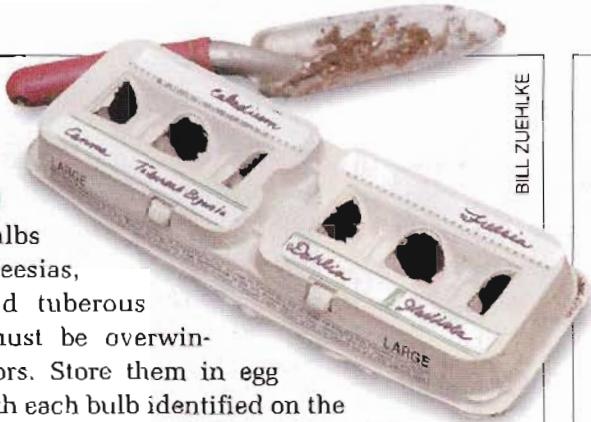


Tom Gump



## Bulb storage solution

Tender bulbs such as freesias, dahlias and tuberous begonias must be overwintered indoors. Store them in egg cartons, with each bulb identified on the top. The ventilation holes help prevent rot.



BILL ZUEHLKE

## Dog-proof your shrubs

Does your dog love to dig holes beneath your shrubs to lounge in? It's great for Bingo, but not so great for the roots of the plants. Keep him from digging around your shrubs by staking chicken wire around the roots. To hold the wire in place, dig a 3-in. trench under the edges of the wire, bend the edges down into the trench and stake it every 12 in. in all directions. Your dog will hate getting his nails caught in the mesh, and his digging days will be over—in that spot, anyway.

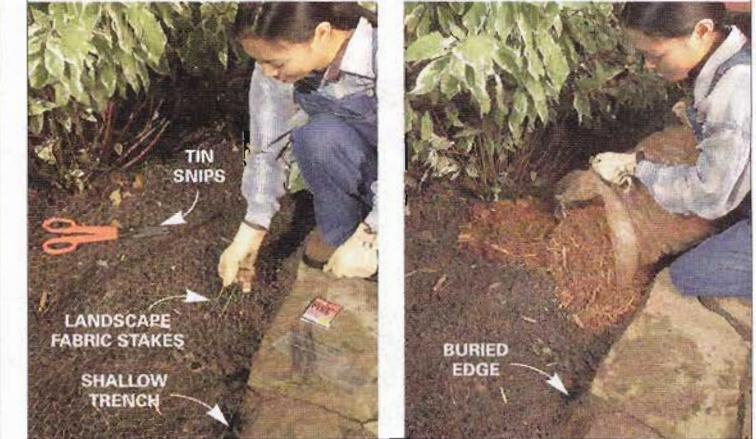


## Underground sprinkler photos

When we installed an underground sprinkler system, I made a map of it before the grass grew back. I turned the water on to each zone and snapped photos of all the sprinkler heads and water lines. I labeled the photos with the zone number and the number of spray heads and rotors and put them in a bag with the controller instructions. We check the photos whenever we need to find a spray head or dig in the yard.

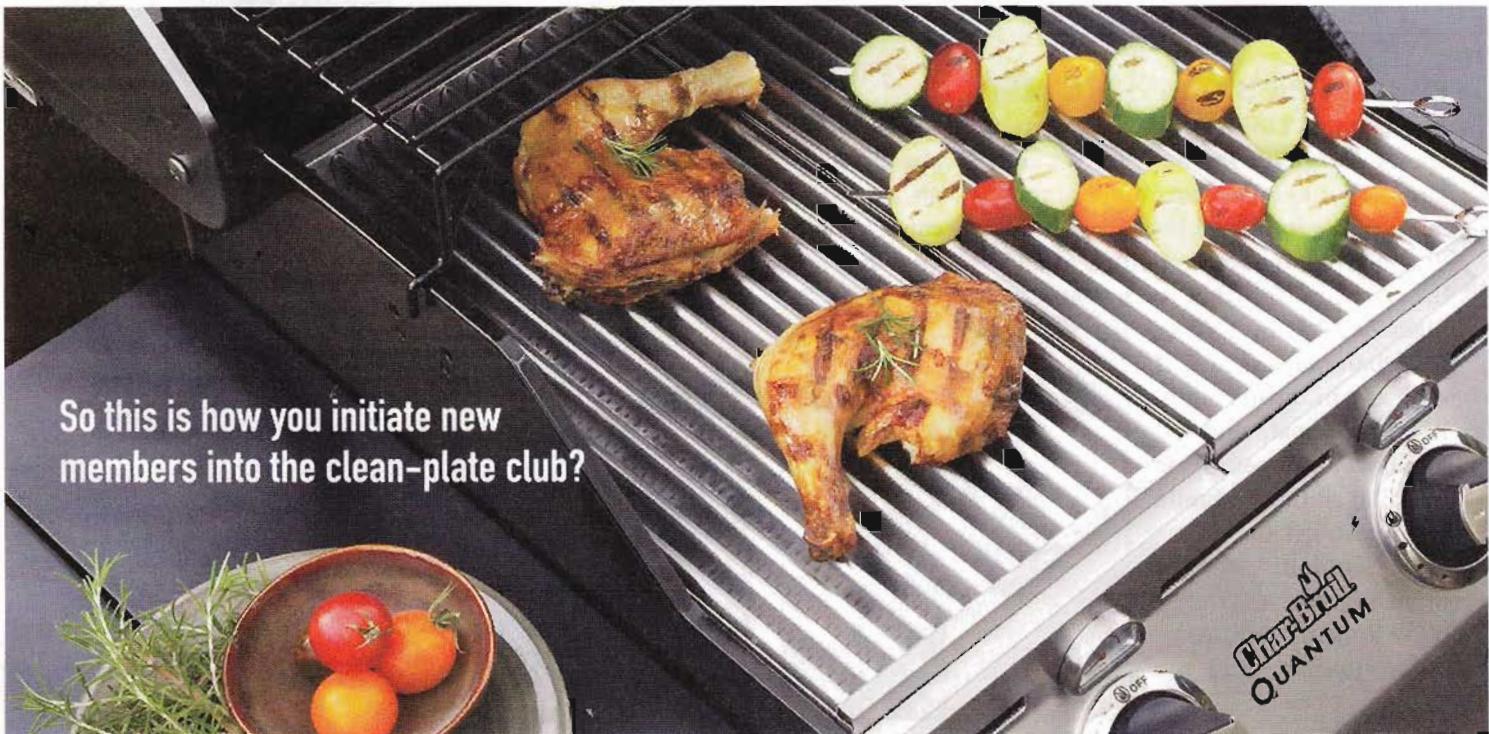


Karen Merkel



MIKE KRIVIT (3)

thefamilyhandyman.com May 2010 75



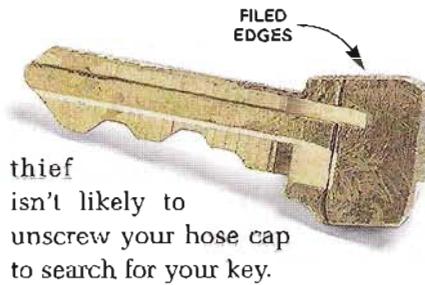
So this is how you initiate new members into the clean-plate club?

Gas grills, charcoal grills and grill accessories at [Lowes.com](http://Lowes.com).



## Hose hide-a-key

Every thief knows that people often hide their spare house key under a doormat or inside a fake rock. Here's a better idea. File down the head of the key (make sure it still works easily in the lock) and then hide it inside the cap of a soaker hose. Brass keys don't rust, and a



thief  
isn't likely to  
unscrew your hose cap  
to search for your key.

*Joel Steingold*



## Soft-grip bag handles

For small grocery trips, I like to walk to the store to get some exercise. The only downside is walking home with a heavy shopping bag that's uncomfortable to hold because the handle digs into my hand. Now I carry a piece of foam pipe insulation and wrap it around the handle for a nice, soft grip.

