

HANDY

H A N D Y M A N C L U B O F A M E R I C A M A G A Z I N E



Great Giveaway!

Win A Cub Cadet
Zero-Turn Mower! p.72

Entry Enhancements

- ◆ Build a Better Porch
- ◆ Secure Your Soffits
- ◆ Plant a Tree

PLUS:

5 Sprinkler fixes

Working with rivets

Choosing a chain saw

Storage-bench plans

WEB EXCLUSIVE FEATURES

Windshield repair
DIY concrete slab
Door restoration

and more @ www.HandymanClub.com



3.7L | 5.0L | 6.2L | ECO
BOOST™
4 NEW ENGINES

Mr. POWER, Meet **Mr. Fuel Economy.**



Say hello to EcoBoost™ – 365 horsepower. 420 lb.-ft. of torque.
22 highway mpg.* Introduction's over. Let's go to work.

This is the future of truck
THE NEW 2011 F-150

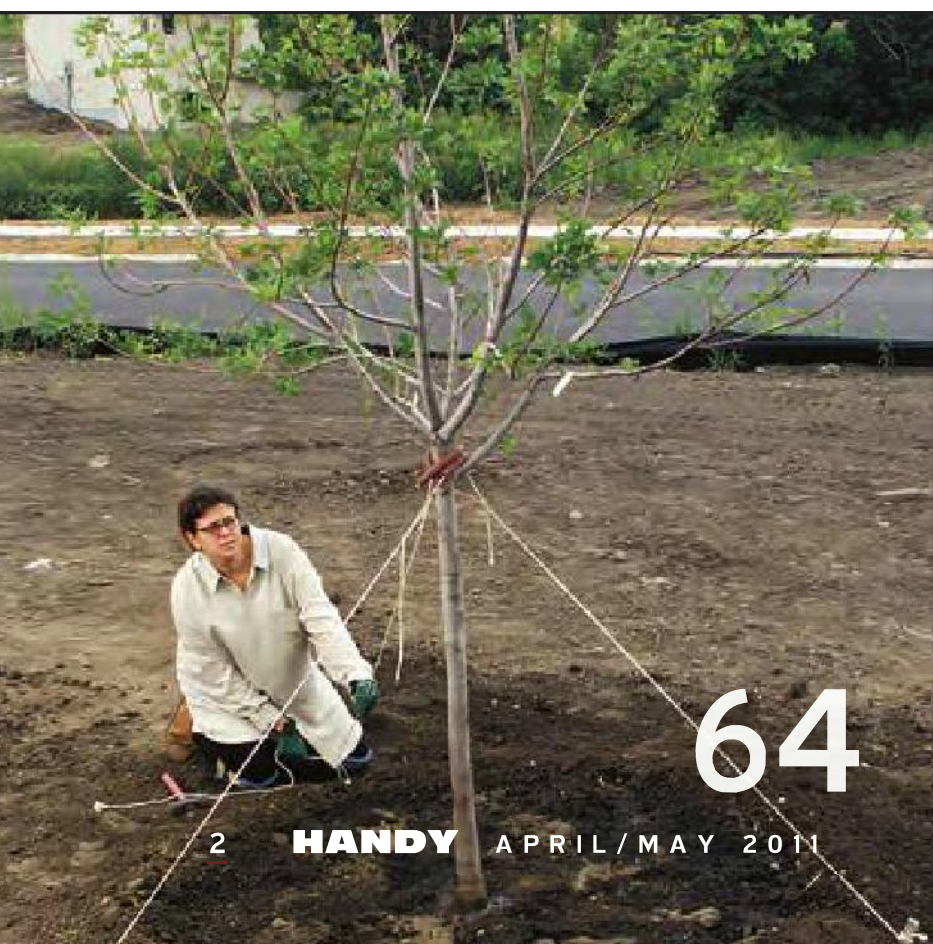
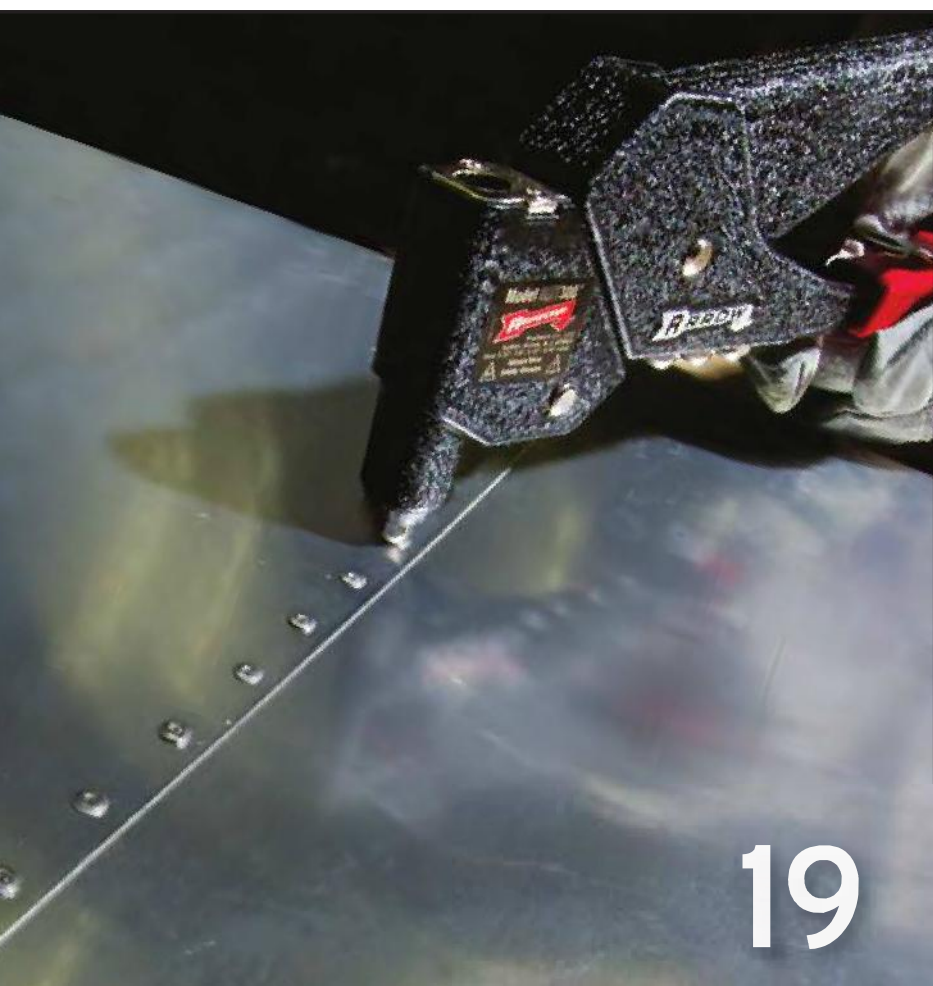
FIND OUT MORE AT **FORD.COM**



*Optional. EPA-estimated 22 hwy mpg 4x2; 21 hwy mpg 4x4 shown. 3.5L V6.

CONTENTS

APRIL/MAY 2011



FEATURES

26 Porch Perfect

Gain space for outdoor living and enhance eye-appeal

36 Choosing a Chain Saw

Why biggest isn't always best — especially for weekend lumberjacks

42 Soffit Solutions

Repairs and remedies to keep your house breathing easy

DEPARTMENTS

CLUBHOUSE

4 Playing It Safe

Why we like building codes

WORKSHOP

10 Storage Bench

Convenient seating for indoors or out

METALSHOP

19 A Riveting Experience

Classic metal fasteners hold strong

GEAR

48 Builders' Show Blockbusters

HANDY editors' favorites from this year's event

PROJECTS I

54 How to Tile a Backsplash

Add function and flair to your kitchen work space

PROJECTS II

60 Sprinkler-System Maintenance

Simple fixes for common irrigation problems

BASICS

64 Planting for the Future

How to get a tree off to a great start

HISTORIES

88 Riveted

The hardware that secures bridges and britches

WEB FEATURES

Online exclusives at www.HandymanClub.com

Build a Decorative Concrete Slab

The right steps for pouring and coating an outdoor floor
by Connie Bastyr

Windshield Repair

Clear insights on DIY fixes
by Joseph Provey

Grand Old Entry

A new skin brings an 80-year-old door back to its glory days
by Gary Legwold

A Riveting Project

How to build the outdoor chandelier featured on p. 19
by Mike Berger

COVER PHOTO BY SCOTT JACOBSON STUDIOS



MEMBER FORUM

HandyWorks/GoodWorks . .	70
Great Giveaway	72
Tip Trader	73
Member Tested	74
Quiz/Member Benefits . . .	79
Expert Answers	80

Find **MEMBER MAIL** at
www.HandymanClub.com

SKIL®

Do it right. Do it with Skil™



Take the pressure off getting a perfect finish.

Make guesswork a thing of the past with exclusive Pressure Control™ technology.

Now getting the perfect sanding pressure is easy, thanks to SKIL's **Pressure Control™** technology. Our 1/4 Sheet Palm Sander, 5" Random Orbit Sander and Octo™ Multi-Finishing Sander all feature our lighted pressure control gauge to clearly indicate optimal pad pressure – and help you get a perfect finish. Soft-grip handles provide the ultimate in comfort and control. And our Clear-View Micro-Filtration dust canister contains even the finest particles, so your workspace stays cleaner and healthier. Octo™ is also the only multi-finishing sander that comes with eight sanding profiles to help you sand those hard-to-reach areas with precision and ease. **Finish every project like a pro with SKIL.**



GOES PLACES
NAILS AND
SCREWS
WOULDN'T
DARE.



Scotch® Mounting Tape.
Available in the
hardware department.



Scotch® Products. Great ideas that stick.

©2011 3M, Scotch, the Scotch Mounting Tape Design and the Plaid Design are trademarks of 3M.

CLUBHOUSE

Playing It Safe

Codes aren't arbitrary, frivolous or meant to be an inconvenience; they're for your benefit

In the world of DIY, *safety* means more than just wearing eye, ear and respiratory protection and keeping your fingers out of a spinning blade's path. Your safety — and that of your family and neighbors — depends on following standardized building practices. As commonsense as this may seem, I've met the occasional homeowner or contractor who doesn't believe it's necessary to get a building permit or adhere to applicable codes. The excuses range from the apologetic — "It's just a small job" — to the confrontational — "It's my business and the government should stay out of it."



Standardized building practices are meant to prevent catastrophic incidents such as house fires.

Those justifications might be reasonable if you lived in the middle of an uninhabited desert. But if you're my next-door neighbor and your house explodes because you thought you knew how to hook up a gas line, I'd probably consider you a selfish public menace.

Standardized building practices are essential to keep America's infrastructure and social fabric intact. Think what might happen if everyone decided to flout the rules. Badly designed decks would crumble; incompetent wiring would spark electrical fires; poorly constructed roofs would cave in. Neighbors would sue. Because of the unpredictability of claims, homeowner's insurance would be unaffordable (or unavailable). And because mortgage companies require homeowner's insurance, loan costs would escalate. The increased need for local emergency services would trigger a tax hike (unless you and your neighbors decide you can do without police, firefighters and paramedics). In short, the equilibrium we take for granted would likely erupt into chaos.

Of course, building experts are not infallible (or incorruptible), and codes are not always perfect. For example, aluminum wiring and some types of plastic plumbing that were code-approved in the 1970s are now considered unsatisfactory. There's always a learning curve to figure out what works and what doesn't, but that determination is best left to engineering professionals.

If your future projects include building a deck, arbor or gazebo; installing a new roof; running electrical wiring or plumbing; or even planting trees, you'll probably face local regulations that govern those activities. None of the rules were intended to oppress anyone. Permits, codes and inspectors exist for the benefit of your community and are meant to help you do the best and safest job possible. So don't hesitate to be an active DIYer, but be a safe and considerate one.

LARRY

Larry Okrend
Executive Director
Handyman Club of America

P.S. Don't miss out on our lively Facebook discussions. To join in with editors and other Club members, click "like" on www.facebook.com/HandymanClub.

PRESERVE THE BEAUTY WHATEVER THE WEATHER.



Give wood strong, long-lasting protection
with Helmsman® Spar Urethane.



From snow to rain to hot sun, the elements can take their toll on beautiful wood. That's why you need the superior, long-lasting protection of Helmsman® Spar Urethane. It contains special ultraviolet absorbers to help protect wood from the fading effects of the sun. And as temperatures change with the seasons, its flexible finish expands and contracts to resist cracking. Harsh weather comes and goes. But with the protection of Helmsman® Spar Urethane, the beauty remains.



Also available in a
water-based formula



Makes And Keeps Wood Beautiful™
Get Inspired. Visit minwax.com

Backyard Barbeques with a New Twist

A COMBINATION OF WOOD AND CHARCOAL



PRECAST

A mobile outdoor fireplace/charcoal grill that uses durable, handmade, individual, fire rated link-logs, does not require a mason, special skills or cement.

Handmade in New England

If this is your idea of a good time with family and friends then please call PRECAST

Contact us for a free brochure

Phone:
508-378-7742

Website:
www.precastoutdoorfireplaces.com

e-mail:
precastfireplaces@comcast.net

EXCEPTIONAL CUSTOMER SERVICE FOR OVER 30 YEARS



Volume 19 ♦ Number 2 ♦ Issue 105

EDITORIAL

Editor in Chief	Larry Okrend
Managing Editor	Mike Berger
Executive Editor	Dan Cary
Senior Editor	Connie Bastyr
Senior Editor	Jenny Stanley
Online Editor	Gary Legwold
Copy Editor	Ami Johnson
Contributors	Vern Grassel
	Mike Tavis

ART AND PRODUCTION

Executive Art Director	Mark Simpson
Art Director	Michael Anderson
Production Director	Paula Reddy
Production Coordinator	Erin Nielsen

Membership Questions:
memberservices@HandymanClub.com
800-243-7679



Group Publisher
Grayle Howlett

Vice President Advertising
Steve Clow

Vice President Media Development & Production
Bill Miller

Executive Marketing Director
Bruce Revman

ADVERTISING

Digital Sales

Art Hotz, (646) 862-3905
ahotz@namginc.com

NY and Southeast Sales Director

Tuck Sifers, (646) 862-3911
tsifers@namginc.com

Western Sales Representative

Mike Nelson, Nelson Outdoors Inc.
(503) 968-2304, m.nelsonoutdoors@frontier.com

Southern California Sales Representative

Jeff Morehouse, Morehouse Media LLC
(310) 791-9818, jmorehousemedia@aol.com

New England Sales Representative

Scott Buchmayr, Buchmayr Associates
(978) 462-6335, sbuchmayr@worldnet.att.net

Industrial Midwest Sales Representative

Amos Crowley, Buchmayr Crowley Associates
(440) 564-5255, amos@crowleymedia.us.com

Midwest Sales Representative

Sommer Dockery, (312) 346-8857
sdockery@namginc.com

AR, OK, TX, LA

Mike Austry, MJA Media
(214) 252-9971, maustry@sbcglobal.net

DETROIT

Jay Gagen, RPM Associates
(248) 230-3777, jay@rpmassoc.com

Shop@HANDY

Colleen Hobbs, (301) 482-1778
chobbs@meaghermedia.com

Direct Response Advertising

Smyth Media Group, (914) 693-8700
stephanie@smythmedia.com
Randi Wisner, randi@smythmedia.com

Do It Right the First Time



Model 4019

MATERIAL ESTIMATOR™

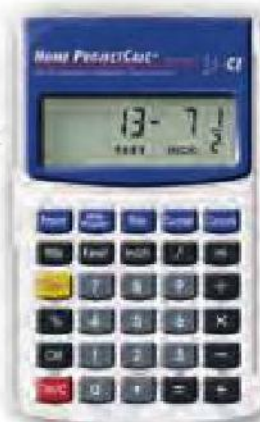
Materials Estimating Calculator

With the **Material Estimator** you can quickly and easily calculate Yards, Feet, Inches, Fractions and Meters and material quantities and costs to get exactly the materials you need. Prevent estimating errors and save time and money. Quickly and accurately find material requirements for studs; 4x8, 4x9, 4x10, 4x12 sheets; board feet, floor tiles, blocks, bricks, gravel and paint, and more.

HOME PROJECT CALC™

Do-It-Yourself Project Calculator

Unlike standard calculators, the **Home ProjectCalc** gives you measurements in Feet, Inches and Fractions. It is the do-it-yourself project calculator that will help you with all your home improvement projects – from fast measurements to accurate material estimates. *It will soon become the handiest tool in your toolbox.*



Model 8510



4840 Hytech Dr., Carson City, NV 89706

For the dealer nearest you, call today
1-800-854-8075 or visit...

www.calculated.com

HM-0411

This magazine is printed on paper that uses post-consumer, recycled fiber.



PINCH FOR PINCH

YOU WON'T FIND A BETTER DEAL



©2011 Pinkerton Tobacco Co. LP

MOIST SNUFF

YOU WOULDN'T PAY DOUBLE FOR A STEAK. YOU'D NEVER OVERPAY FOR YOUR TRUCK.
SO WHY PAY MORE FOR YOUR TOBACCO WHEN LONGHORN DELIVERS
ROBUST FLAVOR AND BOLDER VALUE IN EVERY PINCH.

IT'S THE REAL DEAL.

Visit LonghornSnuff.com for more deals and exclusive content from

OUTDOORLIFE
THE SOURCE FOR HUNTING AND FISHING ADVENTURE

**WARNING: This product can
cause gum disease and tooth loss.**

POWERFUL TOOLS IN A HIGH STAKES ENVIRONMENT!



2011 National Hardware Show
May 10-12, 2011
Las Vegas Convention Center



What Could Be Better Than the Combination of Tools and Vegas in Springtime!

Be the first to find out about the latest tools and innovations in the home-improvement and gardening markets at the 2011 National Hardware Show. The Handyman Club of America and the National Home Gardening Club have joined forces to bring six of our experienced members to the *HANDY/Gardening How-To* Product Test Shop. These Top Tool Testers will get hands-on experience with a variety of tools and other products from major industry manufacturers.

BE A PART OF THE ACTION: You can watch videos of the tool tests and product demonstrations streamed directly from the show floor. Get product information and chat with other Club members about the latest products on the market. Daily updates posted on our Facebook and Twitter pages.

Starting April 1st visit www.hardwareshow.ning.com to join in the fun!