*Russell L. Durrwachter*

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## Lawn chair umbrella holder

My wife and I love to watch our grandkids play outdoor sports. To escape the hot sun, we always take along our large golf umbrella. The umbrella shades both our chairs, but holding it the whole game gets tiring. I came up with this simple umbrella holder, which clamps right to the lawn chair. Bolt a piece of 1-1/2-in. PVC to the chair and secure it with a 4-in. hose clamp. It works great, and all you have to remember is to collapse the umbrella when you get up or a sudden breeze will blow it over.

*Joseph  
Connell*



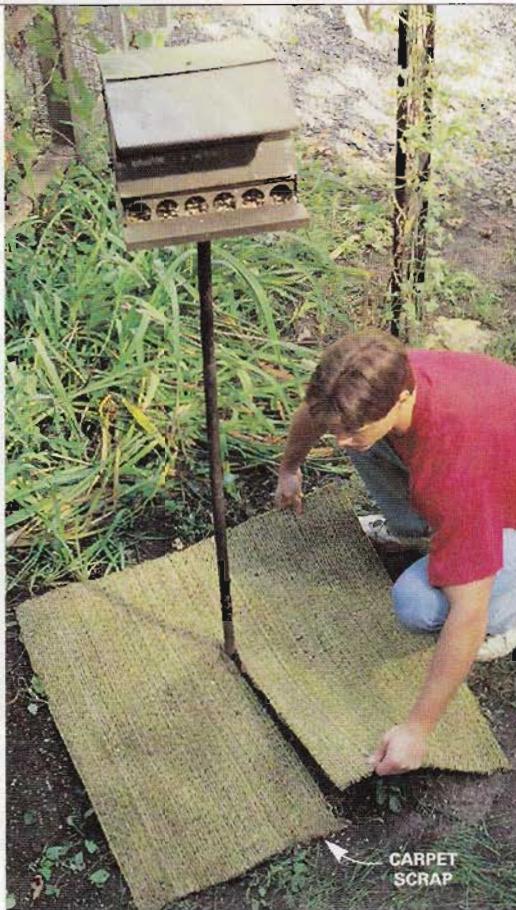
## We want your feedback!

Help us improve *The Family Handyman* by sharing your opinion of this and other articles. See p. 4 for details.

## No more sprouting birdseed

Birdseed that drops to the ground often makes a mess, kills the grass and then grows into an odd jumble of plants. A carpet scrap keeps the seed off, allowing the area to be neat and weed-free.

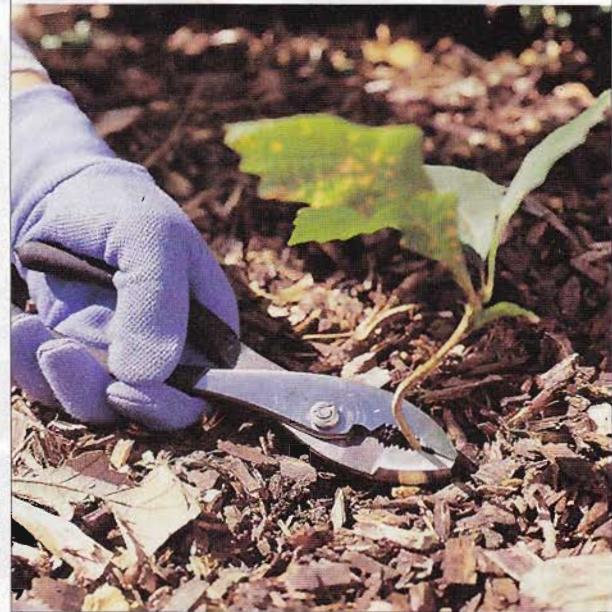
To get rid of the hulls, sweep the carpet or shake it off in the garbage can. However, the carpet scrap will kill the grass and plants underneath. Be sure you move any plants that you want to save.



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When tough tree and shrub "volunteer seedlings" (weeds) just won't give, grab the stem with a pair of pliers. Up they'll come in a flash! It's especially effective on woody plants. Plants with a long tap root or spreading roots still require some digging.



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Whether you're anxious to get going on your spring projects, or simply looking forward to enjoying more time outside, Lowe's has what you need to get the season off to a great start. Visit [Lowes.com](http://Lowes.com).



# New Tools & Gear for Pros



## Nail gun nirvana

For the last 20-plus years, manufacturers have sought the holy grail of nailers—a functional, compressorless, hoseless unit. It looks like Senco has finally figured it out with its Fusion finish nailers, which are powered by lithium-ion batteries. Imagine—no hauling or listening to that compressor anymore—or wrestling air lines.

The battery keeps the gun from being as light as its air-powered brethren, but it's as light as one could hope for. Senco claims you get 500 shots per charge. The battery will reach an 80 percent charge in just 15 minutes.

The 15-gauge brad gun goes for \$350, and the 18-gauge pinner is \$390. Find

dealers and online sources at [senco.com](http://senco.com). The tools were scheduled to hit store shelves in May.

Senco, (800) 543-4596. [senco.com](http://senco.com)



## Hole-drilling heaven

The XCore tile hole saws from RotoZip make drilling holes in tile, stone, marble and granite a snap. They drill at higher speeds and withstand more heat than other hole saws. The company says they drill 10 times faster and last four times longer than other tile hole saws in materials up to 1-1/4 in. thick. You can buy the hole saws for \$60 to \$75 at home centers and [amazon.com](http://amazon.com) (other retailers listed on the Web site). RotoZip, (877) 768-6947. [rotozip.com](http://rotozip.com)

## X-ray vision for remodelers

What you can't see behind walls and floors can hurt you—as evidenced by the perfect hole-in-one into the cable TV line. The Sub-Scanner (\$350) helps you peer into walls and floors to see what's inside. It detects the location and depth of PEX, wood, metal, copper, PVC and

other materials behind drywall, tile, marble—you name it. It also detects rebar up to 6 in. deep in concrete.

The Sub-Scanner runs on a lithium-ion battery. Find retailers and online sources on Milwaukee's Web site. Milwaukee Tool, (800) 729-3878. [milwaukeetool.com](http://milwaukeetool.com)



# Simpler skim-coating

A new approach that's easy to master

by Jeff Gorton  
editors@thefamilyhandyman.com

**if** you're a skilled drywall taper or plasterer, you probably use a hawk and trowel to skim-coat walls. We don't expect to change your mind if you use those tools as second hands. But if you're a remodeler who does only occasional skim-coating to fix wrecked walls, you know it's a tough skill to master.

The method we show isn't faster than traditional skim-coating—you have to do two or three coats and let each one dry in-between. But it's idiot-proof, and the walls will end up flat and smooth. So if you're a contractor who's given up on skim-coating and you always call in a taper for the task, you can save on labor by tackling it yourself next time. It only takes a regular paint roller and a squeegee knife. The 14-in.-wide squeegee knife we used is called a Magic Trowel. It costs \$25 and is available at some Sherwin-Williams stores. To find online sources, search for "TexMaster 9927" or "squeegee knife."





## PRIME THE WALLS

- 1** Roll a fast-drying, stain-sealing primer on the walls. The primer seals loose paper and promotes better adhesion of the joint compound.



## ROLL ON THE MUD

- 2** Spread a layer of slightly thinned all-purpose joint compound on the walls with a heavy-nap roller. Work in small sections so you can smooth out the joint compound before it starts to dry.

## Start by prepping the walls

With this method, you don't just spot-prime; you roll the entire wall with a stain-blocking sealer (Photo 1). If you've always used solvent-based sealers like traditional BIN and KILZ, it's time to try one of the water-based stain killers. Water-based BIN works well, and you won't have any whining from your customers about the smell. But don't rush on to the next step; let the sealer dry thoroughly before applying any joint compound.

These are thin layers that won't fix holes or torn-away paper, or make uneven sections level. Patch these problems with setting-type joint compound. Let the compound harden (it doesn't have to be dry) before you start skim-coating.

## Roll on the mud

Mix all-purpose joint compound to about the same consistency as mud you'd use for bedding tape (the consistency of mayonnaise, or just thin enough to roll on the wall). You'll get shrinkage if you mix it too wet. Don't worry if you get cracking on the first coat; just mix the next coat a little thicker by spooning in some fresh mud from another bucket.