Sponsored By:



SKIL

RYOBI

RIDGID



FREE

Awning Idea Kit and DVD

- Cool Shade in Seconds
- 99% UV Protection
- Great Relaxation and Entertainment Spot
- Exceptionally Affordable – Prices as Low as \$499!
- Saves Energy, Helps Cut Air Conditioning Bills
- Motorized & Manual Models
- Easy to Use, Totally Retractable
- Screen Rooms
- Many Exciting Accessories
- Many Fabrics to Choose From
- Unsurpassed Quality
- 5-Year Limited Warranty
- No Risk Home Trial
- A Must Have for Decks and Patios

Learn how to transform an ordinary deck or patio into a beautiful, shaded “outdoor room” – a cool, protected retreat where you and your family will love to spend time.

SunSetter, the #1 best-selling awnings in America for over a decade, invites you to call, email, or send today for our **FREE Awning Idea Kit and DVD**. Discover how to outsmart the weather and protect your family while you turn your deck or patio into your favorite 3-season outdoor room – a lovely focal point of your home and a center for outdoor enjoyment.

A SunSetter puts you in control of the weather on your deck or patio. Relax and entertain outside anytime you want without worrying about hot sun, harmful UV

rays or passing light showers. It can be up to 20° cooler under your awning! A SunSetter gives you far more cool shade and protection than a tippy patio umbrella – yet it’s so affordable you’ll wonder why you waited so long to get one. **Get your Free Idea Kit and DVD today.**

SunSetter®
AWNINGS

Find out more with absolutely no obligation. Get your **FREE Awning Idea Kit and DVD** in any of 4 simple ways:

- 1. Call Toll Free: 1-800-876-8060, ext. 23874**
You can call 24 hours a day, seven days a week.
- 2. Email to ideakit@sunsetter.com**
Be sure to include your full name and mailing address.
- 3. Go to www.sunsetter.com**
- 4. By Mail:** SunSetter Products, Dept. 23874
184 Charles Street, Malden, MA 02148. Be sure to include your complete mail address and email address.



Storage Bench

Build a versatile piece that looks great outside or inside your home

BY VERN GRASSEL AND DAN CARY



Keep seat cushions and other small deck accessories dry and out of sight in this cedar storage bench.



Perfect for a deck, patio or pool area, this solid-cedar bench is designed to provide comfortable seating and ample storage. Though it's built to withstand outdoor exposure, it's handsome enough that you might decide to keep it inside to hold blankets or firewood.

Construction requires only a few woodworking power tools: a router, a table saw, a drill and a jigsaw. We cut the grooves and rabbets using a table saw, but you could use a router table and a straight bit. Pocket-screw joinery keeps the frame assembly simple.

Note: The 1x6 and 1x8 cedar that we bought at a home center is 7/8 in. thick. If you are using 3/4-in.-thick lumber, you'll need to make the appropriate adjustments.

PHOTOGRAPHY BY MICHAEL ANDERSON

THE TREE IS NOT GOING TO MOVE ITSELF.



The Home Depot offers powerful chain saws from ECHO®, RYOBI®, and Homelite® so you can deal with Mother Nature fast. Visit your local Home Depot store for a wide selection of chain saws, or visit us on the web at homedepot.com. **That's the power of The Home Depot.**



More saving. More doing.®

STORAGE BENCH

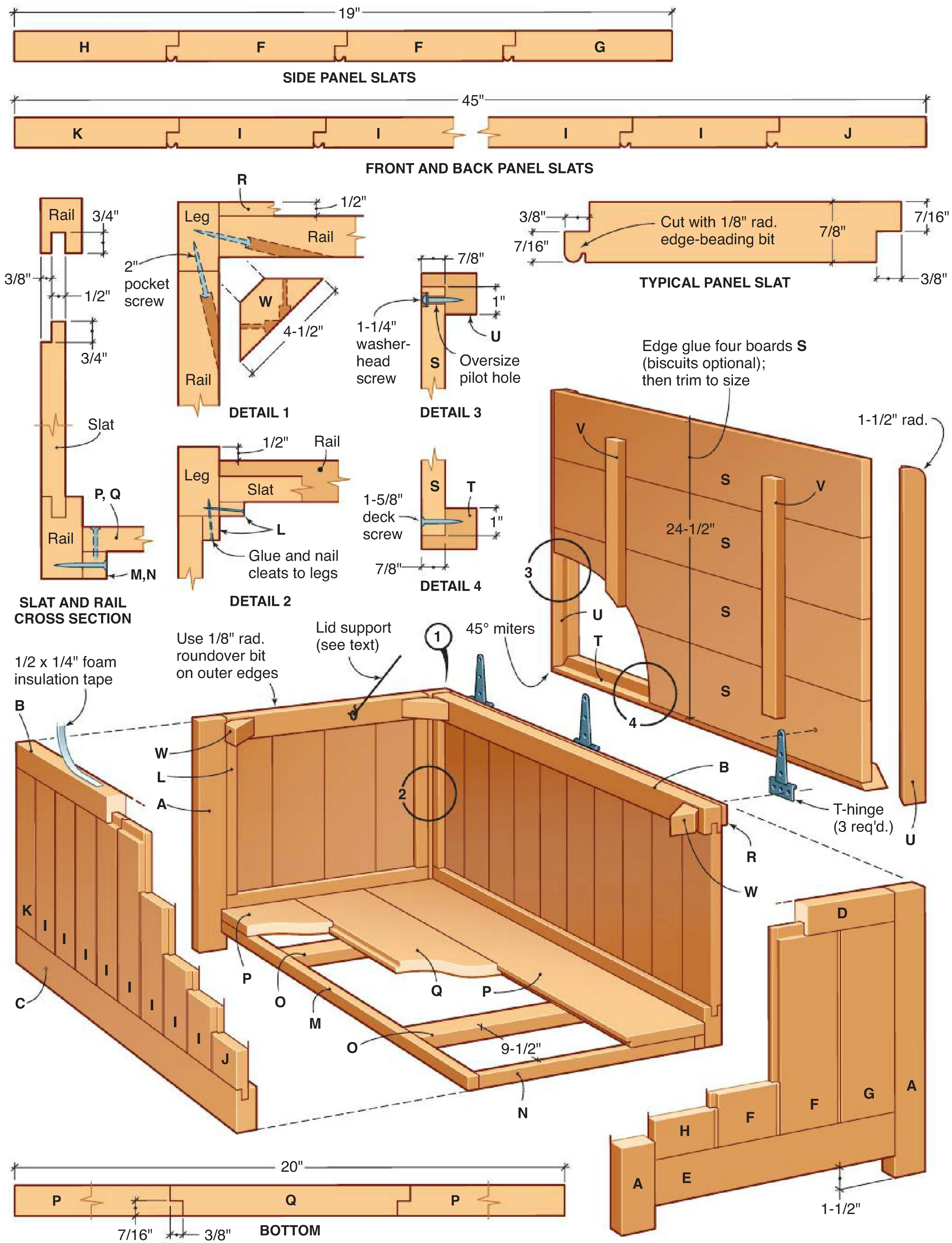
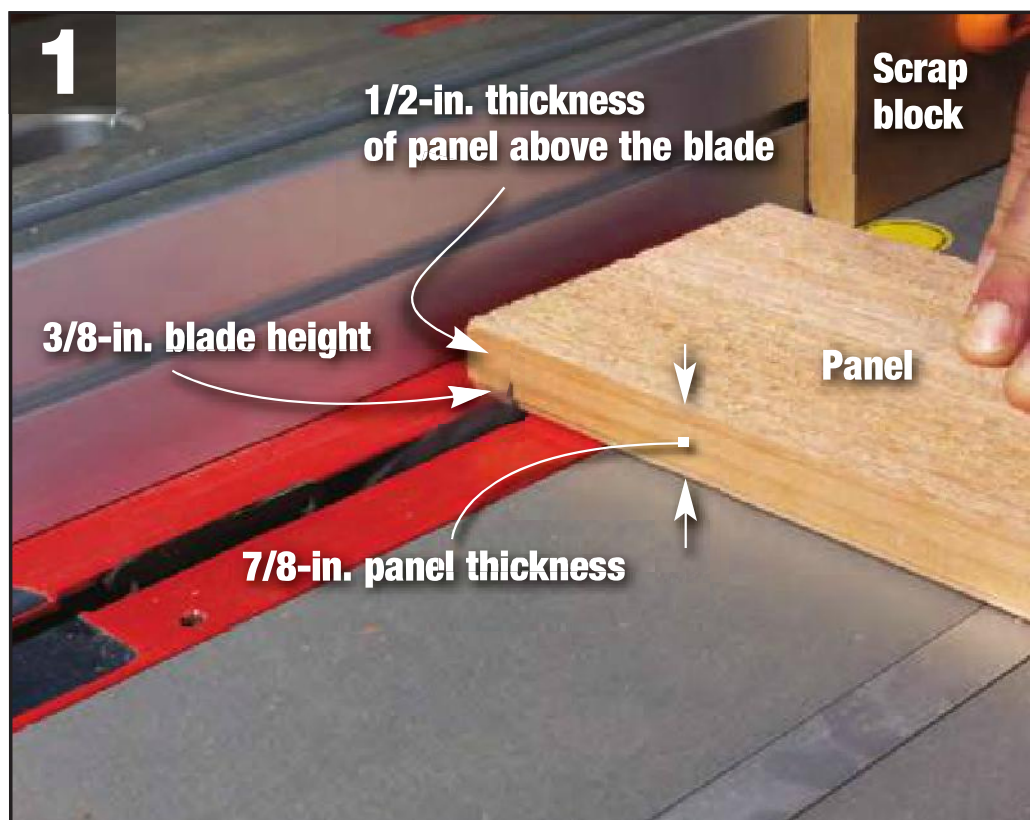
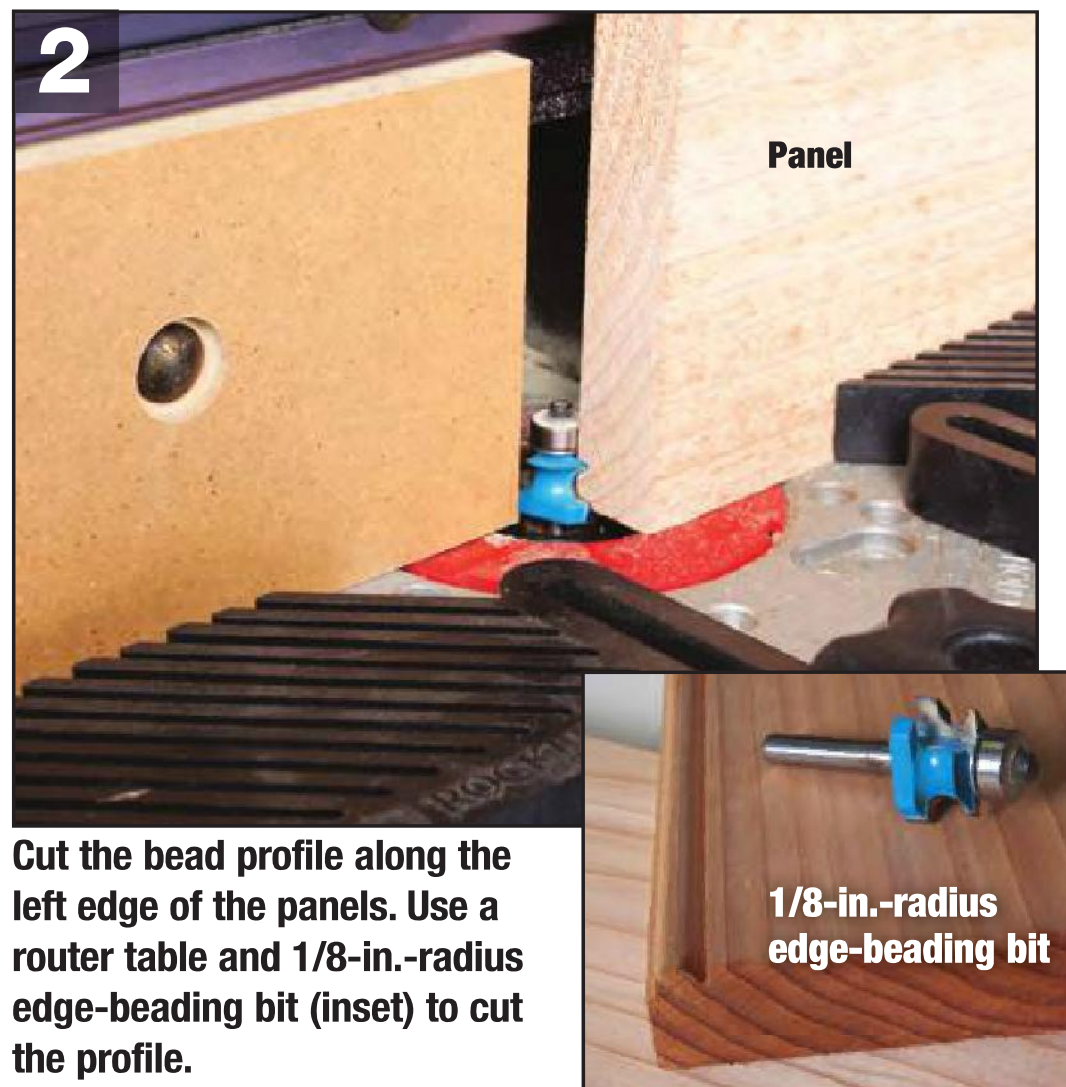


ILLUSTRATION BY GABRIEL GRAPHICS



1 Crosscut the rabbet in the end of the panels. Use a scrap block to register the panel for the first cut and then move the panel away from the blade for additional cuts until you have cleaned out the entire rabbet. Use a miter gauge to guide the panel pieces through the cut.



2 Cut the bead profile along the left edge of the panels. Use a router table and 1/8-in.-radius edge-beading bit (inset) to cut the profile.

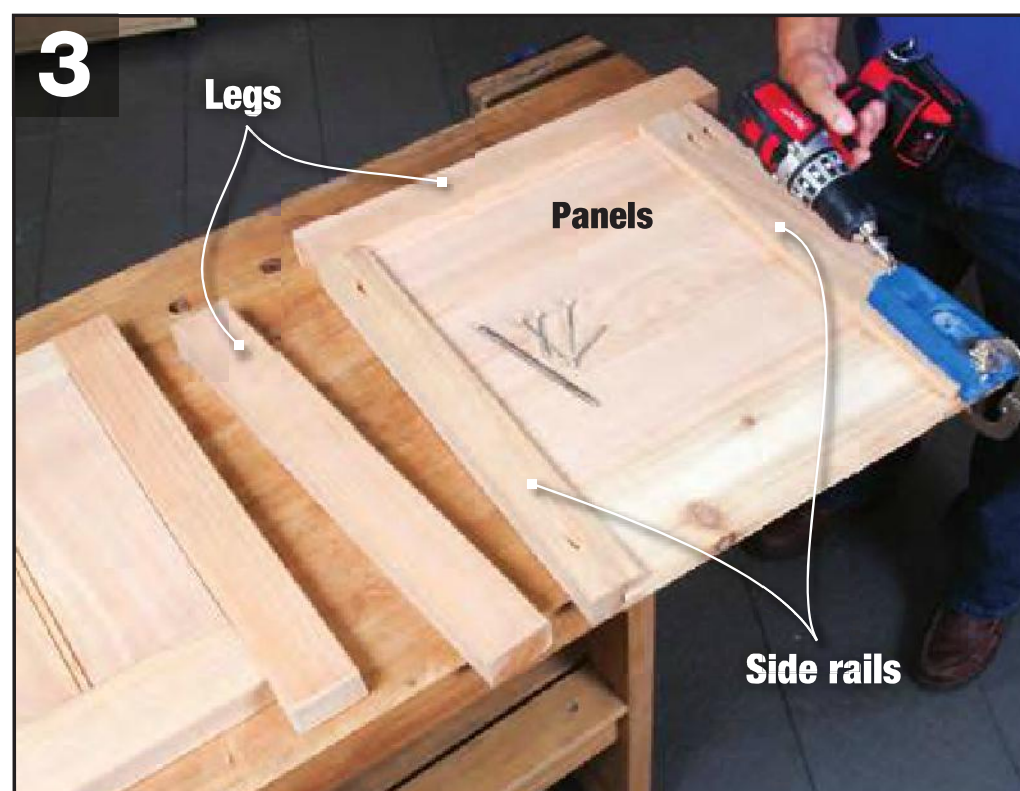
CUTTING LIST

KEY NO.	DESCRIPTION	SIZE
A 4	Legs	1-1/2 x 2-1/2 x 19-1/2 in.
B 2	Front/back top rails	1-1/2 x 2 x 45 in.
C 2	Front/back bottom rails	1-1/2 x 3 x 45 in.
D 2	Side top rails	1-1/2 x 2 x 19 in.
E 2	Side bottom rails	1-1/2 x 3 x 19 in.
F 4	Side middle panels	7/8 x 5-1/4 x 14-1/2 in.
G 2	Right side panels	7/8 x 4-7/8 x 14-1/2 in.
H 2	Left side panels	7/8 x 4-3/4 x 14-1/2 in.
I 16	Front/back middle panels	7/8 x 4-7/8 x 14-1/2 in.
J 2	Front/back right panels	7/8 x 4-5/8 x 14-1/2 in.
K 2	Front/back left panels	7/8 x 4-3/4 x 14-1/2 in.
L 8	Corner cleats	1/2 x 7/8 x 13 in.
M 2	Bottom frame front/back	7/8 x 1 x 45 in.
N 2	Bottom frame ends	7/8 x 1 x 18-1/4 in.
O 2	Bottom cleats	7/8 x 2-3/4 x 18-1/4 in.
P 2	Outside bottom boards	7/8 x 6-3/4 x 45 in.
Q 1	Center bottom board	7/8 x 7-1/4 x 45 in.
R 1	Hinge cleat	1/2 x 1-1/2 x 45 in.
S 4	Bench top pieces*	7/8 x 24-1/2 x 48-1/2 in.
T 1	Top back edge	1-1/2 x 2 x 49-1/2 in.
U 2	Top side edges	1-1/2 x 2 x 25 in.
V 2	Top cleats	7/8 x 2 x 19 in.
W 4	Corner blocks	1-1/2 x 1-1/2 x 4-1/4 in.

*The bench top is made from four 7/8 x 6-1/4 x 48-1/2-in. boards and then trimmed to the final size.

SHOPPING LIST

2x4 x 8-ft. cedar boards (5)	Exterior-rated wood glue
1x6 x 8-ft. cedar boards (5)	Watco teak oil
1x8 x 8-ft. cedar boards (4)	1/8-in.-radius
1-5/8-in. deck screws	edge-beading router bit
1-1/4-in. washer-head or	(see SOURCES ONLINE)
panhead screws	4-in. T-strap gate hinges (3)
2-1/2-in. coarse-thread	1/4-in. x 3-ft. rope
pocket screws	Eye screws (2)
2-in. deck screws	1/2- x 1/4-in. x 14-ft.
1-1/2-in. brads	foam insulation tape



3 Use a drill and pocket-hole jig (see SOURCES ONLINE) to bore the holes in the top and bottom side rails. Install the side panels in the side-rail rabbets and attach the rails to the legs with washer-head screws.

Make the legs, rails and panels

Start by cutting and labeling the parts (see cutting list, left). The rails feature grooves that capture the front, back and side panels. Cut a groove in the bottom edge of each top rail and in the top edge of each bottom rail. Set the table saw blade 3/4 in. high and 3/8 in. from the rip fence. Make the first pass; then move the fence out 1/8 in. and make another pass. Continue to move the fence out and make passes until the groove is a hair more than 1/2 in. wide.

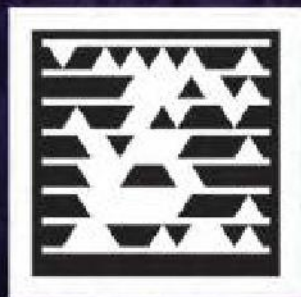
The top and bottom of each panel feature a rabbet that fits inside the grooves in the top and bottom rails. Subtract 1/2 in. from the thickness of the panel to determine how high to set your table saw blade. (We set the

Maxfilm

**OUTLASTS & PROVIDES
SUPERIOR PROTECTION COMPARED
TO CONVENTIONAL SPRAY LUBES.**



Visit www.protectparts.com to view recent footage of an independent test comparing Maxfilm to four leading brands or download the free tag reader app and watch it now.

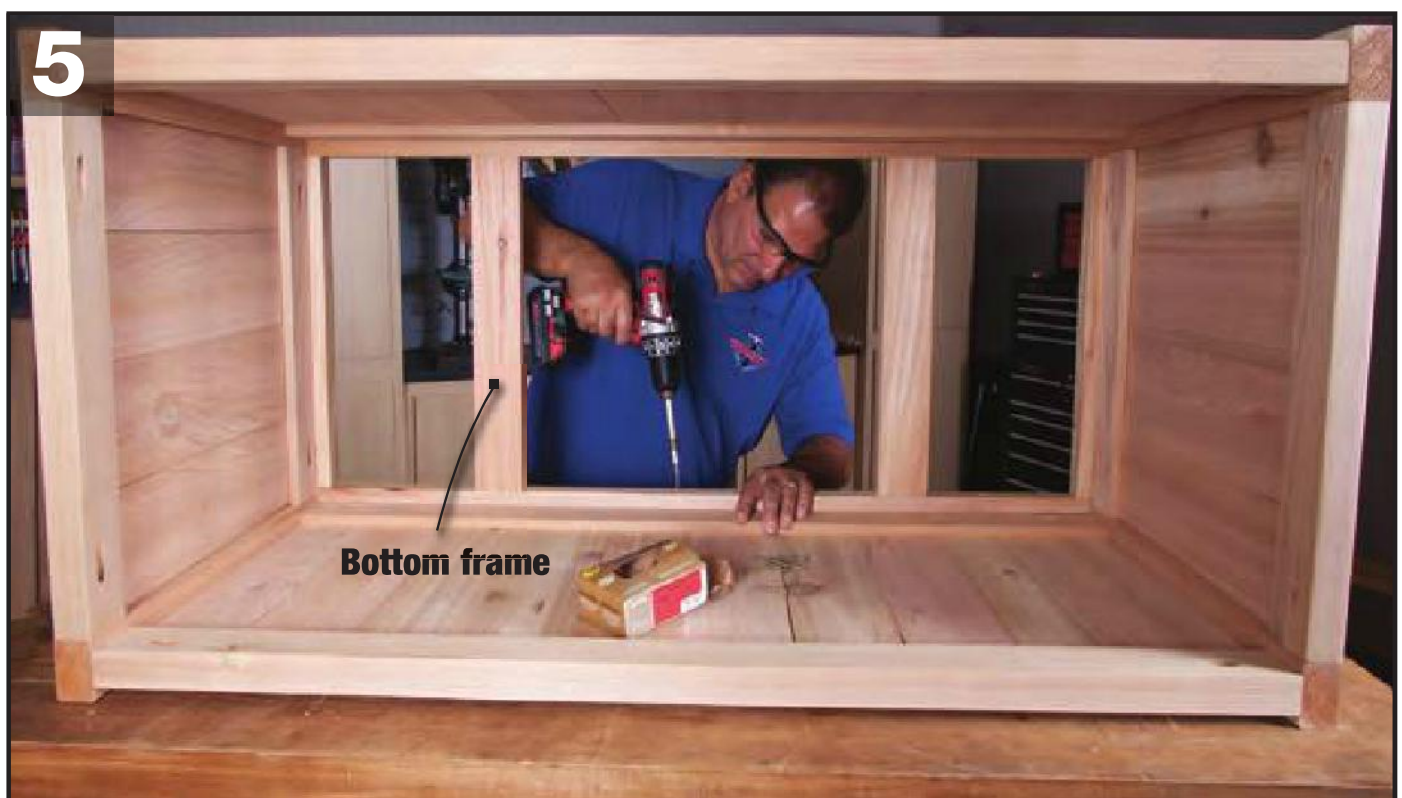


Get the free mobile app for your phone
<http://gettag.mobi>

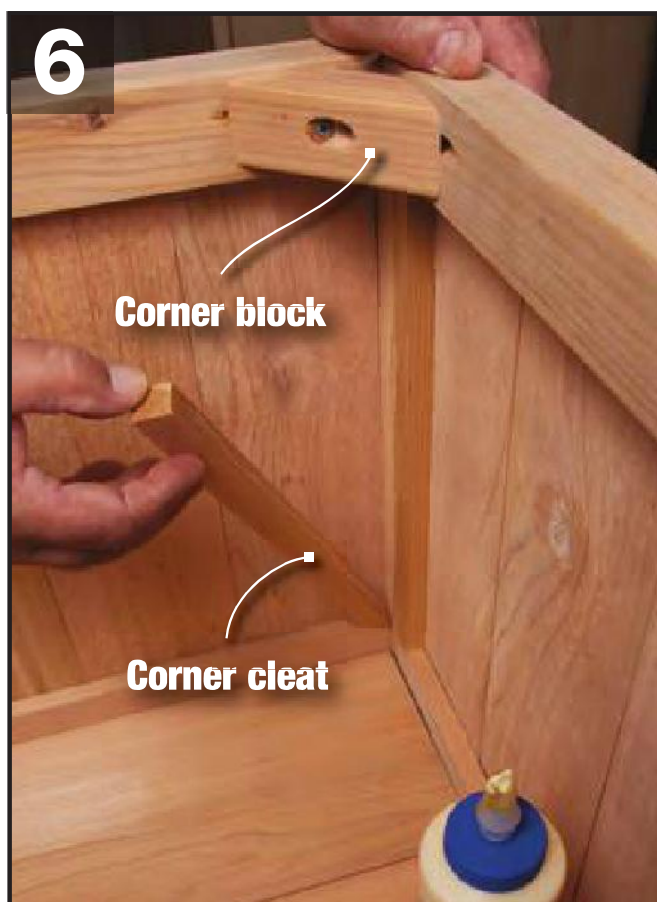
For a free Royal Purple
product catalog, call
866-769-3516



Install the front and back panels between the front and back rails. Flip the side assemblies upside down and position the front- and back-rail assemblies 1/2 in. inside the front edge of the legs. Attach the rails to the legs with pocket screws.



Position the bottom edge of the bottom frame flush with the bottom of the bottom rails. Attach the frame to the bottom rails with 1-5/8-in. deck screws.



blade height to 3/8 in.) Then clamp a scrap block to the fence and position the fence so that the block is 3/4 in. from the blade. Press the end of each piece against the scrap block to position it for the first cut (photo 1, p. 13). Move the panel piece 1/8 in. away from the scrap block after each pass.

Next, cut the bead-board profiles. Use a 1/8-in.-radius edge-beading bit (see SOURCES ONLINE) to cut the

Attach the corner cleats to the legs with glue and brads. Press the cleat tight against the panel when you attach it to the leg. Do not attach the cleat to the panel.

bead profile along one edge of all of the middle and right panel pieces (F, G, I and J; photo 2).

The side edges of the panels feature overlapping rabbets. First cut the bottom (also called the cheek) of the rabbet. Set the table saw blade to a height of 3/8 in. Position the fence so that the distance from the outside edge of the blade is equal to half the thickness of the panel. Our panel pieces were 7/8 in. thick, so we set the fence 7/16 in. away from the blade. **Note:** Be careful to cut the rabbets along the correct edge of each panel. (Refer to the illustration, p. 12, to see the rabbet locations on each panel.) Push the panel pieces through the cut on edge, using a featherboard to help keep each piece tight against the fence.

Next, cut the side (also called the shoulder) of all of the lap-joint rabbets. Set the blade to a height that is equal to half the thickness of the panel (in this case 7/16 in.). Position the fence 3/8 in. from the outside edge of the blade. Push each piece facedown through the cut.

Assemble the box

Install the side panels between the top and bottom side rails. Then attach the side rails to the legs with pocket screws (photo 3). Use a router equipped with a 1/8-in.-radius roundover bit to ease the outside edges of the side leg assemblies.

Next, install the front and back panels in the front- and back-rail rabbets. Position the front and back rails 1/2 in. inside the front edge of the legs and attach them with pocket screws (photo 4, opposite).

Assemble the bottom frame pieces (M, N and O) with 2-in. deck screws. To prevent splitting, drill a 1/8-in. pilot hole for each screw. Then attach the frame to the inside of the bottom rails with 1-5/8-in. deck screws (photo 5).

Finally, A Tough Super Glue

Gorilla Super Glue's Impact-Tough® formula creates a flexible bond, providing a strong, reliable fix. Quickly bonds metal, wood, ceramic, paper, rubber, leather and more!

FOR THE TOUGHEST JOBS ON PLANET EARTH®
GORILLA TOUGH
1-800-966-3458 Made in USA



© 2011 Gorilla Glue Company

RELIEF FOR DRY HANDS THAT CRACK & SPLIT

Absolutely Odorless • Non-Greasy

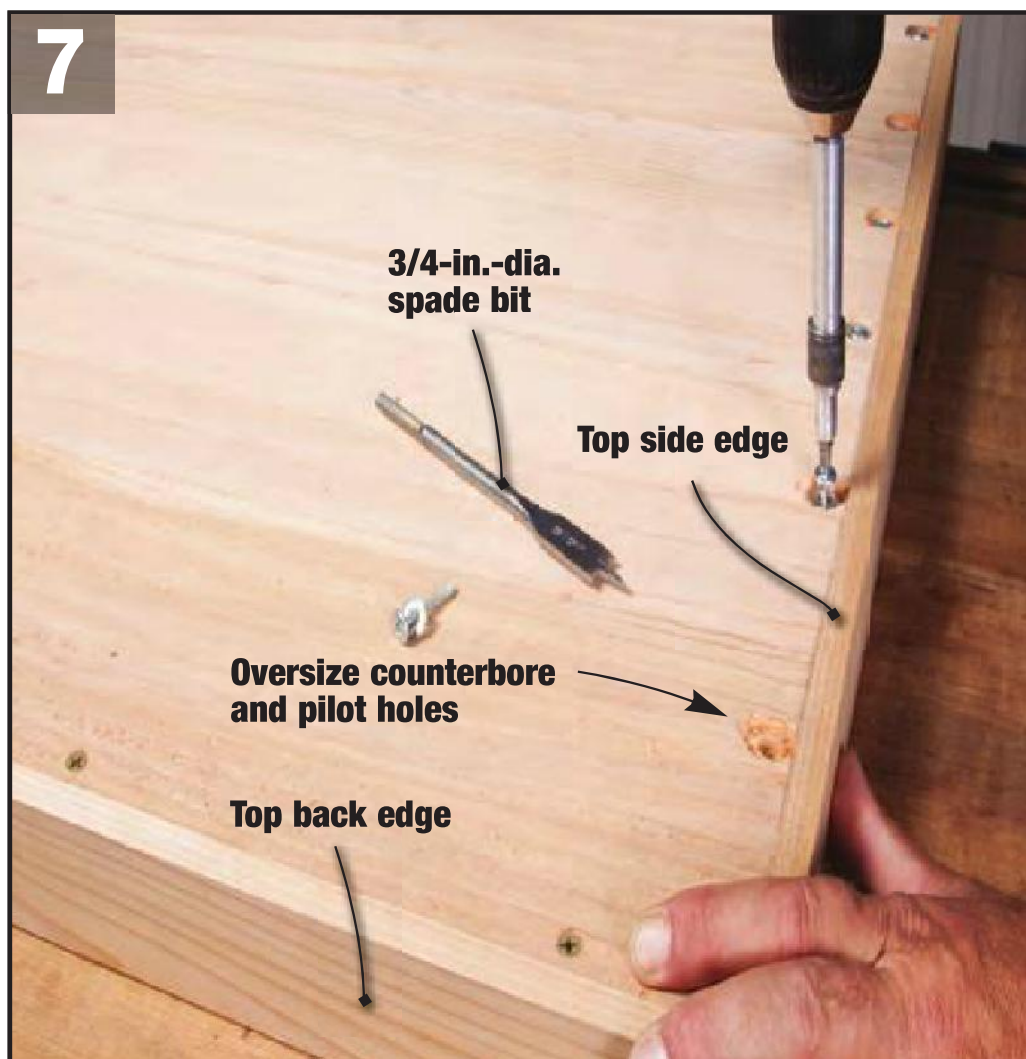


FOR DRY HANDS THAT CRACK & SPLIT
O'Keeffe's Working Hands
THE LEADING HAND CREAM FOR PEOPLE WHO WORK WITH THEIR HANDS

FOR DRY FEET THAT CRACK & SPLIT
O'Keeffe's Healthy Feet
NATURAL CREAM FOR A LIFE OF HEALTHY FEET

Buy today or find a store near you
www.OKeefesCompany.com
1-800-275-2718 © 2011 The O'Keeffe's Company

Also available for your feet.



7 Attach the side edge pieces to the top. Drill a 3/4-in.-dia. x 1/4-in.-deep counterbore and then drill a 1/4-in.-dia. pilot hole in the center of the counterbore. Attach the edge pieces with 1-1/4-in. panhead screws and washers.

Use the table saw to cut 7/16 x 7/16-in. rabbets in both edges of the center bottom board (Q) and in one edge of the outside bottom boards (P). Attach the bottom boards to the bottom cleats (O) with 1-1/4-in. washer-head screws. Drive one screw in the center of each board.

Corner blocks reinforce the front-rail connections. Use a table saw and a miter saw to cut the corner blocks (W) to width and length. Attach the corner blocks to the top rails with 2-1/2-in. pocket screws.

The panel pieces will expand and contract with changes in temperature and humidity. The corner cleats (L) cover any gaps that these changes may create between the legs and the panels. Attach the corner cleats to the legs with glue and 1-1/2-in. brads (photo 6). Then attach the hinge cleat (R) to the back edge of the back top rail with glue and brads.

Build the bench top and seat

The bench top is made by edge gluing four boards together. Rip four 1x8s to 6-1/4 in. wide to make the boards that will form the bench top. We used biscuits to help align the boards, but you can glue the boards together without biscuits. After the

glue has dried, remove the clamps, sand the top smooth and trim it to its final size (24-1/2 in. x 48-1/2 in.).

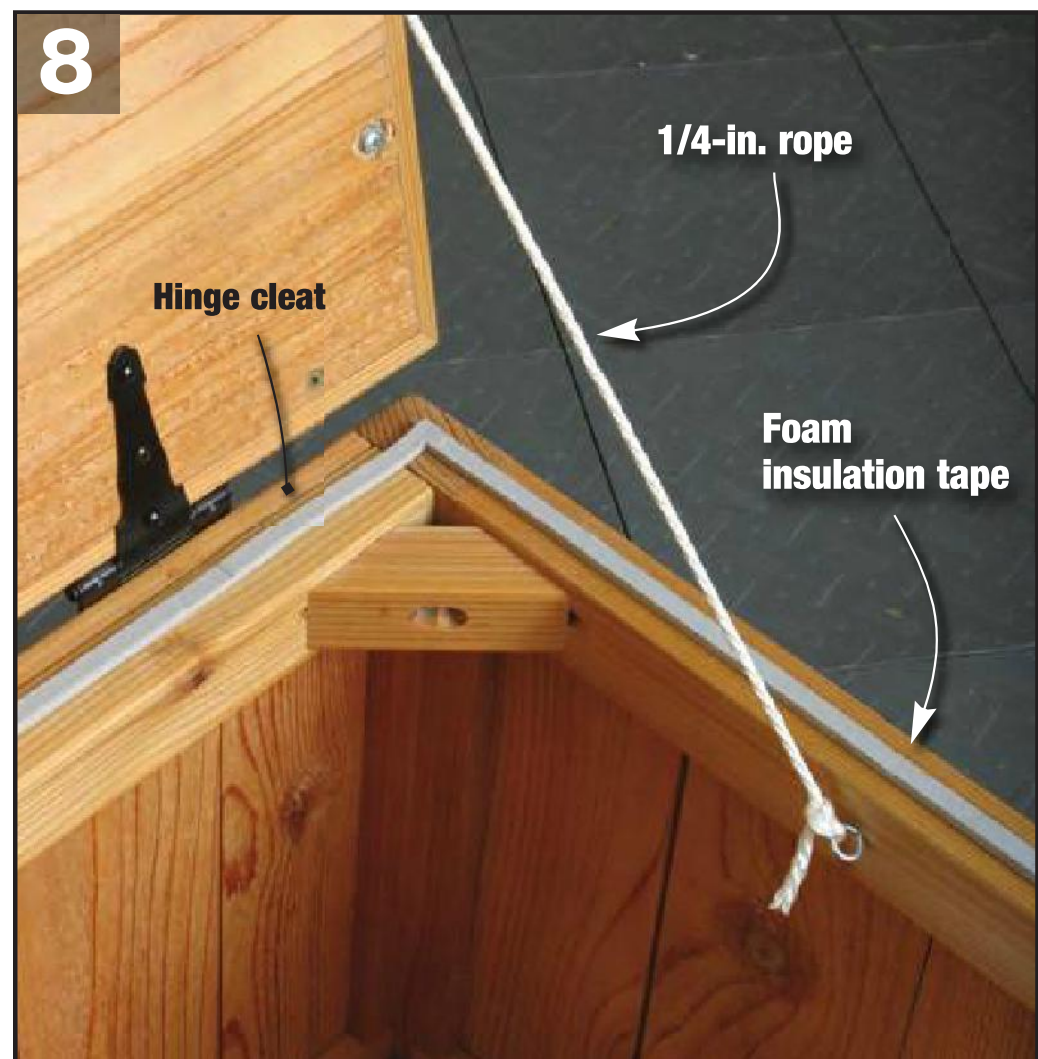
Next, make the top edge pieces (T and U) that overhang and conceal the end grain of the bench top. Use a jigsaw to cut the 1-1/2-in. radius on the front of the top side edges (U). Use a table saw to cut 1-in.-wide x 7/8-in.-deep rabbets in each piece. Miter cut the back end of the side edges and both ends of the back edge.