Use a 1/2-in.-nap roller to roll mud on an area about 4 ft. square (Photo 2). Try to keep it as even as you can so the squeegee work will go better for you.

## Wipe it smooth

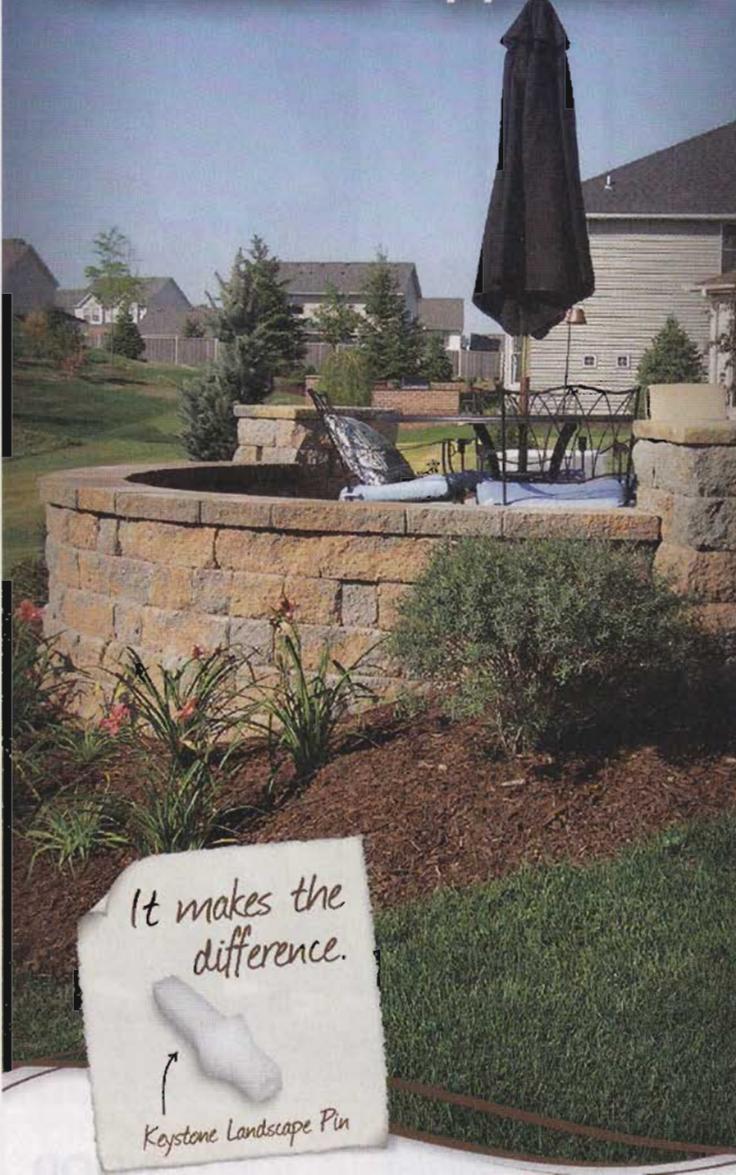
Smooth the mud with the squeegee knife. Keep a damp rag and a mud pan handy. Use the rag to wipe the blade after every few strokes and the mud pan to wipe off excess mud that builds up on the blade. Starting at the top corner, set the squeegee knife against the wall and pull it down (Photo 3). Overlap each vertical pass until you finish the section. You may have to go over some areas a few times. It won't take you long to get the hang of using the squeegee knife.



## TROWEL THE FIRST COAT

- 3** Smooth the joint compound with the squeegee knife. Start in the top corner and pull down.

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For more information on drywall repair and taping, type "drywall" into the search box.



### PULL UP FROM THE BOTTOM

- 4** Roll joint compound onto the lower section and smooth it by pulling the trowel upward.



### SCRAPE OFF LUMPS

- 5** Scrape the wall with a 6-in. putty knife to remove lumps and ridges. Brush off the wall and you're ready for the next coat.



### CHANGE DIRECTIONS FOR THE SECOND COAT

**6** Trowel the second coat horizontally. If you still see indentations or imperfections after the second coat dries, trowel on a third coat.

When you're done with the top section, roll joint compound on the lower half. Pull the squeegee knife from the bottom up (**Photo 4**). Touch up along the edges as you go.

Let the first coat of joint compound dry. To speed up drying time, especially if the air is humid, bring a space heater and a box fan or two. You don't have to sand between coats; just knock off lumps or proud mud lines with a 5- or 6-in. putty knife to avoid streaks in the next coat (**Photo 5**).

### Tip:

Give this squeegee-like taping knife a shot for smoothing out tape joints next time you tape. It tapers the edges and you'll have no trowel or taping knife marks.

### Apply one or two more layers

It sounds like a lot of work to apply two or three coats of joint compound, but the process is quick and the thin layers dry fast. As you know, the smoother you get the wall, the less sanding you'll get stuck with. Trowel off each successive layer at a right angle to the previous one. After the last coat dries, pole-sand the wall with 120-grit paper. If you have too many peaks and valleys, hit the walls with 100-grit first.

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# Deck Building Tips *from a Pro*

**Avoid headaches, save time, and get more customer referrals**

# If

building about 100 decks over the past 25 years makes someone an expert deck builder, I guess I qualify.

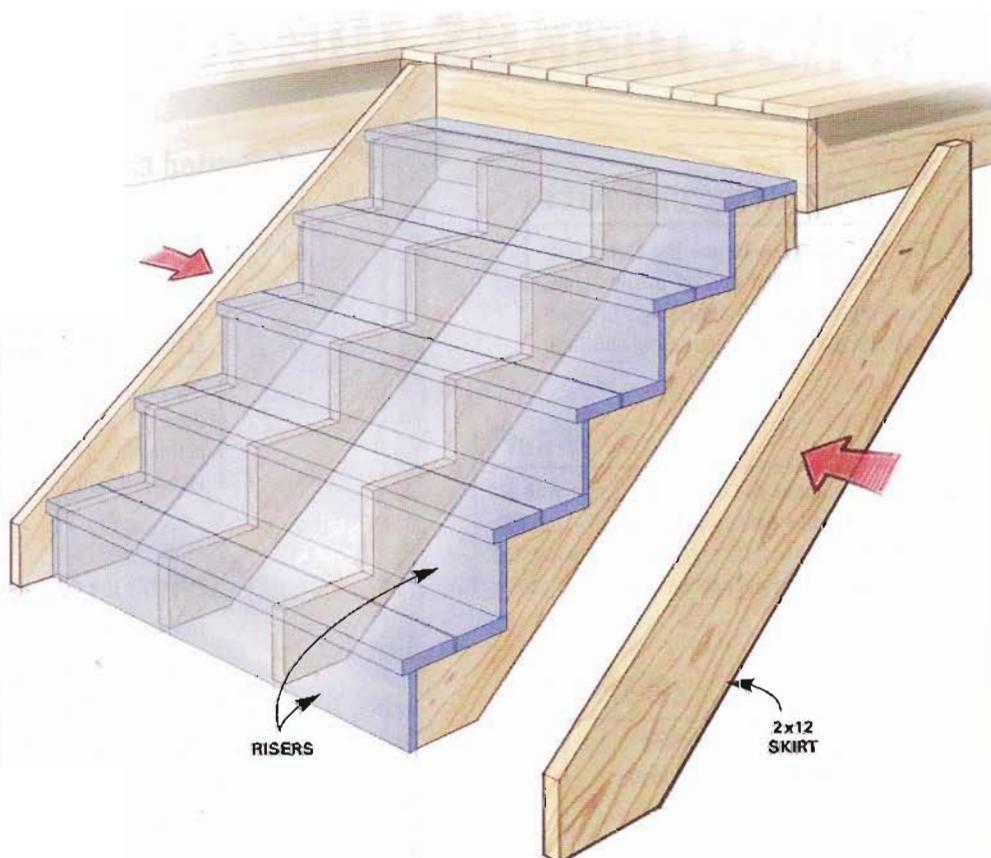
Several of these tips are original and unique. I know—I invented them. Some I figured out by actually constructing the decks; others, by watching them age over the years. Either way, these are some of my favorite deck-building techniques, ones that I'd recommend to anyone planning to build a deck.