Attach the back edge (T) with glue and 1-5/8-in. deck screws. Drive the screws up through the bottom of the bench top. Bore a countersink and a pilot hole for each screw.

The side edge pieces are also attached with screws, but the pilot holes must be oversize and the screw heads recess into counterbore holes to allow the screws to shift when the top expands or contracts. Attach the side edge pieces with 1-1/4-in. washer-head screws (joist-hanger screws work well) or panhead screws and washers (photo 7, above).

Sand and finish

Sand all surfaces smooth and ease the edges with 150-grit sandpaper; then apply an exterior-rated finish if the bench is going to be used outdoors.



8 The vertical strap of each T-strap hinge is attached to the bottom of the top, and the horizontal strap is attached to the hinge cleat. Foam insulation tape helps to keep water and insects out of the box.

We wiped on a couple of coats of Watco teak oil.

The final step is to attach the hinges and lid supports to the top and the box sides after the finish is dry. We simply used two pieces of 1/4-in. rope tied to eye screws, but if you are concerned about the lid slamming on fingers, you can install a pair of soft-closing lid supports (available at woodworking hardware supply stores). Note: You might have to remove the back corner blocks if you decide to install soft-closing lid supports. As a final weatherproofing measure, we lined the top edge with 1/4-in.-thick foam insulation tape to create a seal when the top is closed (photo 8).

Handyman Club life member Vern Grassel is a professional woodworker and remodeler who lives and works in the Twin Cities.

SOURCES ONLINE

For online information, go to www.HandymanClub.com and click on WEB EXTRAS.

Kreg Tool

(pocket-hole jig system)
800-447-8638, www.kregtool.com

Rockler Woodworking and Hardware

(1/8-in.-radius edge-beading bit, No. 91804)
800-279-4441, www.rockler.com



DEAL WITH IT. IT'S WHAT MEN DO.

YOU FACE THINGS HEAD ON. WHY WOULD THIS BE ANY DIFFERENT?

More than half of all men over 40 have some degree of erectile dysfunction (ED).^{*} If you're one of them, ask your doctor about VIAGRA. It's America's most prescribed ED treatment.

For more information go to viagra.com or call 1-888-484-2472 (1-888-4VIAGRA).

THIS IS THE AGE OF TAKING ACTION.

VIAGRA[®]
(sildenafil citrate) tablets

WITH EVERY AGE COMES RESPONSIBILITY. IMPORTANT SAFETY INFORMATION BELOW.

We know that no medicine is for everyone. Don't take VIAGRA if you take nitrates, often prescribed for chest pain, as this may cause a sudden unsafe drop in blood pressure.

Talk with your doctor first. Make sure your heart is healthy enough to have sex. If you have chest pain, nausea, or other discomforts during sex, seek medical help right away.

In the rare event of an erection lasting more than four hours, seek immediate medical help to avoid long-term injury.

In rare instances, men who take PDE5 inhibitors (oral erectile dysfunction medicines, including VIAGRA) reported a sudden decrease or loss of vision, or sudden decrease or loss of hearing. It is not possible to determine whether these events are related directly to these medicines or to other factors. If you experience any of these symptoms, stop taking PDE5 inhibitors, including VIAGRA, and call a doctor right away.

The most common side effects of VIAGRA are headache, facial flushing, and upset stomach. Less common are bluish or blurred vision, or being sensitive to light. These may occur for a brief time.

VIAGRA does not protect against sexually transmitted diseases including HIV.

Please see Important Facts for VIAGRA on the following page or visit viagra.com for full prescribing information.

^{*}Data taken from the *Massachusetts Male Aging Study*. Of 1,290 respondents, 52% stated that they had some degree of ED.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.FDA.gov/medwatch or call 1-800-FDA-1088.

VGU00761 ©2010 Pfizer Inc.
All rights reserved.



IMPORTANT FACTS

VIAGRA[®]
(sildenafil citrate) tablets

(vi-AG-rah)

IMPORTANT SAFETY INFORMATION ABOUT VIAGRA

Never take VIAGRA if you take any medicines with nitrates. This includes nitroglycerin. Your blood pressure could drop quickly. It could fall to an unsafe or life-threatening level.

ABOUT ERECTILE DYSFUNCTION (ED)

Erectile dysfunction means a man cannot get or keep an erection. Health problems, injury, or side effects of drugs may cause ED. The cause may not be known.

ABOUT VIAGRA

VIAGRA is used to treat ED in men. When you want to have sex, VIAGRA can help you get and keep an erection when you are sexually excited. You cannot get an erection just by taking the pill. Only your doctor can prescribe VIAGRA.

VIAGRA does not cure ED.

VIAGRA does not protect you or your partner from STDs (sexually transmitted diseases) or HIV. You will need to use a condom.

VIAGRA is not a hormone or an aphrodisiac.

WHO IS VIAGRA FOR?

Who should take VIAGRA?

Men who have ED and whose heart is healthy enough for sex.

Who should NOT take VIAGRA?

- If you ever take medicines with nitrates:
 - Medicines that treat chest pain (angina), such as nitroglycerin or isosorbide mononitrate or dinitrate
- If you use some street drugs, such as “poppers” (amyl nitrate or nitrite)
- If you are allergic to anything in the VIAGRA tablet

BEFORE YOU START VIAGRA

Tell your doctor if you have or ever had:

- Heart attack, abnormal heartbeats, or stroke
- Heart problems, such as heart failure, chest pain, or aortic valve narrowing
- Low or high blood pressure
- Severe vision loss
- An eye condition called retinitis pigmentosa
- Kidney or liver problems
- Blood problems, such as sickle cell anemia or leukemia
- A deformed penis, Peyronie’s disease, or an erection that lasted more than 4 hours
- Stomach ulcers or any kind of bleeding problems

Tell your doctor about all your medicines. Include over-the-counter medicines, vitamins, and herbal products. Tell your doctor if you take or use:

- Medicines called alpha-blockers to treat high blood pressure or prostate problems. Your blood pressure could suddenly get too low. You could get dizzy or faint. Your doctor may start you on a lower dose of VIAGRA.
- Medicines called protease inhibitors for HIV. Your doctor may prescribe a 25 mg dose. Your doctor may limit VIAGRA to 25 mg in a 48-hour period.
- Other methods to cause erections. These include pills, injections, implants, or pumps.
- A medicine called REVATIO. VIAGRA should not be used with REVATIO as REVATIO contains sildenafil, the same medicine found in VIAGRA.

POSSIBLE SIDE EFFECTS OF VIAGRA

Side effects are mostly mild to moderate. They usually go away after a few hours. Some of these are more likely to happen with higher doses.

The most common side effects are:

- Headache
- Feeling flushed
- Upset stomach

Less common side effects are:

- Trouble telling blue and green apart or seeing a blue tinge on things
- Eyes being more sensitive to light
- Blurred vision

Rarely, a small number of men taking VIAGRA have reported these serious events:

- Having an erection that lasts more than 4 hours. If the erection is not treated right away, long-term loss of potency could occur.
- Sudden decrease or loss of sight in one or both eyes. We do not know if these events are caused by VIAGRA and medicines like it or caused by other factors. They may be caused by conditions like high blood pressure or diabetes. If you have sudden vision changes, stop using VIAGRA and all medicines like it. Call your doctor right away.
- Sudden decrease or loss of hearing. We do not know if these events are caused by VIAGRA and medicines like it or caused by other factors. If you have sudden hearing changes, stop using VIAGRA and all medicines like it. Call your doctor right away.
- Heart attack, stroke, irregular heartbeats, and death. We do not know whether these events are caused by VIAGRA or caused by other factors. Most of these happened in men who already had heart problems.

If you have any of these problems, stop VIAGRA. Call your doctor right away.

HOW TO TAKE VIAGRA

Do:

- Take VIAGRA only the way your doctor tells you. VIAGRA comes in 25 mg, 50 mg, and 100 mg tablets. Your doctor will tell you how much to take.
- If you are over 65 or have serious liver or kidney problems, your doctor may start you at the lowest dose (25 mg).
- Take VIAGRA about 1 hour before you want to have sex. VIAGRA starts to work in about 30 minutes when you are sexually excited. VIAGRA lasts up to 4 hours.

Don’t:

- Do not take VIAGRA more than once a day.
- Do not take more VIAGRA than your doctor tells you. If you think you need more VIAGRA, talk with your doctor.
- Do not start or stop any other medicines before checking with your doctor.

NEED MORE INFORMATION?

- This is only a summary of important information. Ask your doctor or pharmacist for complete product information OR
- Go to **www.viagra.com** or call **(888) 4-VIAGRA (484-2472)**.

Uninsured? Need help paying for Pfizer medicine? Pfizer has programs that can help. Call 1-866-706-2400 or visit www.PfizerHelpfulAnswers.com.



Distributed by:
Pfizer Labs
Division of Pfizer Inc, NY, NY 10017

Rx Only ©2010 Pfizer Inc All rights reserved. Printed in the USA.
VGIF Rev 5 01/10

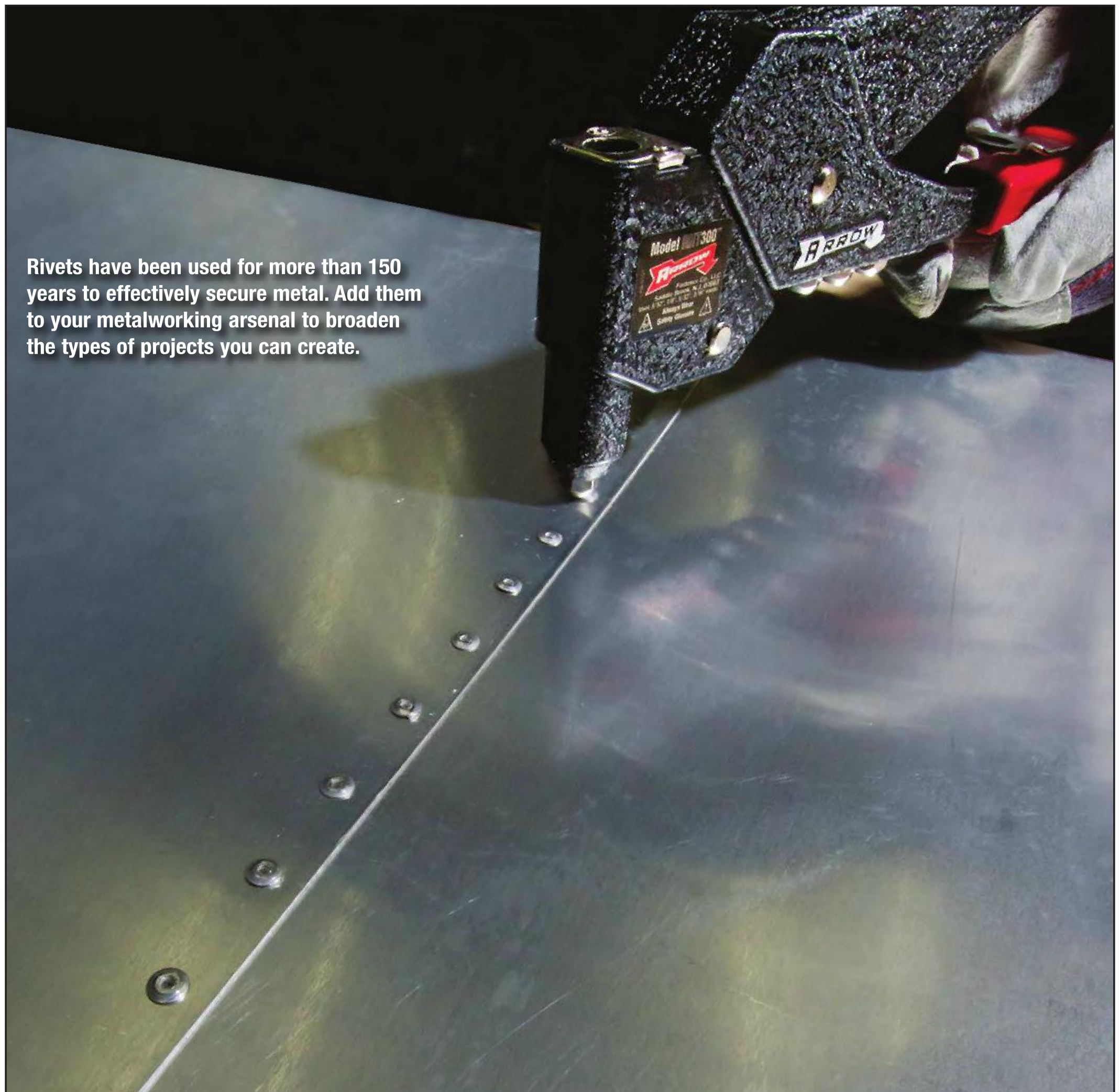
Registered trademarks are the property of their respective owners.



A Riveting Experience

Blind rivets provide a practical, easy and decorative way to join metal

BY MIKE BERGER



Rivets have been used for more than 150 years to effectively secure metal. Add them to your metalworking arsenal to broaden the types of projects you can create.

Not that long ago, welding machines were a fantasy; rivets were one of the few ways to effectively join two pieces of metal. Some of history's greatest structures — the Golden Gate Bridge, the Eiffel Tower and the Titanic — owe their existence to this type of joinery, and rivets remain an integral

IT'S YOUR CHOICE!



POWER MIG® 140C (K2471-1)
120 Volt Input MIG Welder

\$599 After \$75
Manufacturer Rebate

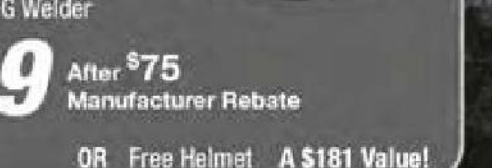
OR Free Helmet
A \$181 Value!



POWER MIG® 180C
(K2473-1)
230 Volt Input MIG Welder

\$699 After \$75
Manufacturer Rebate

OR Free Helmet A \$181 Value!



POWER MIG® 216 (K2816-1)
216 Amp Output MIG Welder

\$1,499 After \$125
Manufacturer Rebate

OR Free Spool Gun
A \$229 Value!



Square Wave™ TIG 175
(K1478-5) 175 Amp TIG Welder

\$1,699 After \$150
Manufacturer Rebate

OR Free Spool Gun A \$229 Value!



Outback® 145 (K2707-2)
Engine-Driven Welder/Generator

\$1,799 After \$150
Manufacturer Rebate

OR Free Value Accessory Pkg.
A \$405 Value!



Ranger® 225 (K2857-1)
Engine-Driven Welder/Generator

\$2,999 After \$200
Manufacturer Rebate

OR Free Value Accessory Pkg.
A \$424 Value!

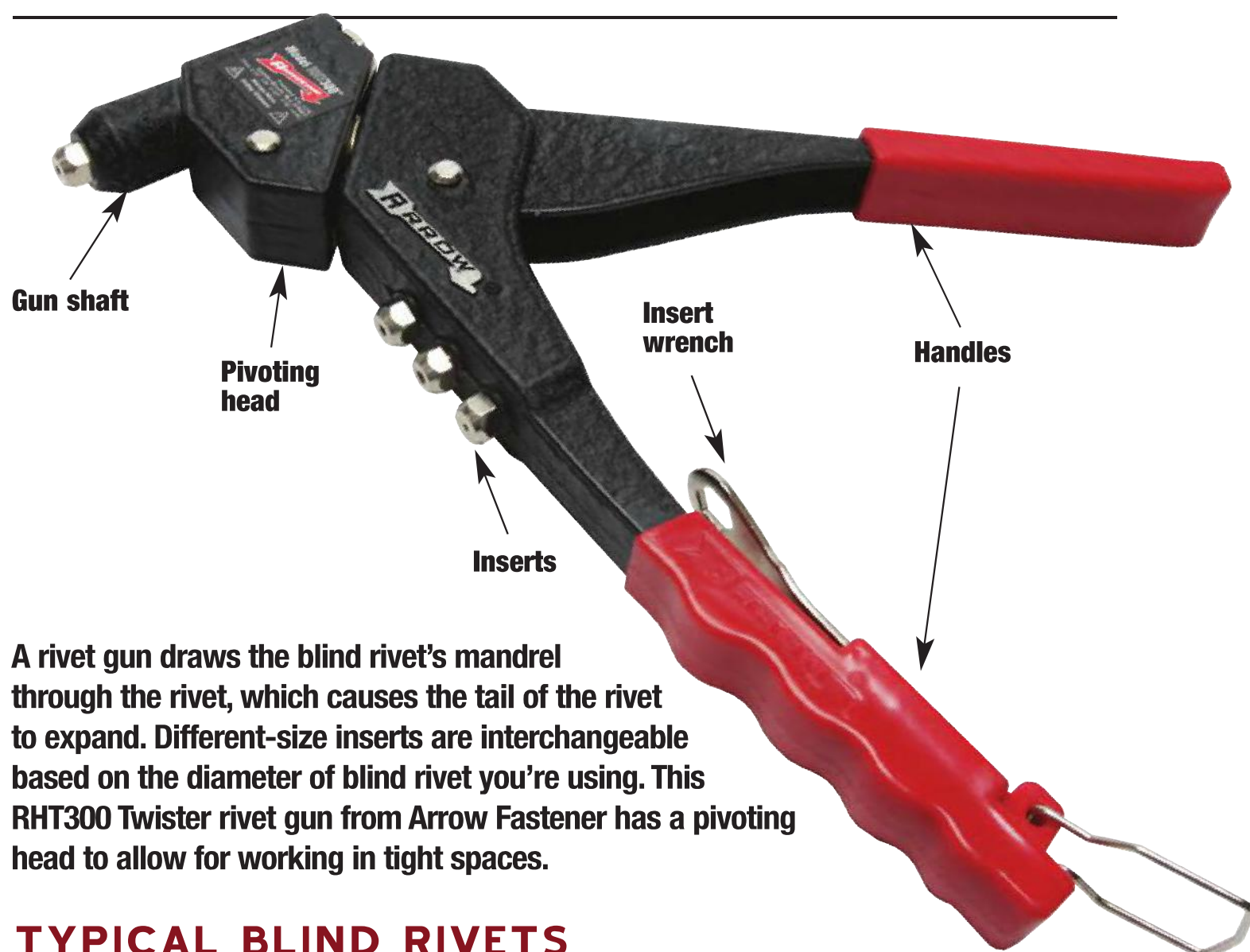


To learn more go to
www.lincolnelectric.com

(Customer pricing determined by suggested retail
price less manufacturer rebate.)