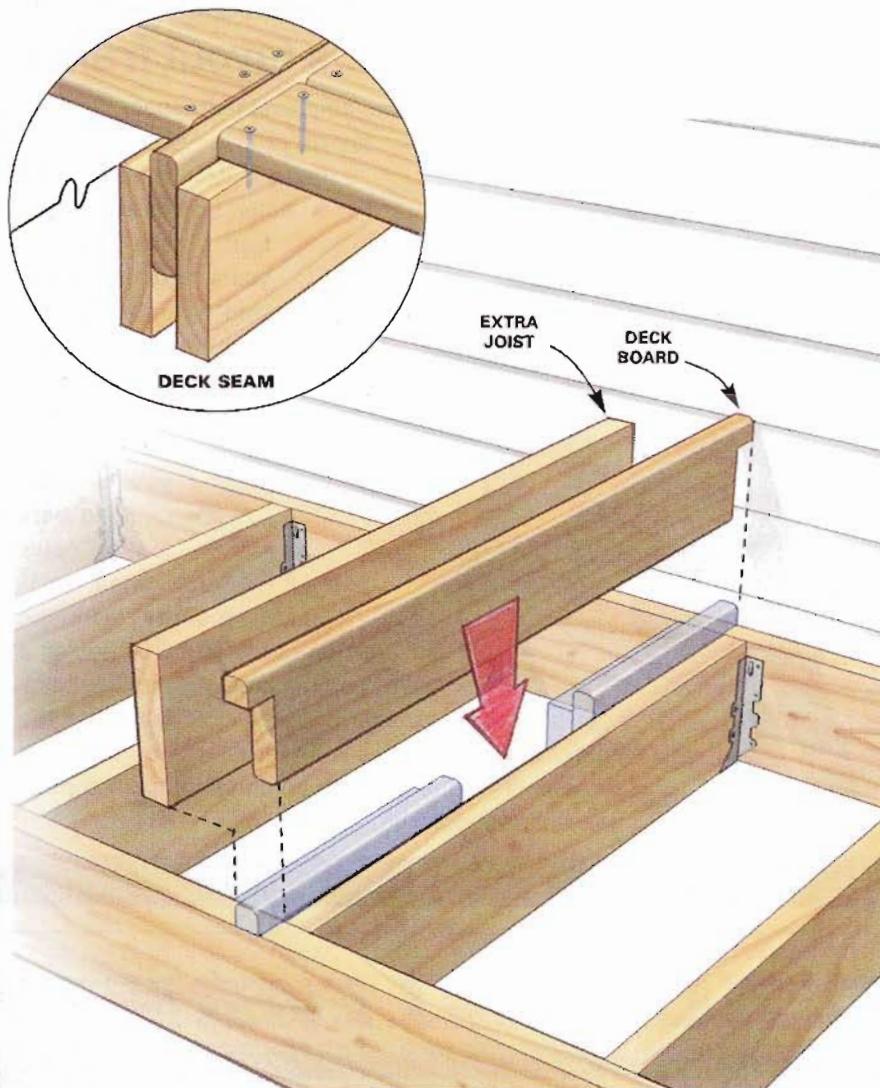
by Travis Larson  
editors@thefamilyhandyman.com

## Build better stairs

Simple notched stair jacks are fine for interior stairs. They get nailed to wall studs for stability and are hidden once the house is finished. Not so with deck stairs. Naked, notched treated-wood stair jacks are unattractive and wobbly, and because there

isn't much meat to attach posts or pickets to, you'll have wobbly handrails, too. But it's easy to strengthen them and spruce them up. Adding sturdy, solid 2x12 skirts to the outside jacks and stair risers does it all.





### Seam a deck

The traditional way most builders go about decking is to randomly stagger joints. The result is that end-to-end deck boards share the 1-1/2-in. thickness of each joist. That can cause problems, especially with wood decks. With only 3/4 in. of nailing surface, fasteners will cause ends to split, and since the board ends have to be tight, untreated wood will rot.

I use a faster, more material-efficient method I call seaming. It's simply strategically placing a seam (or seams, on bigger decks) and using the same length boards for each section. Each seam is a sandwich made of an elevated vertical decking board with joists on both sides. The advantages are many. It's faster than random seaming; all decking ends have a full 1-1/2 in. of framing, so it cuts down on fastener splits; and you can leave 1/4-in. gaps at the ends so end

grain can dry out after it gets wet.

The vertical deck board is for looks only. It makes everything look planned and polished. And there's virtually no waste. If I need to build a 20-ft.-wide deck, I'll make it about 19 ft. 6 in. and use all 10-ft. decking on both halves. That allows for 1-in. overhangs and cutting off some bad ends.

Seaming also works well for solid composite decking, which comes in fewer lengths. If, for example, I'm building a composite deck, 12- and 20-ft. lengths might be the only options. For a 16-ft.-wide deck, I might seam it to have a 4-ft. "sidewalk" down the middle for zero waste. Of course, everything depends on the design and the homeowner. But think about it next time to figure out the best approach.

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### Cobble together a layout frame

Home improvement books and TV shows always recommend laying out deck footings with batter boards and string.

But I gave that up years ago. It's faster and easier to build a layout frame from deck boards or joists.

And unlike string, a frame gives you a solid guide to mark footing holes and align post

bases. You can mark the location of the frame by driving a few stakes and then remove it to dig holes

or pour footings. Then you can quickly replace the frame to align post bases or set posts. You can even screw posts to the frame to hold them in perfect position while you backfill.

#### Calling all pros

If any of you pros out there would like to share some of your deck-building tricks, tips or techniques, let us know. We're especially interested in tips for synthetic decking or rails. We'll pay you \$100 for any we use. Send them to editors@thefamilyhandyman.com.

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NAPA	Fel-Pro	\$99.99

(as of 3/1/2010) RockAuto price is regular price, NOT a special sale price created for this comparison.

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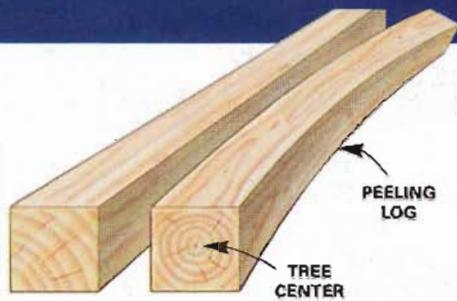
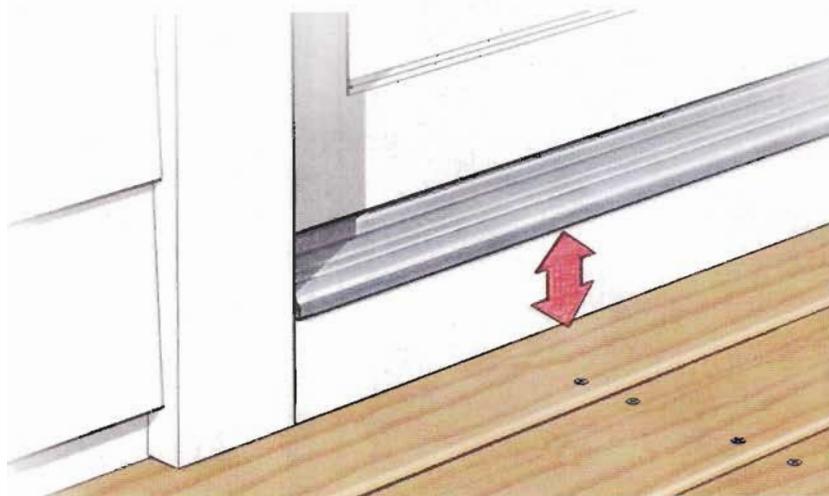


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### Leave a little step below doors

There are so many reasons not to snug decks right under door thresholds. The screen and sliding door tracks on patio doors get full of debris. Storm doors have to bulldoze their way through leaves in the fall. And those leaves will get blown or kicked into the house every time the door opens. Splashing water

rots out wood casing and jamb trim. And last but not least, water will inevitably work its way under any threshold and rot out the subfloor and then the framing. It's nearly impossible to flash between ledgers and thresholds if the decking is flush to thresholds. Leave a 3-in. step: The house and its owner will be a lot happier in the long run.



### Check the end grain on 4x4s

When buying 4x4s, don't just sight them for straightness; always look at the ends. Try to avoid 4x4s that include the center of the tree, especially anywhere near the center of the 4x4. Those can twist into airplane propellers in no time. This is particularly true of 8-footers because those are often the leftovers from "peeling logs," the outer layers of which have been shaved off to make plywood veneer. When I order 4x4s over the phone and need eights, I always order tens to reduce the chances of getting 4x4 leftovers from peeler.

THE PRO SECTION

May 2010 89



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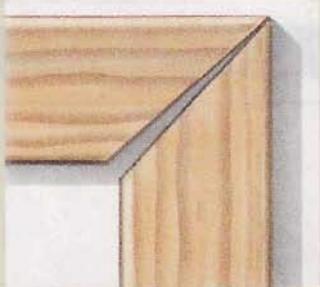
## Get over lag screws

There are few reasons to use lag screws anymore. Construction screws may look wimpy, but they're actually stronger than lags. And you don't have to spend five minutes cranking each one in with a ratchet.

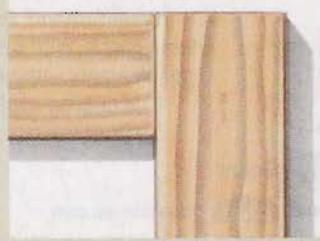
Give construction screws a try on your next deck. You can drive them with any 18-volt screw gun without predrilling—they don't split wood. The price may shock you (they cost four times as much), but you'll never go back to lags.



## Avoid miters



Avoid miters when you can, especially in wide boards. Here's why. Wood installed outdoors immediately starts shrinking—or in some conditions, expanding—mostly in width. Miters will always open up unevenly, and your perfect miter will look like a hack job in no time. Whenever possible, use simple butt joints. They don't look as professional as miters at first, but they look better in the long run.



## How to save a flooded basement

### QUESTION

My basement flooded and I've got wet carpet. Is it possible to save it?

You didn't give us much info to go on, so you'll have to go by these rules: If the floodwater was clean (broken pipe, burst washing machine supply hose or a foundation leak), you can probably save the carpet (the pad is "iffy"). But you've got to act fast. If the carpet isn't

dry within 72 hours, it'll start to grow mold. However, if the floodwater was dirty (sewer backup or washing machine drain water), you need to call in the pros (see "Call in the Pros").

We'll assume the basement was flooded with clean water, the water is

now shut off and the cost of the carpet is less than your insurance deductible (or that you simply want to do it yourself to avoid a claim). Before you set one boot on that squishy carpet, heed this warning: You must turn off the power to the basement. If you're not



Rent a commercial extractor or a carpet cleaner to suck out as much moisture as possible. Move slowly and do several passes in different directions.



Rent a commercial dehumidifier and air mover fan ASAP. Position the machines on opposite sides of the room to pick up and remove most of the moisture.

### Save your stuff

Most people leave their valuable items in the basement while they dry out the carpet. Big mistake. The longer your items sit in the basement, the more moisture they'll soak up. And that means mold. So get them out of the basement fast!

- Move all electronic gear upstairs (high humidity can corrode electronic components.)
- Take photos and artwork off the walls and move them to a dry location.
- Place valuable wet books in your freezer until the "freeze-drying" effect removes all the water from the pages.
- If you can't move furniture out of the basement, place aluminum foil under the legs.

positive which breakers power the basement receptacles, flip the main circuit breaker in the garage panel. If your electrical panel is in the basement, *call an electrician to turn off the power.*

Next, remove any extension cords and power strips from the floor and unplug or switch off all electrical appliances (washer, dryer, HVAC). Ask the electrician (if you hired one) to repower the upstairs (to keep the fridge going) and inspect the basement receptacles to determine whether it's safe to repower them. If not, you'll have to buy several GFCI-equipped extension cords and run power from upstairs receptacles.

Then it's time to extract the water from the carpet. Don't

waste your time with a wet/dry shop vacuum—it simply doesn't have enough power. Instead, rent an extractor (if available) or carpet cleaner (shown; \$65 per day), an air mover fan or two (\$42 per day) and a large commercial dehumidifier (\$100 per day; see p. 93). Rent the largest dehumidifier available. The big ones can remove up to 30 gallons per day, compared with 4 gallons for the largest home units.

Extraction is 1,200 times more effective than dehumidification. You'll want to move the extractor slowly across the carpet to suck up as much water as possible. Don't rush this step! Once the water is out, peel back the carpeting (watch out for those rusted sharp nails on the tackless stripping) and remove the wet pad. Cut the pad into strips, roll it up and haul it outside. If the weather is hot, dry and sunny, you can try drying it yourself by rolling it out on your driveway. If that works, you can reinstall it by taping it back together. Just be aware that new carpet pad is cheap, so don't waste a lot of time trying to dry the old stuff.

Lay the carpet back on the floor and fire up the air movers and rental dehumidifier. Keep the basement temperature at or below 75 degrees F. You might think hotter is better because it will dry everything faster. But a higher temp will accelerate bacterial growth and turn your basement into a petri dish.

While the carpet is drying, check the condition of the wall insulation. If you don't have insulation and you dry out the basement quickly, you don't have to replace the drywall. But if the insulation is wet, it's gotta go (wet insulation *cannot* be saved). Snap a chalk line, cut the drywall with a recip saw and toss the wet stuff. Replace the insulation and install new drywall.

Finally, if your appliances or furnace was under water, call in appliance and HVAC specialists before plugging any of them back in.

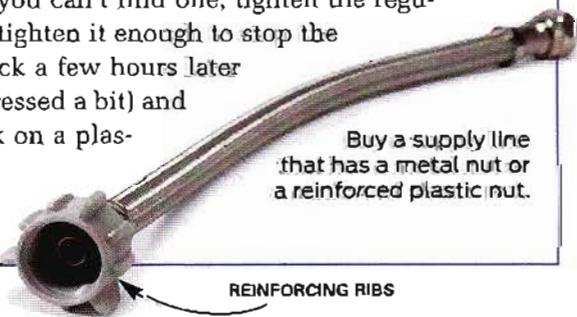
## QUESTION

### How tight is hand-tight?

The directions that came with the toilet supply line said to hand-tighten the connectors. Then the connection leaked. So I used a pliers to crank it down. It turned almost two full turns. Did I overdo it?

If it were up to us, no manufacturer would be allowed to use cheap plastic compression nuts on supply lines. Your question is one we hear often. In fact, Max Lemberger, one of our field editors, just told us his toilet tale of woe. Hand-tightening caused a leak and pliers-tightening caused the compression nut to crack—days after he installed the supply line. The result was a small flood.

Here's our official advice: Buy a supply line that has a metal nut or a reinforced plastic compression nut. If you can't find one, tighten the regular plastic nut in two stages. First, tighten it enough to stop the water from leaking. Then come back a few hours later (when the rubber gasket has compressed a bit) and snug it up a tad more. Never crank on a plastic nut with a pliers.





## QUESTION

### Whole lot of shakin' goin' on

I've leveled my front-loading washer, but it still vibrates like crazy. I'm thinking about bolting it to the floor.

Whoa! That'll just make more noise. Instead of connecting the washer to the floor, you want to isolate it from the floor. The washer's rubber feet are supposed to do that. Unfortunately, at high spin speeds, they don't do a very good job.

That's where vibration isolation/dampening pads come in. Installers use these heavy-duty rubber pads under furnaces and blowers. One company makes a pad specifically for front-loading washing machines. The puck-shaped pads made by Good Vibrations Inc. (330-606-0978) get good reviews. You can get a set of four for \$47 plus shipping from gviinc.net.

Installing the pads is a three-step process, and you'll need a helper for lifting the machine. Start by lifting each corner of the machine and slipping a pad under each foot. Mark each pad location on the floor. Then lift the washer out of the way so you can apply the adhesive discs and mount the pads to the floor as shown.