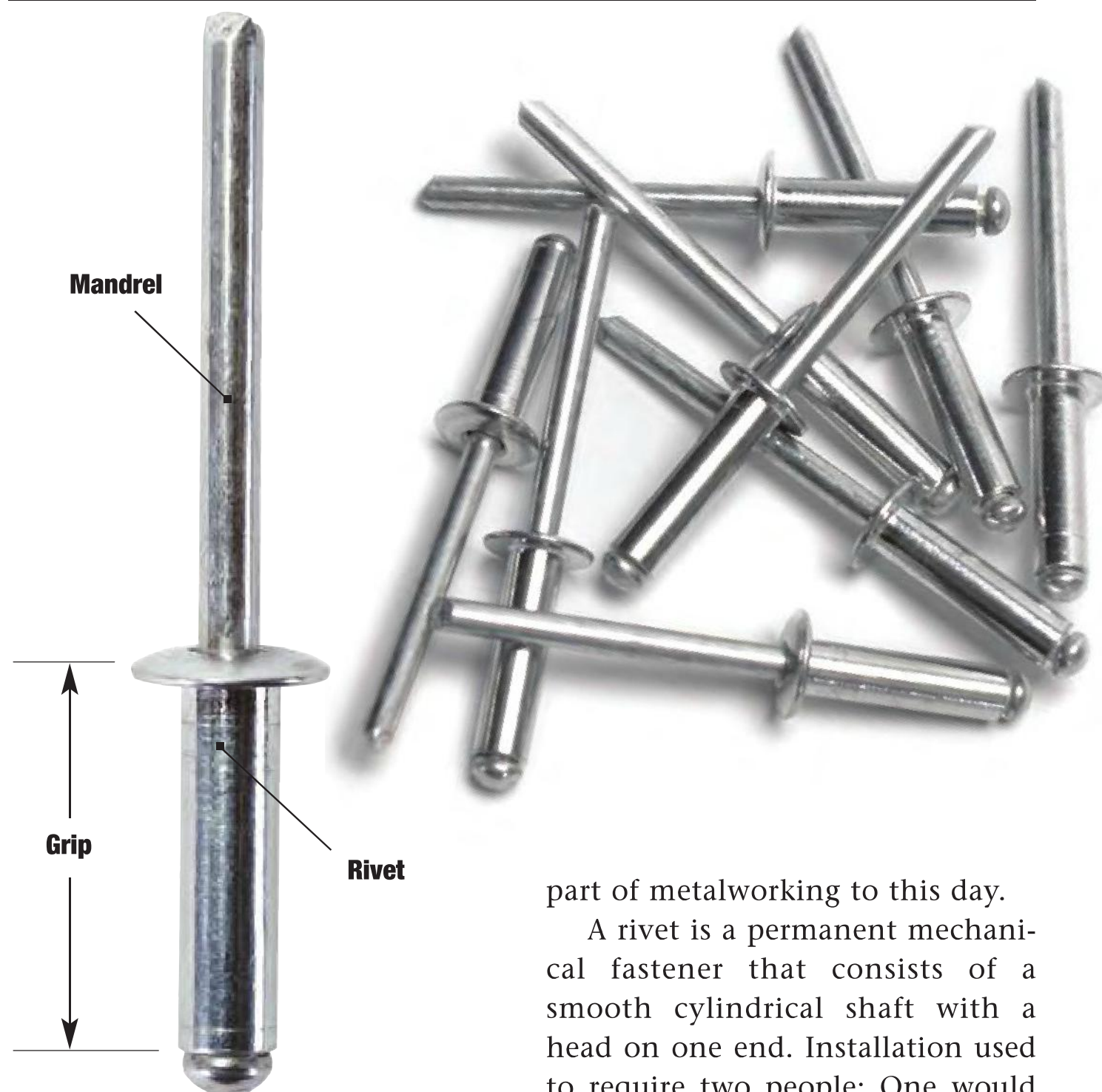
**LINCOLN
ELECTRIC**
THE WELDING EXPERTS®

TYPICAL RIVET GUN



A rivet gun draws the blind rivet's mandrel through the rivet, which causes the tail of the rivet to expand. Different-size inserts are interchangeable based on the diameter of blind rivet you're using. This RHT300 Twister rivet gun from Arrow Fastener has a pivoting head to allow for working in tight spaces.

TYPICAL BLIND RIVETS



Blind rivets (shown enlarged for detail) come in a variety of sizes, styles and materials, but they all share the same common features.

part of metalworking to this day.

A rivet is a permanent mechanical fastener that consists of a smooth cylindrical shaft with a head on one end. Installation used to require two people: One would insert the rivet (which was often heated to a very high temperature) through a punched or drilled hole, and the other would hammer the



Semi-Transparent
Cedar Naturaltone
DP-533

I didn't just waterproof my deck...



I weatherproofed it.

The advanced 100% acrylic formula in BEHR Premium Weatherproofing seals in the beauty and seals out the weather... for a deck I'm really proud of. It delivers complete weather protection from sun, rain, snow and ice. Now, I spend less time maintaining my deck and more time enjoying it... especially the compliments.

BEHR Premium Weatherproofing Wood Stains and Finishes

(Available in Solid Color, Semi-Transparent, Wood-Toned and Transparent)

BEHR
GOOD. BETTER. BEHR.®

Exclusively at



BEHR is a registered trademark of Behr Process Corporation.
©2011 Behr Process Corporation.

BEHR.com



**COLLECT ACRES OF LEAVES
— WHILE YOU RIDE!**

The DR® LEAF and LAWN VACUUM turns your riding mower into a powerful yard clean-up machine!

VACUUMS leaves, grass clippings, and other debris from your lawn using an incredible 85 mph suction force!

SHREDS most everything it vacuums. Reduces the volume of leaves by 90%.

DUMPS OR BAGS collected material.

CHIPS fallen tree branches and prunings up to 2" thick with a built-in chipper.

WALK-BEHIND MODELS AVAILABLE!

6 MONTH HANDS-ON TRIAL

Call for a FREE DVD & Catalog!

TOLL-FREE 1-888-213-2305
www.DRleafvac.com

71296X © 2011

The DR® POWERWAGON is a Self-Propelled **EASY HAULER**

Sized and Priced for Homeowners!

HAULS UP TO 800 LBS. — firewood... mulch... gravel... stone. Powers up hills and down...even through soft, wet soil!

ELECTRIC-START and powered dump options available.

EASY TO USE! Rear caster and differential drive for easy turning... 4 speeds, reverse, dump-bed, hand brake all included.



6 MONTH HANDS-ON TRIAL

Call for a FREE DVD & Catalog!

TOLL-FREE 1-888-213-2305
DRpowerwagon.com

71295X © 2011

tail, deforming or “bucking” it to 1-1/2 times its original shaft diameter. (The end opposite the head is called the buck-tail.) The result was an incredibly strong fastener that was capable of supporting both tension loads (loads parallel to the axis of the rivet shaft) and shear loads (loads perpendicular to the axis of the rivet shaft).

Though the concept remains the same, modern rivet installation is easier and requires only one person. Here’s how you can put these classic fasteners to work in your projects.

RIVETS FOR DIYers

In almost all DIY applications, you’ll use what’s referred to as a blind rivet, which consists of a tubular rivet with a mandrel inserted through the center (photo, p. 20). Blind rivets are sometimes referred to as pop rivets, but a true Pop rivet is a brand that’s sold by Emhart Teknologies. Although most blind rivets look the same at first glance, there are important differences that you need to understand in order to safely use them.

Blind rivets are sized by two measurements: the actual diameter of the rivet and the thickness of metal that the rivet can hold (referred to as the “grip”). Dozens of specialty blind rivets are available; the most commonly used ones for DIY applications are:

- **Dome head** — This is the most widely available and commonly used style. The dome-head flange offers a good bearing surface and is suitable for many applications. These rivets are typically available in 3/32-, 1/8-, 5/32-, 3/16- and 1/4-in. diameters.

- **Large flange** — This head style offers a bigger bearing surface than

**Keeps Paint Out.
Keeps Lines Sharp.™**



FrogTape® is the only painter's tape treated with PaintBlock® Technology. PaintBlock forms a micro-barrier that seals the edges of the tape, preventing paint bleed. Visit FrogTape.com to see PaintBlock in action, get painting tips and more!

FrogTape.com
877-FROGTAPE
(376-4827)



©ShurTech Brands, L.L.C. 2010/43554



Enhance your toolbox.

Where's your next project? Whether it's at home, in your workshop, at a jobsite or in your own garage, Mechanix Wear has a glove specifically designed to protect your hands and help you work faster, safer and cleaner. So next time you're looking for the perfect tool for the job, start with Mechanix Wear Gloves. The Tool That Fits Like a Glove.® 800.222.4296 Canada: 604.542.7055



A SIMPLE RIVET PROJECT

The outdoor candle chandelier shown below is constructed from 16-gauge steel stock that's commonly found at home-improvement or hardware stores and assembled using 1/8-in.-dia. steel rivets. I used a wooden form to help shape the hoops, and except for two welds — one for each hoop to join the steel into a continuous hoop — everything else was riveted together in just a few hours.

To see the entire step-by-step building process, and to access complete plans and cutting lists, log onto www.HandymanClub.com and click on Web Extras. — MB



the dome head and is best for joining compressible or brittle materials such as wood or plastic to metal. Large-flange rivets are commonly available in 1/8-, 5/32- and 3/16-in. diameters.

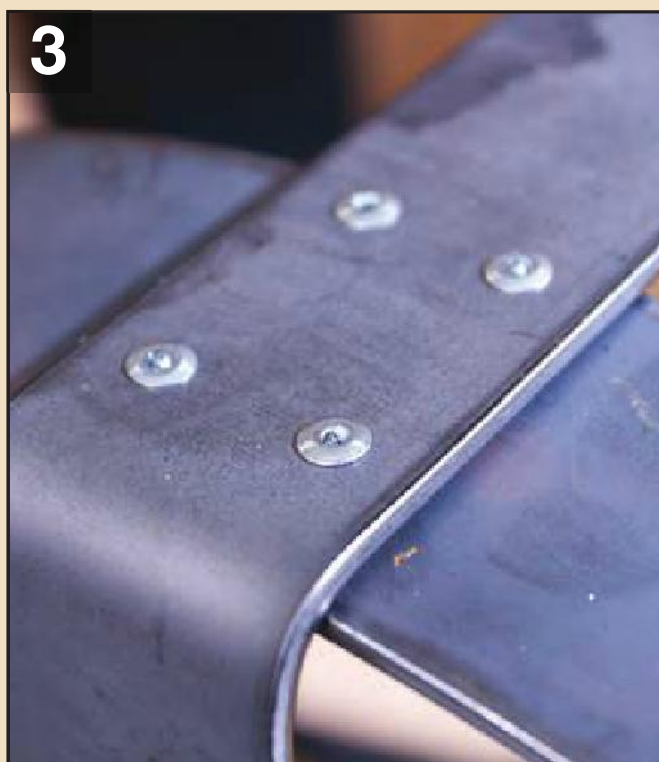
- **Countersunk head** — These rivets are used in special applications that require a flush surface and are typically available in 1/8-, 5/32- and 3/16-in. diameters.



1 Drill holes for the rivets in the flat stock that will serve as the main support straps.



2 Clamp the bottom hoop and the support straps together. Use the holes you've already drilled in the straps as guides for drilling holes through the hoop. Insert the rivet into the hole, slide the rivet gun onto the rivet's mandrel and squeeze the gun handles together.



3 The final result is four neatly spaced rivets that securely fasten the straps to the hoops.



4 Once you've attached the top hoop to the straps, use rivets to fasten the candle bases to the straps.

The rivet that you choose must be made from the same type of metal that it will touch — different metals can react to each other and corrode over time. The most commonly available rivet materials include:

- Aluminum rivet/aluminum mandrel
- Aluminum rivet/steel mandrel
- Aluminum rivet/stainless steel mandrel
- Steel rivet/steel mandrel
- Stainless steel rivet/steel mandrel
- Stainless steel rivet/stainless steel mandrel
- Plastic rivet/plastic mandrel
- Copper rivet/brass mandrel

Once you've purchased the correct rivets, installation is simple (as shown in "A Simple Rivet Project," above). Start by clamping together the two pieces you want to join.

Drill a hole that matches the diameter of the rivet through both pieces. Insert the rivet into the hole, slide the shaft of the rivet gun (photo 2) over the mandrel and squeeze the gun's handles together. As you draw the handles together, the jaws within the gun's shaft will grab the mandrel and pull it through the rivet, causing the tail to expand. It may take a couple of squeezes to fully draw the mandrel through the rivet; you'll know that you've successfully set the rivet when the mandrel breaks away.

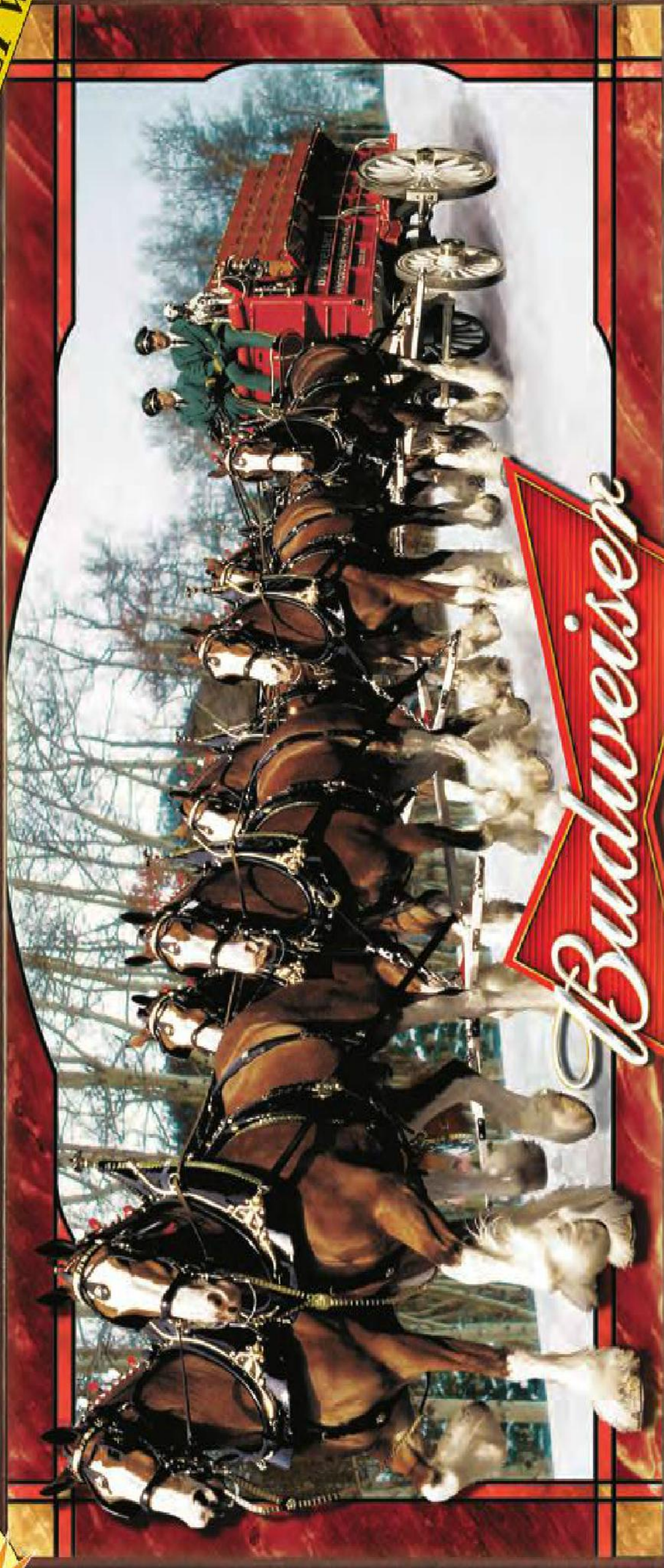
SOURCES ONLINE

For online information, go to www.HandymanClub.com and click on WEB EXTRAS.

Arrow Fastener
800-776-2228
www.arrowfastener.com



NEARLY
2 FEET WIDE!



Budweiser

Budweiser® Clydesdales illuminating stained-glass panorama

In 1933, to celebrate the repeal of Prohibition, August A. Busch Jr. presented a very special gift to his father: a turn-of-the-century beer wagon hitched to a magnificent team of Clydesdales. Since then, the horses have come to symbolize the longstanding traditions of a true American original: Budweiser®. Now a classic eight-horse hitch steps lively once more, filling the nearly two-foot long expanse of a first-ever stained-glass panorama that *lights from within* at the touch of a switch, and features a sculpted, classic Budweiser® bow-tie logo on the front.

An exceptional value—with our unconditional guarantee

Lit or un-lit, the Budweiser® Clydesdales illuminating stained-glass panorama will become a statement piece in any decor, and arrives fully assembled. The edition is strictly limited, and strong demand is anticipated, so order yours now in four easy, interest-free installments of \$37.50, for a total of \$149.99*, backed by our 365-day guarantee. Send no money now. Just mail the Reservation Application today! www.bradfordexchange.com/budpano

©Vahveiser Busch Inc. 2010. Adult product not intended for sale to persons under 21 years of age.

Shown much smaller than actual size of 22" wide x 10 3/8" high, including frame. With hanging device.

RESERVATION APPLICATION SEND NO MONEY NOW

**THE
BRADFORD EXCHANGE
—HOME DECOR—**

9345 Milwaukee Avenue • Niles, IL 60714-1393

YES. Please reserve the Budweiser® Clydesdales illuminating stained-glass panorama for me as described in this announcement. **Please Respond Promptly**
Limit: one per order.

Signature _____

Mrs. Mr. Ms. _____ Name (Please Print Clearly)

Address _____

City _____

State _____ Zip _____

01-10450-001-E09291

*Plus a total of \$15.99 shipping and service. This limited-edition is restricted to 95 firing days. Allow 4-8 weeks after initial payment for shipment. All sales are subject to product availability and order acceptance.



At the touch of a switch, long-lasting LED lights shine from within, adding a bold sense of color and life to the first-ever Budweiser® Clydesdales stained-glass panorama.

©2010 BGE 01-10450-001-BI



PORCH PERFECT

Turn a token porch into a lively living space that adds curb appeal

BY CONNIE BASTYR

An expanded patio and a pergola structure enhance this home's front-porch presence.



PHOTOGRAPHY BY TRACY WALSH AND SCOTT JACOBSON AND COURTESY MANUFACTURERS
ILLUSTRATION BY MICHAEL ANDERSON



The front porch is back in style,

and its architectural prominence makes it a superstar in curb appeal. Unfortunately, many homes — like the 1980s suburban split used for this project — sport skinny, superficial porches that look fine but lack function. These narrow spaces (often little more than generous roof overhangs) are not practical as outdoor living areas, especially if you want room for a table and chairs.

To transform the front of this home, we expanded the concrete walkway to create a large patio and then applied a decorative finish to unite the old and new surfaces. (When you're adding onto a porch it is usually most efficient to continue with the existing flooring — wood, stone, concrete, pavers or tile — but don't rule out the idea of switching to a different material for the entire area.) We also added a pergola that nests under the eave so it appears to be a natural extension of the structure.

Besides gaining outdoor living space, we wanted to take attention away from the standout garage façade (another architectural feature common to modern houses). The new porch puts the focus on a friendly entryway for visitors, not vehicles, and gives the house a distinctive charm.

FIRST THINGS FIRST

Before embarking on any building addition, check with your municipality about zoning restrictions and to see

whether permits are required. In our case, the 25-ft. minimum setback requirement would have been a problem if the house were a few feet closer to the curb or if we had planned for a larger extension. No two properties are the same, but some general principles apply to all scenarios (see "Lessons Learned," p. 33).

To be sure that our plan would not compromise the structure, we looked at original blueprints, examined the roof structure from inside the attic and consulted the city's building official. Although the two 4x4 porch posts were on footings, they were not load-bearing or structural, so it was safe to remove them. Of course, if additional footings are required (two were in our case), it's essential to check for underground utilities (see SOURCES ONLINE).

Before settling on a design, we measured the space, marked potential footprints with a garden hose and drew sketches of ideas. We looked at the eaves to see where we needed to design around downspouts, gutters or soffit vents. We also researched pergola styles online and at the library.

A day before we started the project, we carefully dug out the surrounding plants and "banked" them in a shady spot, keeping their roots covered and moist. We also removed the groundcover material (river rock) and stored it elsewhere in the yard to reuse after construction was finished.



1 Cut 2-in. deep x 1-1/2-in.-wide notches across all beams (and later, the rafters) with the matching boards clamped together. Gang-cutting ensures a parallel grid after assembly.

CONCRETE SOLUTIONS

Although most of the existing slab was in good condition, there was a large crack in one section of the concrete walkway. This project offered the opportunity to fix that eyesore (and potential hazard) by replacing the section while enlarging the overall surface. Forming a concrete slab and pouring footings can be DIY projects, but we opted to bring in a professional to do the work. (In case you want to tackle the entire project, we photographed and documented the concrete work, including the decorative finish coat — see WEB EXTRAS).

Once the old 4x4 posts were removed, the concrete's square cutouts needed to be expanded to



2 To create a notch, set your circular saw blade depth to 2 in. and cut along each edge of the notch location (1-1/2 in. apart). Make four passes with the saw in the space between the outer cuts. Using a sharp chisel, remove the wood and smooth out the end of the notch (inset).

receive the new 6x6 posts. Our contractor used a concrete-cutting saw to enlarge the holes so the new posts could rest directly on the existing footings. To protect the wood's end grain from rotting, we needed to preserve the ends of the new posts and to seal around them once they were in position. An alternative approach is to pour new footings and set metal post supports into the tops of the footings.

PERGOLA PROCEDURES

Although our design and dimensions are specific to this house, the approach and concepts we used can



3 Check that the posts are cut to the right length by holding an offcut from one of the 2x8 header boards up to the ceiling. Use a corner level to ensure that the post is plumb as you measure.

apply to similar projects. We chose cedar, but you could use pressure-treated or other weather-resistant wood. The basic components of the pergola are posts, beams, rafters and a header beam.

Begin by trimming the four 2x10 beams to length (see illustration, p. 30). Then cut a decorative curve or taper at the ends. (To replicate a design element from the home's exterior, we formed a simple 45-degree dog-ear cut.) With all four beams clamped together, cut and form the first and last (end) notches (photo 1, above). Set aside one of the boards to use later. Clamp together the other three beams; then mark and cut the remaining eight notches (photo 2).

Posts and beams: Adjust the heights of two posts to fit under the porch ceiling, allowing space for a 2x8 to fit on top of the post (photo 3). After trimming the posts to length,



LET THERE BE LIGHT

Dramatic changes in presentation demand careful attention to details. Accessories such as address numbers, door handles and light fixtures are powerful design elements that should complement the finished project. In this case, we replaced the puny, dated carriage lights (inset) with larger fixtures in a current style. Shopping tip: The low placement of the existing wiring disqualified any fixtures that were structured to hang far below their base. Keep this factor in mind when selecting wall-mount fixtures. — CB

Shopping tip: The low placement of the existing wiring disqualified any fixtures that were structured to hang far below their base. Keep this factor in mind when selecting wall-mount fixtures. — CB

WEB EXTRAS

For instructions on the concrete portion of this project, read our Web feature "Build a Decorative Concrete Slab" at www.HandymanClub.com.



CUT YOUR HEATING AND COOLING COSTS UP TO 80%.

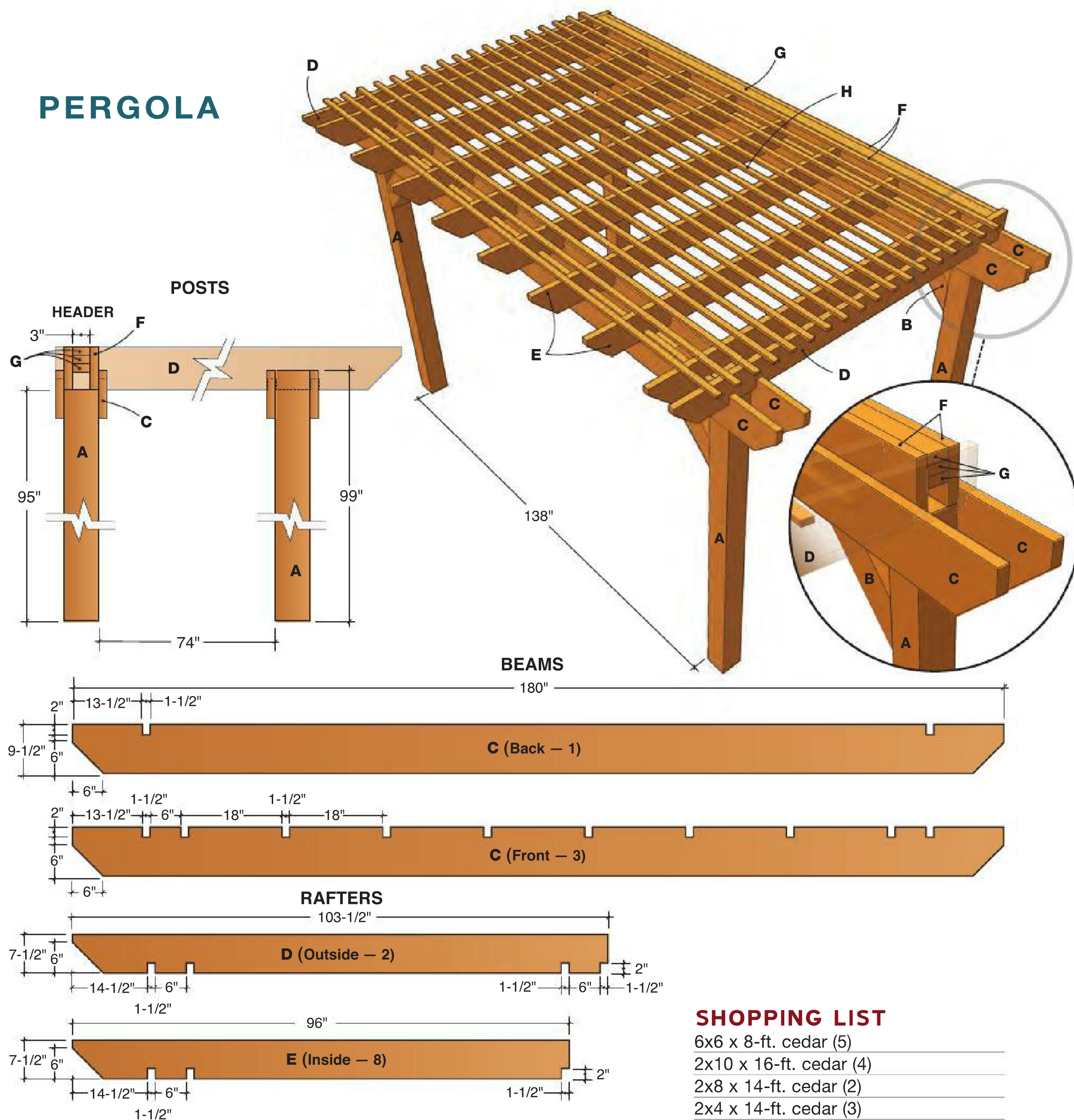


Cut your energy bills. ClimateMaster geothermal systems tap the constant temperature of the earth to provide heating, cooling, and hot water. Your home stays comfortable year-round while trimming your energy use by up to 80%. And now with new federal tax credits, you will save an additional 30% on the total installation. Best of all, ClimateMaster systems are not only a good investment, they are a cleaner choice for the environment. To learn more about how the geothermal technology leader can help you cut your energy bills, visit climatemaster.com or call 877-436-6263 today.


CLIMATEMASTER®
Geothermal Heat Pump Systems

An LSB Industries, Inc. Company (NYSE: LXU)

PERGOLA



CUTTING LIST

KEY	NO.	DESCRIPTION	SIZE
A	4	Posts	6x6 x 8 ft.
B	4	Angled brackets	6x6 x 28 in.
C	4	Beams	2x10 x 180 in.
D	2	Outside rafters	2x8 x 103-1/2 in.
E	8	Inside rafters	2x8 x 8 ft.
F	2	Headers	2x8 x 150 in.
G	3	Header blocking	1-1/2 x 3 in. x 150 in.
H	18	Top slats (optional)	1x2 x 160 in.

SHOPPING LIST

6x6 x 8-ft. cedar (5)
 2x10 x 16-ft. cedar (4)
 2x8 x 14-ft. cedar (2)
 2x4 x 14-ft. cedar (3)
 2x8 x 10-ft. cedar (2)
 2x8 x 8-ft. cedar (8)
 1x2 x 14-ft. cedar (18; optional)
 1/2 x 8-in. lag screws (8)
 10-in. lag screws (8)
 3/8 x 5-in. lag screws (24)
 3-in. deck screws
 1-1/2-in. galvanized
 narrow-crown staples or
 1-5/8-in. deck screws

secure them to their footings (adding temporary braces if needed).

To help support the first beam while you're installing it, clamp a 2x4 to the front face of each porch post, approximately 13 in. from the ceiling (photo 4, p. 32). Rest the beam on

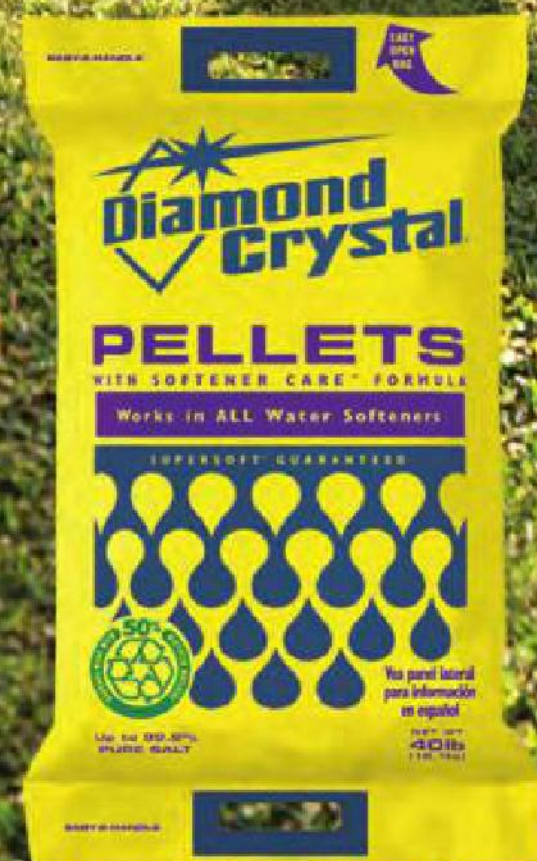
top of the 2x4 supports and adjust its position up or down by moving the clamped 2x4s until the beam is level at 3-1/2-in. from the ceiling. Be sure that the posts are plumb as you drive 5-in. lag screws (two at each end) to attach the beam to the posts.

Set the two outer posts on their footings and use a long level and a 2x4 (or a laser level) to verify that the tops are level with each other and that they are even with the top edge of the installed beam. (You're going to need a helper.) Trim the posts as needed.

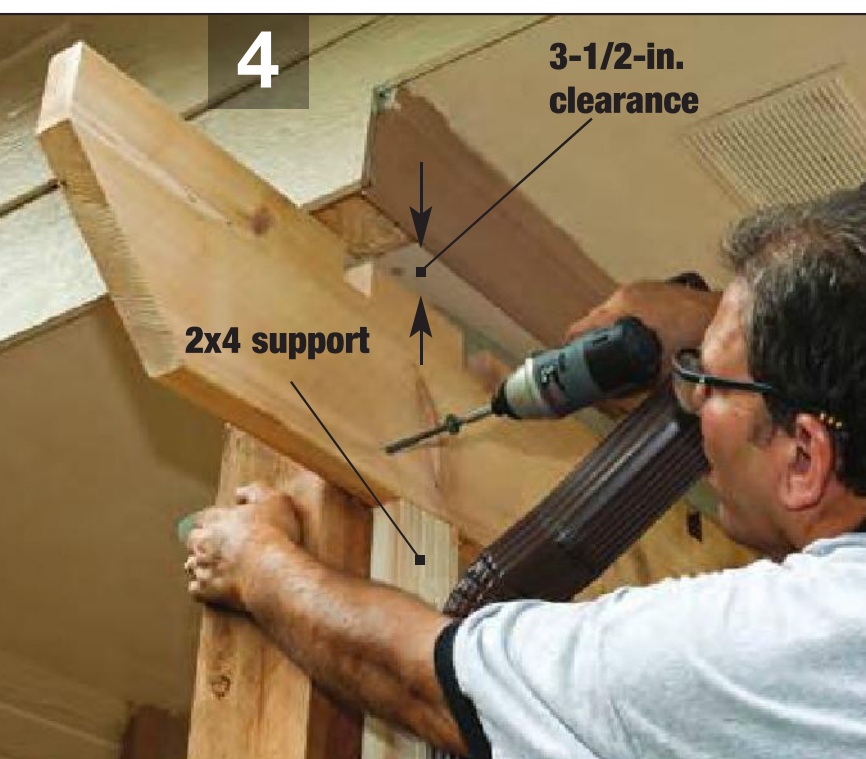
CARING FOR THE FUTURE IS NOW AS EASY AS CARRYING OUR BAGS.

Try our easy-2-handle® bag, now made with 50% recycled material. Your family will enjoy the soft water, and you'll enjoy knowing that our bag is a little easier on the environment.

Visit diamondcrystalsalt.com for more information.



For illustration purposes only. Children should not attempt to carry without adult permission and supervision.



The 3-1/2-in. space between the porch ceiling and the top of the beam will allow you to twist the rafters in position and link the intersecting notches. (The header beams will conceal the gap.)



Attach the house-facing beam to the two outer posts using two 5-in. lag screws in each joint. The top edge of the beam should be flush with the tops of the posts.



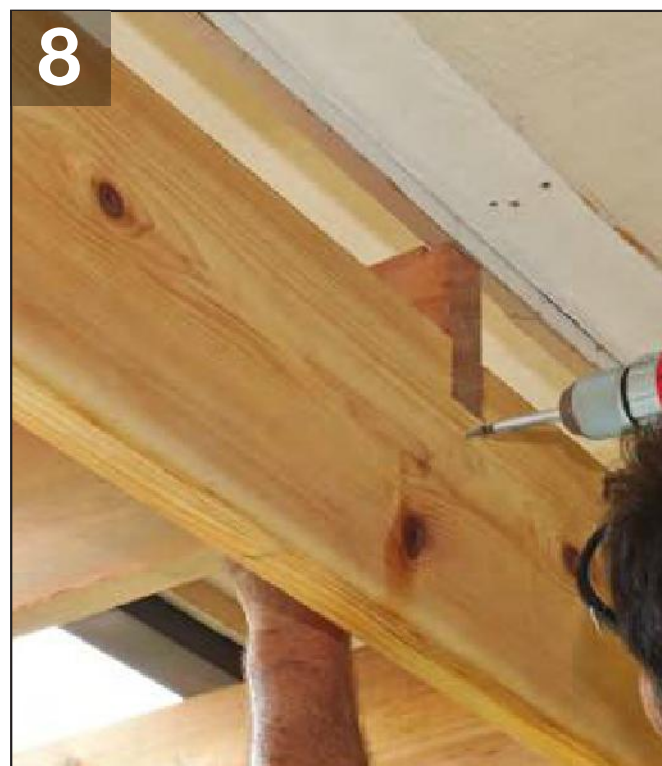
The rafters fit in place more easily while only two beams are in position. The final two beams fit up into the open notches afterward. Mating notches like these hold together without fasteners.