## QUESTION

### Forget self-closing hinges

I bought a new spring hinge for the service door to my attached garage, but it's not an exact duplicate. I dread the thought of replacing and remortising all three hinges. What are my other options?

Replacement spring hinges are expensive (about \$32 per set). But for just a little more money (\$48), you can buy a high-quality hydraulic door closer (shown here is Global No. TC2204; \$48 from amazon.com). You can find less expensive door closers (\$35), but they don't last as long and are less adjustable.

If you have a steel door, don't use the wood screws that come with the unit (they'll pull out after a week). Instead, drill the mounting holes (make sure the drill is level) all the way through the door and mount the unit with hex bolts, nuts and lock washers. Then fine-tune the door's operation as shown.



Rotate the "sweep" adjuster to slow the closing speed to about five seconds (it will prevent the door from bumping you in the rear as you exit). Then turn the "latch" adjuster to get a quick, one-second final swing to latch the door.



#### QUESTION

#### Do-it-yourself window screens

I have some aluminum-framed screens that are beyond repair. The hardware store wants a fortune to make new ones. Is there some way I can make new ones myself?

Most home centers sell screen frame kits and rolls of screen. Just cut the rails to the proper size with a hacksaw and slide in the plastic corners. The kits come with the spline to trap the screen in the channel, but you'll have to buy a spline embedding tool (less than \$5 at home centers). For simple screens, just follow the directions. However, if your old screens have latches, spring clips or pull tabs, bring one inside and fire up the computer to order the parts you'll need. Have the old screen handy for measurements and to match the hardware to the catalog images at

[alcosupply.com](http://alcosupply.com)  
or [blaine-window.com](http://blaine-window.com).



#### COMMENT

#### Cabinet knob goof

In our March '10 issue (p. 48), we advised you to use removable thread adhesive (Loctite 242, blue) to secure cabinet knobs and drawer pulls. But our photo showed permanent (Loctite 271, red) thread adhesive. If you use the red variety and ever want to change the knobs, you'll have to either heat them or break them off. We're sorry. When shopping, examine the package carefully: Loctite packages both the red and blue varieties in a red tube.

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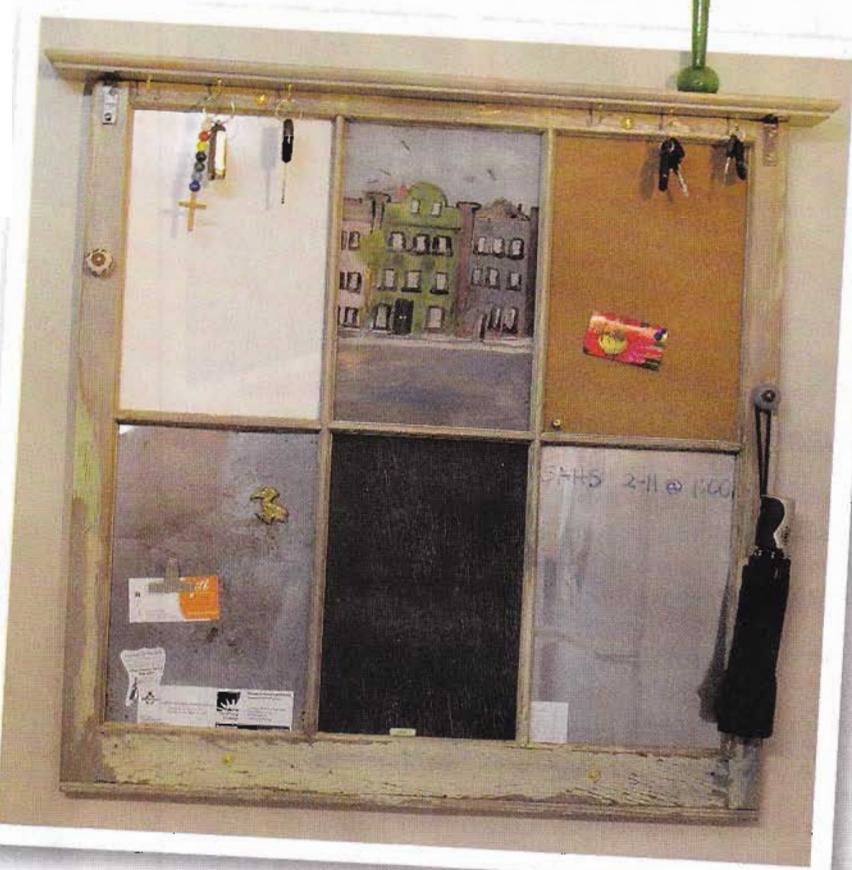
### Window sash message center

Anita Garrett picked up this old window sash for \$1 at a salvage store. In place of the glass panes, she mounted dry-erase, cork and chalkboards, a metal sheet for magnets, a mirror and a painting. Plus, there are hooks for keys, knobs to hang umbrellas, and a shelf.



"I wanted a rustic look, so I brushed a coat of polyurethane right over the old paint and weathered wood."

Anita Garrett



### Great crate drawers

Gene Myers discovered that old milk or bread crates make quick, sturdy drawers for shop storage or kitchen cabinet rollouts. He screwed full-extension drawer slides (\$12 a pair) to the crates just as if they were wooden drawer boxes.



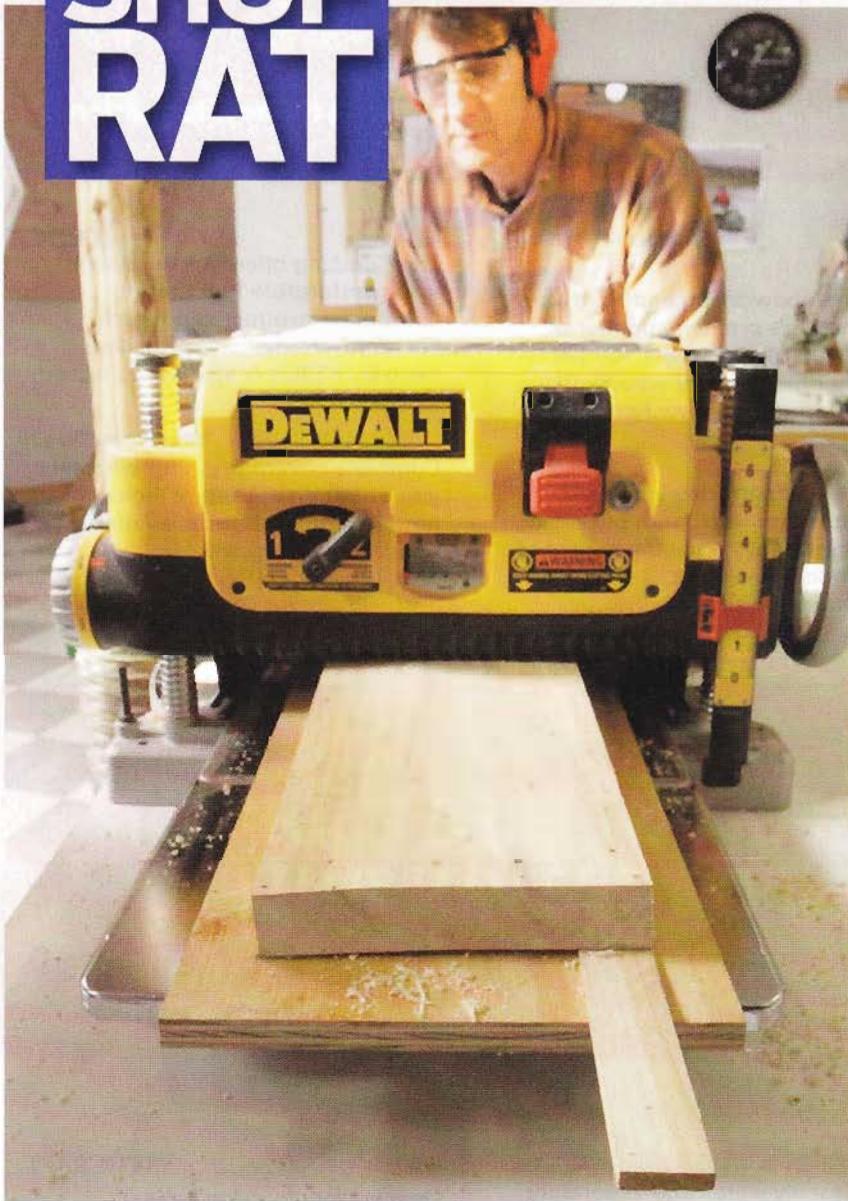
"I got big, sturdy drawers—without spending time and money building drawer boxes."

Gene Myers



No purchase necessary to enter or win. Purchase will not improve your chances of winning. Contest is open to legal residents age 18 or older of the U.S. and its territories and possessions. Contest closes at 11:59 p.m. (ET) on May 16, 2010. To enter and for official rules, visit [thefamilyhandyman.com/myproject](http://thefamilyhandyman.com/myproject). We reserve the right to use any entry in the magazine and pay you \$100 for the photo. VOID WHERE PROHIBITED. Contest sponsored by The Reader's Digest Association, Inc., publisher of *The Family Handyman*.

# SHOP RAT



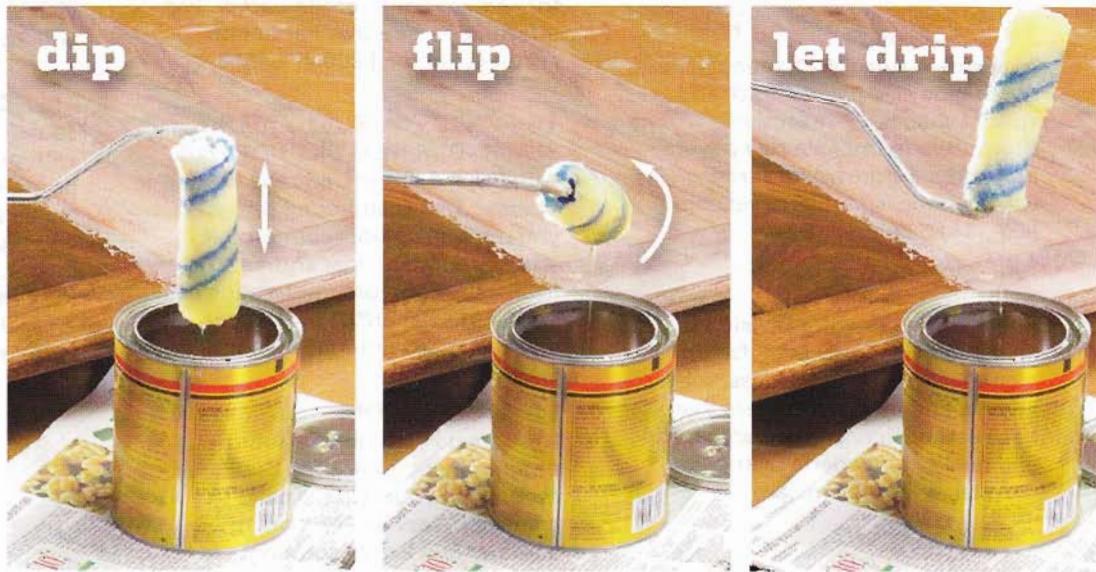
## Planing warped boards

A jointer is the best tool for flattening twisted, warped boards. But what if you don't have a jointer or the board is too wide? Set the board on a "sled," a flat piece of 3/4-in. plywood. Then shim the high corner(s) so the board doesn't rock. Also shim high spots in the middle of the board. Mark the shim locations, remove the board and hot-glue the shims into place. Then glue the board to the shims and the plywood with a dab of hot glue. Send that rascal through until it's flat, then pull it free and plane down the other side.



## No-fuss rolling

Little rollers are perfect for spreading nice, even coats of contact cement or finish over large areas. To roll without any cleanup, dip the roller into the can instead of pouring the liquid into a paint tray. Get some on the end of the sleeve, lift straight up and carefully flip the roller over the can. The liquid will seep down and drip into the can. Then move over to the workpiece for the roll-out. When you're done, toss the sleeve and seal the can.



by Travis Larson  
editors@thefamilyhandyman.com

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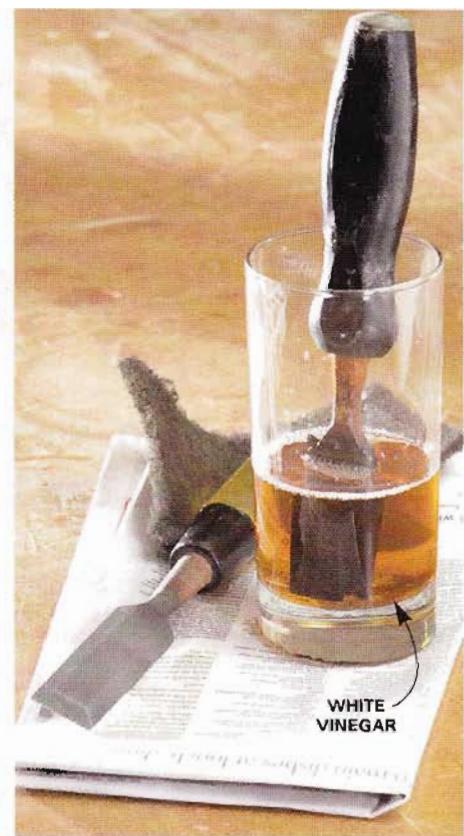
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WHITE VINEGAR

## Clean rusty tools with vinegar

Catherine Miller found a much easier way to clean rusty tools than scraping and sanding them. She poured white vinegar into a tin can (we used a glass) and put a very rusty small wood plane in the vinegar to soak overnight. The next day, with the help of a Scotch-Brite pad, all the rust came off with little effort. The blade needed sharpening, but the plane was almost as good as new. Catherine wraps larger tools in a vinegar-soaked rag, covers the rag with a plastic bag or plastic wrap, and then leaves it for 24 hours. After cleaning off the rust, you just rinse the tool in clear water and wipe it dry.

**Shop Rat note:** We tried this on a rusty old chisel and it worked great. We didn't try the rag business, so you'll have to take Catherine's word for it. The electrolysis tip we showed you in our April issue was more fun, but this was easier!

## We want your feedback!

Help us improve *The Family Handyman* by sharing your opinion of this and other articles. See p. 4 for details.



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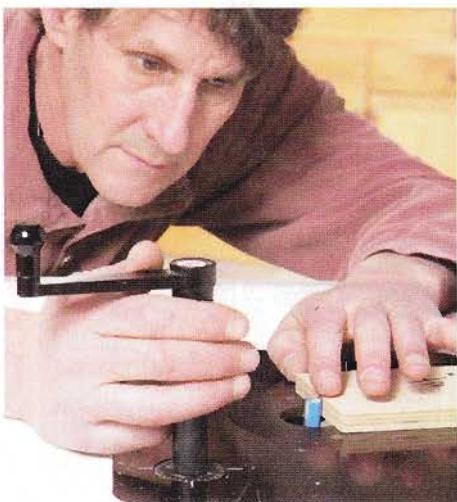
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### Router lifts

If you've seen those slick router lifts in catalogs and wondered whether they're worth the painful price, here's my take: I used to have an under-mounted plunge router on an over-size plastic base, and it was a royal pain in the butt. I'd have to either extract the beast to make fine depth adjustments or crawl under the table like a reptile. Neither option was fun, and both required several tries to get the depth set just right. And there was the hassle of changing bits.

Then I got a router lift and I love it. It makes extremely fine height adjustments simple and fast just by turning a crank. My Jessem model cost about \$300, and the dedicated Porter Cable router cost another \$300. There are \$200 ones on the market, but I haven't given them a try. If you do lots of routing on router tables, a router lift is well worth the big bucks.



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## A good way to cut plastic laminate

My favorite method for cutting plastic laminate to size is the table saw with a crosscutting blade. But you shouldn't try it with just the table saw fence. Laminate is so thin that it always finds its way under the fence and gets trapped during the cut. Kickbacks are likely and dangerous; if the laminate kicks up, it can cut like a machete.