Use a long clamp to temporarily hold the beam up tight against the rafters while you drive two 5-in. lag screws into both of the posts.

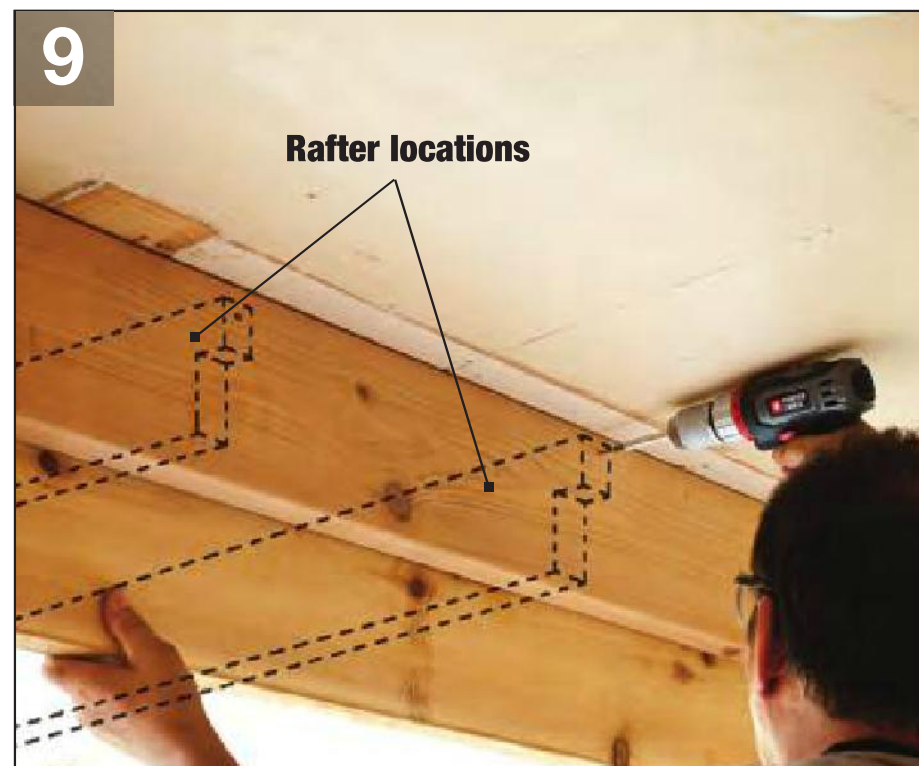
Secure a beam to the outer posts (photo 5).

Rafters: Our design calls for 10 rafters; the two end rafters are longer than the others. Cut the rafters to



To attach the rafters to the porch beam, drive 3-in. deck screws through the 2x10 beam and into the notched ends of the rafters.

size and form the notches and the end profiles. Insert rafters 2 through 9 in the notched locations between the posts (photo 6, above). Then install rafters 1 and 10, which span



Drive 3-in. deck screws through the 2x8 header board and into the butt ends of the rafters (entering the rafter ends above the notches).

the sides of the porch posts. Drive 3-in. deck screws to attach them to the post sides. Fasten the third beam to the outer posts (photo 7). Then attach the back ends of the rafters to the porch beam (photo 8).

Header beam: Mark the rafter locations on the porch ceiling; then set a 2x8 across the tops of the porch posts and fasten it to the end of each rafter (photo 9). Next, attach a 1-1/2-in. x 3-in. board to the ceiling right behind the 2x8 header. Add two more 3-in.-wide boards, one at a time, with 3-in. deck screws. Securely fasten all three boards to the truss framing



FINISHING DETAILS

If you like cedar's natural color, you'll need to retard its tendency to gray with age by applying a clear exterior finish once a year. The fastest, easiest way to coat this structure is with a DIY-friendly airless sprayer. — CB

LESSONS LEARNED

Here are some general principles that can guide you during the planning of your project.

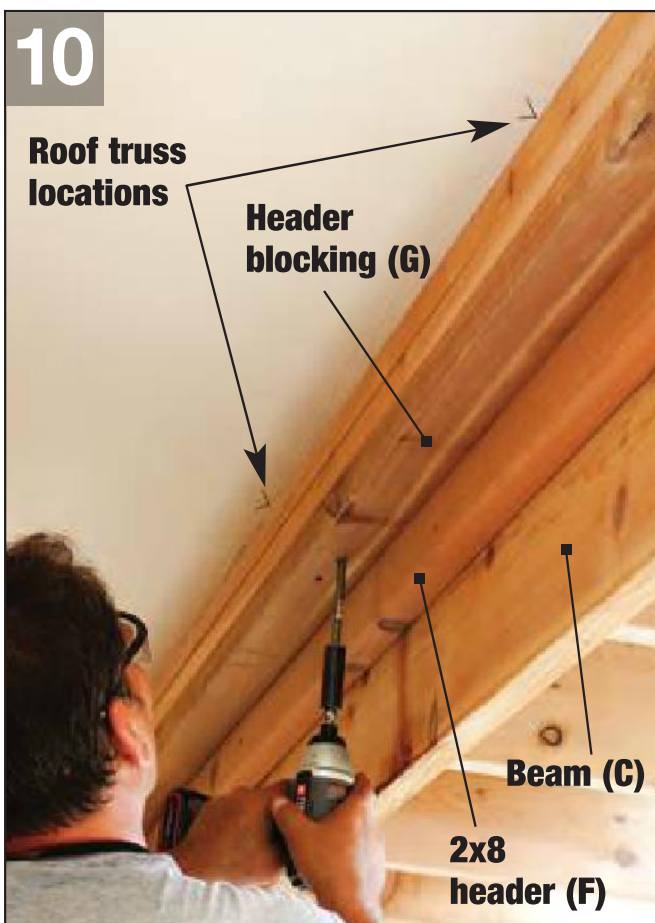
- There are differences between load-bearing, structural and supportive elements, any of which demand careful design. If you attach a deck, porch, pergola or other structure to the house, you'll likely need a permit. Following through with inspections helps to ensure that your addition doesn't compromise the house structure. (The city's building officials can provide valuable advice and information regarding spans, structure and standards — especially if you involve them in the planning.)

- Your design should complement the style of the primary structure. We mirrored the 45-degree angle of the garage door and bay window (and the original brackets on the porch posts) in the new bracket design and on the lines of the new rafters.

- It's OK to recruit a professional. If you consider your time and physical well-being, doing all aspects of the job yourself isn't always worth the cash savings. We hired a contractor to create the concrete slab and footings, and we are glad we did. — CB

with 8-in. lag screws (photo 10, above). Then add the back 2x8 header board on top of the posts (photo 11). Attach the last beam (which was set aside earlier) to the back sides of the porch posts, using two 5-in. lag screws at each end.

Embellishments: The four corner brackets and the top slats are optional additions, not structural elements. The 1x2 slats provide a sense of enclosure and offer a bit of protection from direct sunlight. After calculating the desired gap between the slats, we cut a spacer block (photo 12) to ensure consistent spacing. The brackets (photo 13) are about 28 in. on the longest side with 45-degree angle cuts. We attached them to the posts using four lag screws.



Three 1-1/2-in. x 3-in. boards (ripped from 2x4s) make up the interior of the header beam. They are fastened to the ceiling one at a time with deck screws and then secured with 8-in. lag screws driven into the framing in the porch ceiling.



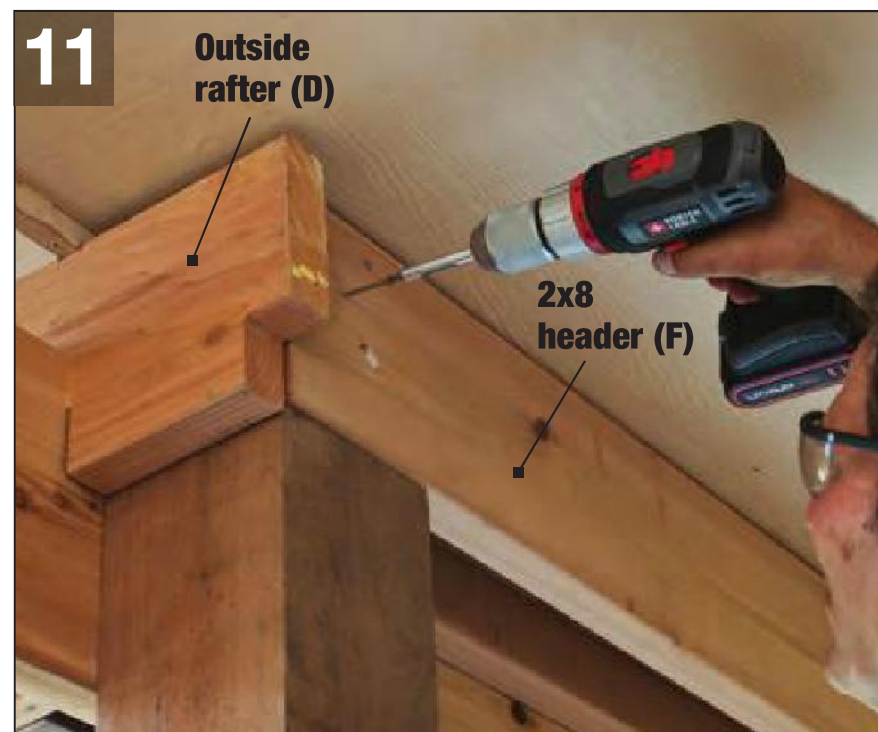
We used 1-1/2-in. galvanized staples to fasten the slats at each rafter crossing. If you prefer, you could use 1-5/8-in. deck screws instead.

FIRST THINGS LAST

The curb-appeal aspect of our project was a key factor right from the start and all the way through to the end. Here are some of the finishing details that helped to insure a first-rate, lasting impression:

A *decorative coating* makes the old and new concrete surfaces look like one large stone surface. Colors complement the brick siding. (We abandoned our original idea to install a paver floor, as it would have been too blocky.)

New, larger *light fixtures* help to enhance the porch's updated look (see "Let There Be Light," p. 28).



Attach the 2x8 header board to the sides of the inner boards, being sure to drive 3-in. deck screws into all three boards and into the posts as well.



Drive two 10-in. lag screws at the lower end of each bracket and one 5-in. lag screw from each side of the beam on top.

An *expanded landscape design* is shaped for ease of maintenance. By combining the established (repurposed) shrubs with new sculptural plants, we dressed up the scenery around the new porch and added a low privacy screen.

With more room for *furniture*, the homeowner swapped the swing for a table and chairs, which boosted the space's functionality and appeal.

SOURCES ONLINE

For online information, go to www.HandymanClub.com and click on WEB EXTRAS.

Call 811 (utility locator)
www.call811.com

HARBOR FREIGHT TOOLS

Quality Tools at Ridiculously Low Prices

100% Satisfaction Guaranteed! • Lifetime Warranty On All Hand Tools!

SALE STARTS TODAY!

FACTORY DIRECT TO YOU!

How does Harbor Freight Tools sell high quality tools at such ridiculously low prices? We buy direct from the factories who also supply the major brands and sell direct to you. It's just that simple! Come see for yourself at one of our 340 STORES NATIONWIDE and use this 20% OFF Coupon on one of our 7,000 products,* plus with any purchase of \$9.99 or greater, pick up a FREE 6 Piece Screwdriver Set, a \$7.99 VALUE with our compliments. We stock Automotive products, Shop Equipment, Hand Tools, Tarps, Compressors, Air & Power Tools, Material Handling, Woodworking Tools, Welders, Tool Boxes, Outdoor Equipment, Generators, and much more.

NOBODY BEATS OUR QUALITY, SERVICE AND PRICE!

SUPER COUPON!

FREE!

WITH MINIMUM PURCHASE OF \$9.99
6 PIECE SCREWDRIVER SET
PITTSBURGH



ITEM 47770
REG. PRICE
\$7.99

HARBOR FREIGHT TOOLS - LIMIT 1 Free item only available with qualifying minimum purchase (excluding price of free gift item). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Shipping & Handling charges may apply if free item not picked up in-store. Coupon cannot be bought, sold or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the offer. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.



38248720

SUPER COUPON!

20% OFF

ANY SINGLE ITEM!

HARBOR FREIGHT TOOLS - LIMIT 1 Use this coupon to save 20% on any one single item purchased when you shop at a Harbor Freight Tools store. *Cannot be used with any other discount or coupon. Coupon not valid on any of the following: gift cards, Inside Track Club membership, extended service plans, Compressors, Generators, Tool Cabinets, Welders, Floor Jacks, Campbell Hausfeld products, open box items, Parking Lot Sale items, Blowout Sale items, Day After Thanksgiving Sale items, Tent Sale items, 800 number orders, or online orders. Coupon not valid on prior purchases after 30 days from original purchase date with original receipt. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store in order to receive the offer. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.



41836990

SUPER COUPON!

SAVE 58%

CHICAGO ELECTRIC POWER TOOLS
OSCILLATING MULTIFUNCTION POWER TOOL



LOT NO. 67256

\$24.99 REG. PRICE \$59.99

17 DIFFERENT ATTACHMENTS AVAILABLE IN OUR STORES!

HARBOR FREIGHT TOOLS - LIMIT 5 This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.



50795483

SUPER COUPON!



CENTRAL PNEUMATIC
3 GALLON 100 PSI OILLESS PANCAKE AIR COMPRESSOR

LOT NO. 95275

SAVE 40%
\$44.99 REG. PRICE \$74.99

HARBOR FREIGHT TOOLS - LIMIT 4 This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.



47167606

SUPER COUPON!

PITTSBURGH AUTOMOTIVE
RAPID PUMP® 1.5 TON ALUMINUM RACING JACK

SAVE \$50 **NEW!**

3-1/2 PUMPS LIFTS MOST VEHICLES!



LOT NO. 68053

\$69.99 REG. PRICE \$119.99

HARBOR FREIGHT TOOLS - LIMIT 3 This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.



41323668

SUPER COUPON!

7 HP, 3050 RATED WATTS/ 3500 MAX. WATTS GASOLINE GENERATOR



Item 67560 shown

SAVE \$190

\$259.99 REG. PRICE \$449.99

HARBOR FREIGHT TOOLS - LIMIT 3 This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.



17857004

SUPER COUPON!

CENTRAL PNEUMATIC
2-IN-1 COMBINATION AIR NAILER/STAPLER



LOT NO. 97586

SAVE \$50

\$119.99 REG. PRICE \$169.99

HARBOR FREIGHT TOOLS - LIMIT 5 This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.



66454772

SUPER COUPON!

12 VOLT 3/8" LITHIUM ION CORDLESS DRILL/DRIVER



12V battery and charger included.

LOT NO. 68126

\$34.99 REG. PRICE \$59.99

SAVE 41%

HARBOR FREIGHT TOOLS - LIMIT 4 This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.



26252130

SUPER COUPON!

CENTRAL PNEUMATIC
3" HIGH SPEED AIR CUTTER



Item 47077 shown

\$6.99 REG. PRICE \$19.99

SAVE 65%

HARBOR FREIGHT TOOLS - LIMIT 7 This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.



87462453

SUPER COUPON!

PITTSBURGH
6 PIECE PLIERS SET



LOT NO. 38082/46005

Item 38082 shown

SAVE 33%

\$9.99 REG. PRICE \$14.99

HARBOR FREIGHT TOOLS - LIMIT 11 This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.



50050095

SUPER COUPON!

RECIPROCATING SAW WITH ROTATING HANDLE
CHICAGO ELECTRIC POWER TOOLS



LOT NO. 65570

\$19.99 REG. PRICE \$39.99

SAVE 50%

HARBOR FREIGHT TOOLS - LIMIT 4 This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.



97990089

HARBOR FREIGHT TOOLS

Quality Tools at Ridiculously Low Prices

100% Satisfaction Guaranteed!

Lifetime Warranty On All Hand Tools!

SUPER COUPON!

CENTRAL MACHINERY

2 HP INDUSTRIAL 5 MICRON DUST COLLECTOR

LOT NO. 97869

SAVE \$100

\$149.99

REG. PRICE \$249.99



HARBOR FREIGHT TOOLS - LIMIT 3
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

23364516

SUPER COUPON!

CHICAGO ELECTRIC POWER TOOLS

10" SLIDING COMPOUND MITER SAW

LOT NO. 98199

SAVE \$60

\$79.99

REG. PRICE \$139.99

SAW BLADE INCLUDED



HARBOR FREIGHT TOOLS - LIMIT 3
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

70035670

SUPER COUPON!

Tools sold separately.

60" HARDWOOD WORKBENCH

U.S. GENERAL

LOT NO. 93454

SAVE \$70

\$129.99

REG. PRICE \$199.99



HARBOR FREIGHT TOOLS - LIMIT 4
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

80856685

SUPER COUPON!

HAUL-MASTER

HEAVY DUTY SCAFFOLD

LOT NO. 98979

SAVE \$80

\$169.99

REG. PRICE \$249.99

900 LB. CAPACITY



HARBOR FREIGHT TOOLS - LIMIT 3
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

43116219

SUPER COUPON!

HAUL-MASTER

800 LB. CAPACITY TRUCK RACK

LOT NO. 98511

SAVE \$120

\$179.99

REG. PRICE \$299.99

Fits most full size and compact trucks.



HARBOR FREIGHT TOOLS - LIMIT 5
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

43936244

SUPER COUPON!

CHICAGO ELECTRIC POWER TOOLS

1.5 HORSEPOWER 7" BRIDGE TILE SAW

LOT NO. 98265

SAVE \$50

\$149.99

REG. PRICE \$199.99

Stand and diamond blade sold separately.



HARBOR FREIGHT TOOLS - LIMIT 3
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

76432671

SUPER COUPON!

CHICAGO WELDING

90 AMP FLUX WIRE WELDER

LOT NO. 98871

SAVE \$60

\$89.99

REG. PRICE \$149.99

NO GAS REQUIRED!



HARBOR FREIGHT TOOLS - LIMIT 5
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

69047058

SUPER COUPON!