Here's what to do instead. Pick up a short section of 1-1/2-in. aluminum angle for about \$15 at the home center. Chamfer the infed end slightly with a file to keep it from catching on the laminate. Then just clamp it to the fence and cut away. Be sure to allow for the thickness when you're setting the width, though. And don't use steel angle. It has a rounded inside corner, which will cause the laminate to curl up as you cut.

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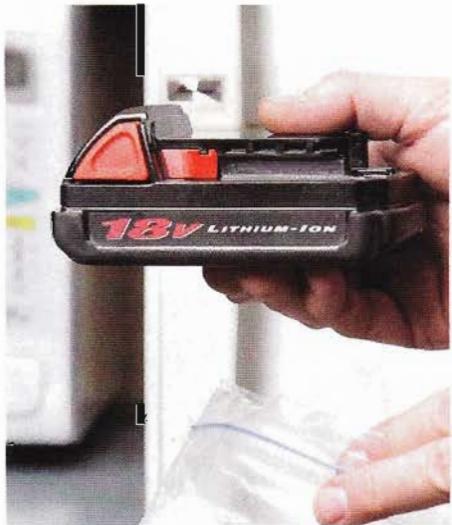
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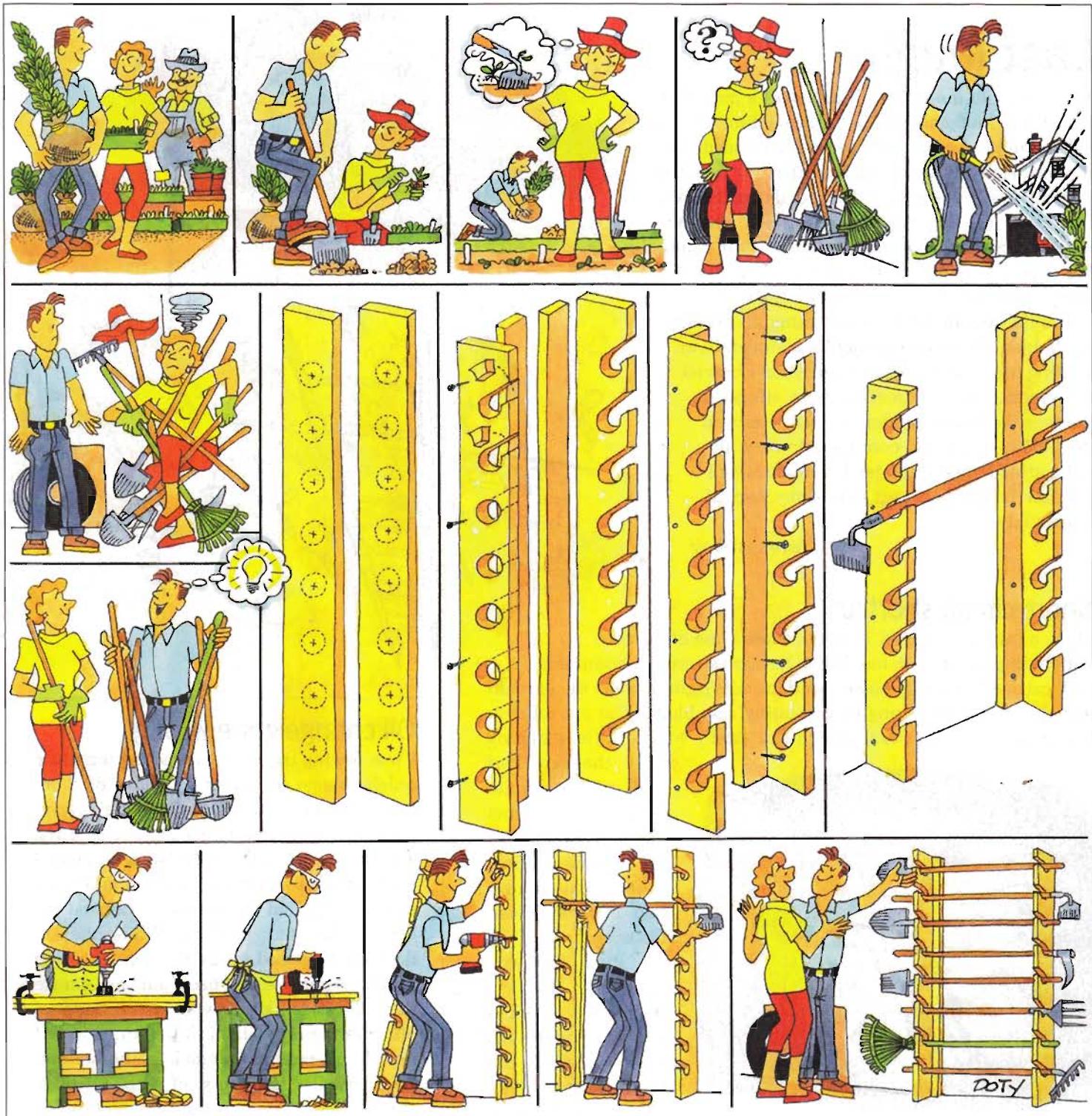


## Double your battery life

Here's a tip for making lithium tool batteries last twice as long. Most kits come with two batteries. Take one of them and stick it in the refrigerator—with the milk, not the ice cream. Lithium-ion batteries have a shelf life of only a few years even if you use them sparingly. And new batteries are expensive. But keeping one cold makes it last at least twice as long. Granted, you'll be a little inconvenienced from time to time waiting for a dead battery to recharge, so this tip won't be practical for pros.

When the first battery finally gives up the ghost, you can start all over with a practically brand new one. And by the way, frequent full discharges will wear out your battery quicker. Several partial discharges with short recharges are better than running the battery dead and then giving it a complete refill.

## Garden tool rack



Our thanks go to Chris Smith, Blacksburg, VA, for this idea.

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See Contributor Guidelines on p. 4.

# GREAT GOOFS

from our readers  
greatgoofs@thefamilyhandyman.com

## Last laugh

My son asked me to help him install a new high-definition roof antenna. I followed him up the extension ladder, carrying everything I needed for the job. Halfway up, I realized that my son had disturbed a hornets' nest behind the gutter, and they were coming out in force to see what the rumble was. Since it was too late to stop climbing, I plowed right past, with only a couple of stings. But now we were stuck on the roof.

I could see the hornets swarming all around the ladder. We sat on the roof for about an hour, waiting for them to settle down, then I braved the swarm once again (two more stings) on the world's fastest ladder descent. I moved the ladder so my son could get down without getting stung. But later that night, I had the last laugh—me and that spray can of hornet killer.

— Jason Abbey

## Short-circuit shortcut

Mike, a carpenter buddy of mine, shared one of his cool remodeling tricks with me. When he comes across a hump in a wall caused by a badly bowed stud, he cuts right through the drywall and the stud with a long reciprocating saw blade. The cut relieves the stress and the stud straightens itself. Just a little patching

to fix the saw kerf and you're done. Brilliant! I had that exact problem in my downstairs bedroom—that hump had always driven me nuts.

I stuck the saw blade into the drywall and started hacking away. All of a sudden, the room went black and the saw stopped.



The bad stud happened to be the one with electrical cable stapled to the side to feed the overhead light. I had cut through the cable and blown the circuit breaker. Needless to say, there was a lot more electrical work, drywall patching and painting ahead of me. But at least the wall was flat—mission accomplished!

— Milo Amundsen



## Oil change gone wrong

I was feeling like a sucker for paying those quick-change oil joints 25 bucks or more when I'm so capable of changing the oil myself. It was time to get my hands dirty. Ten minutes to save \$15? No probelmo! I rounded up everything I needed and went to work. I pulled the plug and watched the black gold start to flow. While the oil drained, I headed to the kitchen for a cup of joe. When I came back out, my garage floor looked like Kuwait after Saddam blew up the oil wells. I didn't know it, but my old oil pan had a crack in the bottom. Ever try cleaning 5 qts. of dirty oil off a concrete floor? Well, it takes longer than 10 minutes!

— Lou Belanger

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