CENTECH

DIGITAL INSPECTION CAMERA

LOT NO. 67979

SAVE \$50

\$79.99

REG. PRICE \$129.99

Runs approximately 5 hours on four AA batteries (included).



HARBOR FREIGHT TOOLS - LIMIT 4
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

33112491

SUPER COUPON!

ORBITAL PALM SANDER

LOT NO. 40070

SAVE 55%

\$7.99

REG. PRICE \$17.99



HARBOR FREIGHT TOOLS - LIMIT 6
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

81652943

SUPER COUPON!

HAUL-MASTER

DRYWALL PANEL HOIST

LOT NO. 99645/95852

SAVE \$100

\$199.99

REG. PRICE \$299.99

150 LB. CAPACITY

Item 99645 shown



HARBOR FREIGHT TOOLS - LIMIT 4
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

47914114

SUPER COUPON!

CHICAGO ELECTRIC POWER TOOLS

HEAVY DUTY 4-1/2" ANGLE GRINDER

LOT NO. 91223

SAVE 50%

\$14.99

REG. PRICE \$29.99

GRINDING WHEEL AND SPINDLE NUT INCLUDED



HARBOR FREIGHT TOOLS - LIMIT 5
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

71807390

SUPER COUPON!

CHICAGO ELECTRIC POWER TOOLS

1.5 HP VARIABLE SPEED PLUNGE ROUTER

LOT NO. 67119

SAVE 37%

\$49.99

REG. PRICE \$79.99



HARBOR FREIGHT TOOLS - LIMIT 5
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

59902585

SUPER COUPON!

CENTECH

12" COMBINATION SQUARE SET

LOT NO. 92471

SAVE 60%

\$3.99

REG. PRICE \$9.99



HARBOR FREIGHT TOOLS - LIMIT 8
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

31183197

SUPER COUPON!

CENTRAL PNEUMATIC CONTRACTOR SERIES

18 GAUGE 2-IN-1 NAILER/STAPLER

LOT NO. 97524

SAVE 46%

\$15.99

REG. PRICE \$29.99

WE CARRY A FULL LINE OF FASTENERS!



HARBOR FREIGHT TOOLS - LIMIT 6
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

40641698

SUPER COUPON!

WESTERN SAFETY

LEATHER INDUSTRIAL WORK GLOVES, 5 PAIRS

LOT NO. 66287

SAVE 50%

\$4.99

REG. PRICE \$9.99

One size fits all.



HARBOR FREIGHT TOOLS - LIMIT 7
This valuable coupon is good anywhere you shop Harbor Freight Tools (retail stores, online, or 800 number). Cannot be used with any other discount or coupon. Coupon not valid on prior purchases after 30 days from original purchase date with receipt. Offer good while supplies last. Coupon cannot be bought, sold, or transferred. Original coupon must be presented in-store, or with your order form, or entered online in order to receive the coupon discount. Valid through 7/17/11. Limit one coupon per customer and one coupon per day.

95527180

3 EASY WAYS TO SHOP!

1. VISIT!
340 Stores Nationwide

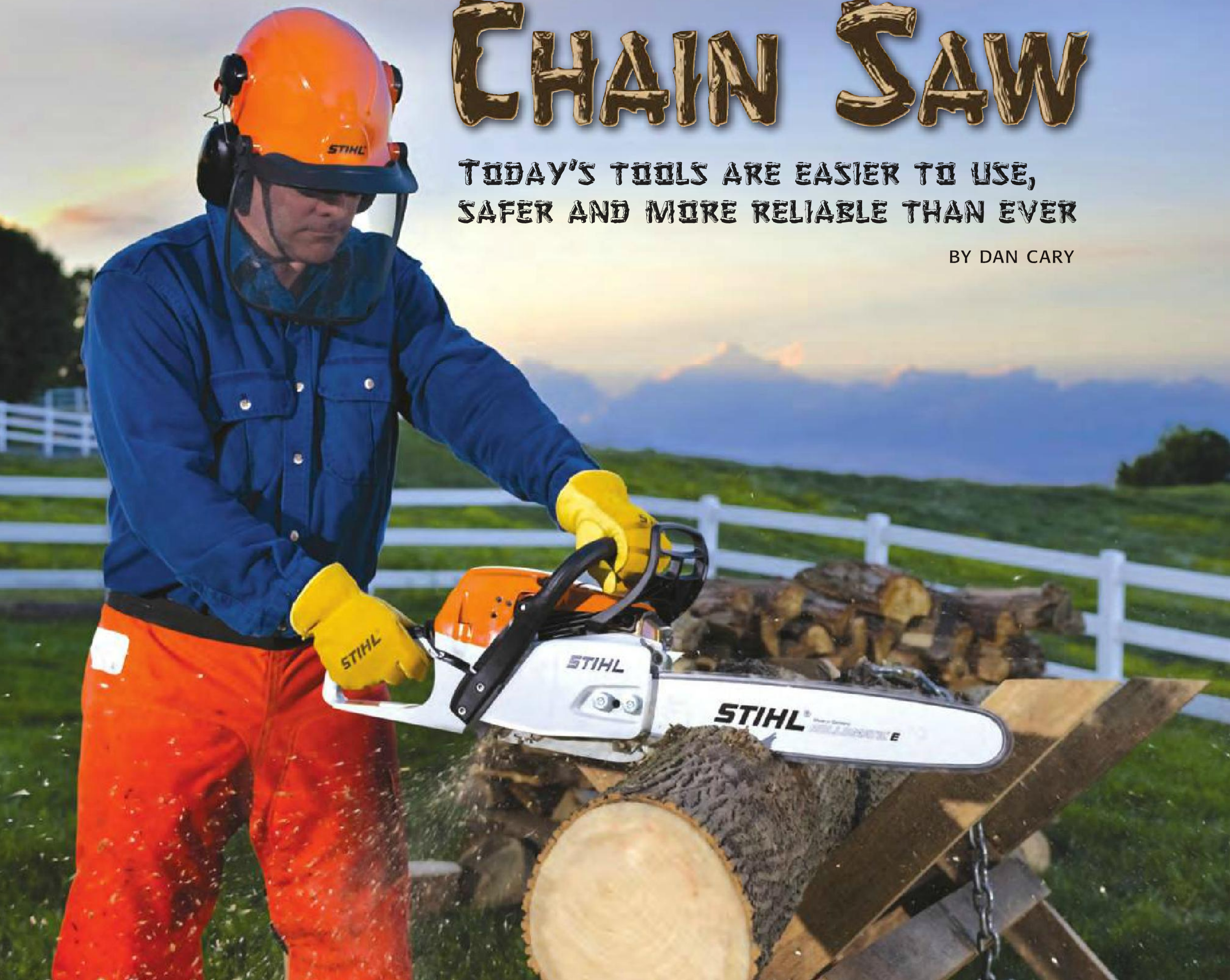
2. GO TO!
www.HarborFreight.com

3. CALL!
1-800-423-2567

CHOOSING A CHAIN SAW

TODAY'S TOOLS ARE EASIER TO USE,
SAFER AND MORE RELIABLE THAN EVER

BY DAN CARY



I can name a dozen ways to cut a 2x4 (not including a karate chop). But when it comes to felling a tree, sectioning branches or cleaning up storm damage, there's really only one choice: a chain saw. This tool is designed to do one thing — cut through wood fast — and it does it well.

If you're considering buying your first chain saw or you have an old one that wears you out when you try to start it, you'll find plenty to like about the latest models. But as always, you should think carefully about how you'll use the tool before you start to shop. Here are some factors to consider as you make your selection.

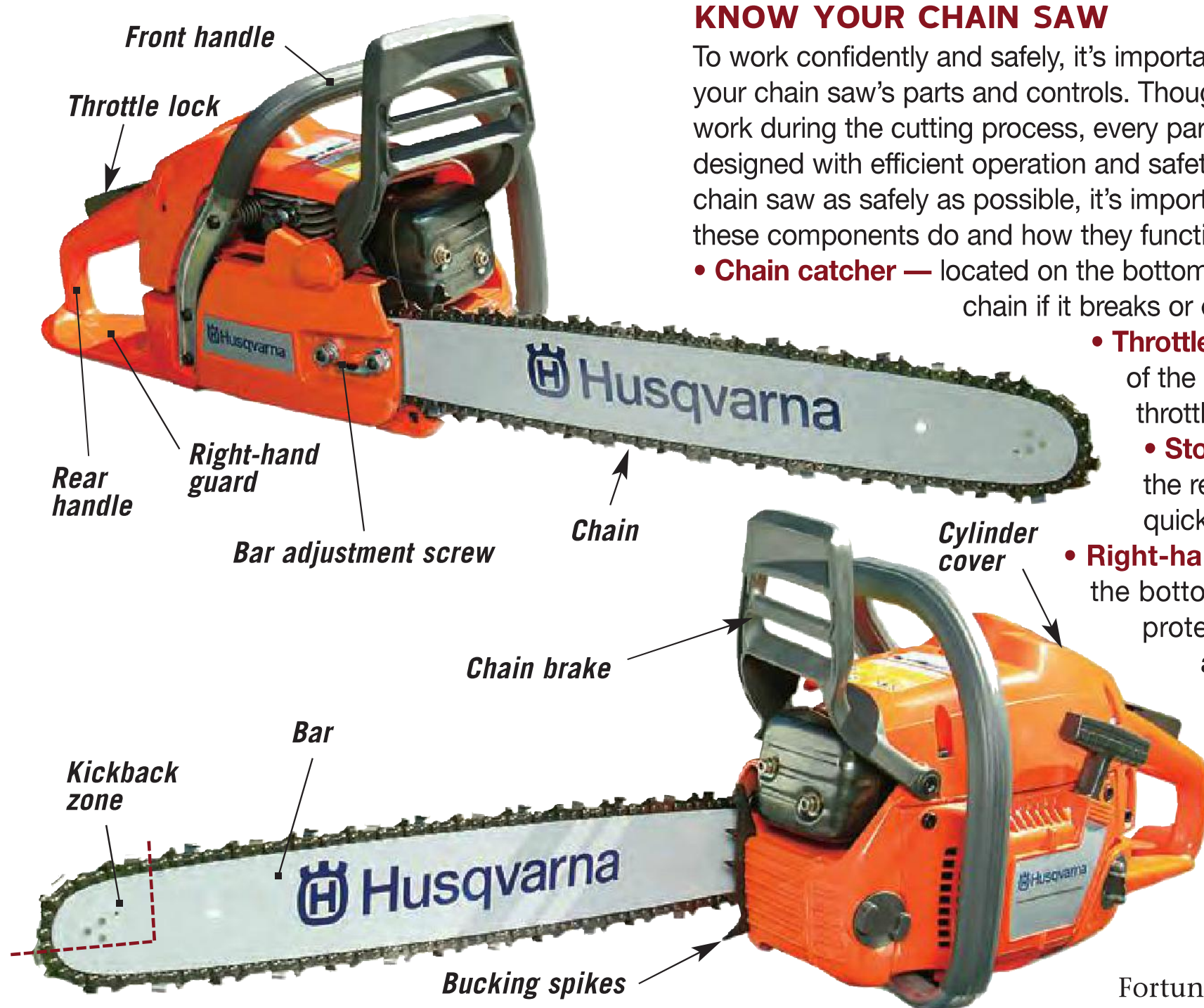
CUTTING TASKS

Your first consideration is what type of work you plan to do. There's no reason to buy a large, expensive, high-power model if you'll only be cutting small branches. Choose the saw that is appropriate for the type and amount of cutting you plan to do. For most homeowners that means a small gasoline-powered or electric model.

Tip: No matter what type of saw you choose, it's bound to incur a lot of wear. Buying from a dealer that offers parts and service makes maintenance easier.

It's also important to consider how often you plan to use the saw. A chain saw is not the type of tool you can

PHOTOGRAPHY BY LARRY OKREND AND COURTESY MANUFACTURERS



KNOW YOUR CHAIN SAW

To work confidently and safely, it's important to familiarize yourself with your chain saw's parts and controls. Though it's the chain that does the work during the cutting process, every part of your chain saw is designed with efficient operation and safety in mind. To operate your chain saw as safely as possible, it's important to understand what these components do and how they function.

- **Chain catcher** — located on the bottom of the saw; catches the chain if it breaks or derails
- **Throttle lock** — located on the top of the handle; prevents accidental throttle advance
- **Stop control** — located near the rear handle; allows you to quickly shut off the engine
- **Right-hand guard** — located on the bottom of the rear handle; protects your right hand from a broken chain
- **Chain brake** — Located above the rear of the bar; stops the chain in the event of a kickback

set on a shelf between uses and expect it to be ready to go the next time you pick it up. Every saw requires routine maintenance, which depends on how much it is used. Even a saw that needs less maintenance, such as an electric model, may require more commitment than you'd like to make. If you want a chain saw for one-time use, such as for cleaning up a few fallen branches, you might be better off renting rather than buying.

POWER

Gas chain saw engines range in size from 30cc to over 100cc. For most residential work, a 30cc to 40cc engine will do the job. A more powerful engine will typically cut faster, so if you cut a lot of firewood, it may be worth moving up to a saw with a 40cc to 60cc engine. The trade-off for that extra power is that the saw will be heavier. In general, saws with engines over 60cc are for those who use their saws professionally, who cut down a lot of trees or who mill lumber (see bottom photo, p. 40).

Some electric chain saws (see top left photo, p. 40) are capable of doing the same work as a small gas-powered saw. Electric saws are easier to maintain, quieter and lighter than gas-powered saws, making them the perfect choice for many homeowners. The main drawback is that you'll be tethered to an extension cord, which limits mobility and access to remote locations. However, cordless models (photo, p. 40) are available.

Gas chain saws used to be infamously difficult to start.

Fortunately, significant improvements have made most new saws easier than ever to start. The starting process and controls on many models have been simplified and are now easier to understand (see top right photo, p. 36). Purge pump primers let you prime the carburetor without flooding it. And pulling the starter cord requires much less effort, thanks to the latest spring-assisted and decompression-valve starting systems, such as those used in the Echo I-30, Stihl Easy-2-Start and Husqvarna Smart Start.

Although meeting the latest regulated emissions standards has been a challenge, most chain saw manufacturers still prefer two-cycle engines because they can pack more power with less weight than comparable four-cycle engines. Their efforts have led to innovations (such as Husqvarna's XTorq technology) that deliver better fuel efficiency and cleaner-running engines without sacrificing (and sometimes even improving) power.

BAR AND CHAIN

The bar length on a chain saw determines the maximum diameter of the log you can cut. It also plays a role in the safety of the saw. A shorter bar is easier to control and safer than a long bar. But you don't want the bar to be too short because it's safest to keep the tip outside the log. Ideally the bar should be at least 2 in. longer than the diameter of the log you're cutting. Professionals typically own several chain saws of different lengths to handle various cutting needs. For most homeowners, one saw with a 14-in. bar will suffice.

The bar and chain must be lubricated to prevent



TOP-HANDLE SAWS

Don't let the compact appearance of a top-handle chain saw fool you. These tools are intended for pros to use in climbing situations when one hand must be free to hang onto a rope or tree branch. The forward-handle design provides much less leverage, which can result in less control.

undue wear. Most electric chain saws feature a manual oil system, such as a push bulb that you press to periodically lubricate the blade during use. Gas-powered chain saws typically feature automatic oiling systems. Traditional automatic chain-oil systems work off of the drive shaft, pumping oil even when the engine is idle. In the past, this often created a pool of oil under the chain saw, but many saws now feature improved systems that use less oil. For example, Stihl's Ematic Bar features a polymer ramp reservoir that holds bar oil until it can be picked up by the passing chain, reducing oil use by as much as 50 percent. Another innovation, Echo's clutch-driven oil system, doesn't pump oil when the saw is idling.



SINGLE STARTER CONTROL

The Stihl Master Control Lever is an example of how manufacturers have simplified the starting process for today's chain saws. The on-off switch, the choke and the starting throttle have been combined into a single lever to make powering up the saw a snap.

In addition to making sure the bar and chain are properly lubricated, you will have to periodically test and adjust the chain tension. A loose chain won't cut well and can be dangerous. Chain tension is adjusted by moving the bar. Choose a saw that has a simple and easy-to-access bar-adjustment system. Some manufacturers offer convenient tool-free (no wrench required) bar adjustment (top left photo, opposite).

SAFETY

No matter what brand or model of saw you choose, there are several safety considerations when operating a chain saw. The first is to wear the proper safety gear (see "Dress for Success," left). Purchase safety gear specifically designed for chain saw protection at the same time you purchase your saw. The importance of wearing proper safety gear cannot be overemphasized.

The next safety consideration isn't as obvious, but it may cause more accidents. "Fatigue can lead to injuries," says Cary Shepherd, senior product specialist for Husqvarna, "so we factor that into the development of just about every component. If it makes the work easier for the operator, then it improves safety."

In that sense, even the technology that makes saws easier to start can be considered a safety feature. "An operator who has had to pull a starter cord 10 times to start their saw is getting



DRESS FOR SUCCESS

Chain saws are powerful tools and therefore potentially dangerous. Safety always comes first, and it starts with wearing the proper attire.

Never saw without a helmet, safety glasses or a full-coverage visor and hearing protection. Protect your hands with a pair of heavy gloves and your feet with a pair of boots that have a protective toe-cap and heavy treads. In addition, wear trousers or chaps that are designed for chain saw work and incorporate saw and abrasion protection. The best chaps meet American Society for Testing and Materials standards, which require them to stop a chain saw running at 2,600 fpm under controlled laboratory conditions. And if you'll be working around other people, wear a bright-colored jacket so you can easily be spotted. — Mike Berger



TOOL-FREE ADJUSTMENT

The Husqvarna chain tensioner is a tool-free bar-adjustment system — no need for a wrench when you use it.

fatigued before they begin cutting,” Shepherd says.

The weight and balance of a saw can also affect fatigue. Before purchasing your saw, put on a pair of protective gloves and pick up the saw in the store. Make sure that it is not too heavy, that it feels well-balanced and that you can securely hold and maneuver it.

Vibration-control systems are another way manufacturers limit fatigue and improve safety. These systems not only make sawing more comfortable and easier in the short term but also help to prevent potential long-term physical problems that frequent saw users can develop, such as tendonitis.

One of the most important safety features that is found on most saws today and that will likely be required on all saws in the near future is a chain-brake system. The chain brake serves two purposes: It prevents the chain from moving in situations when you don’t want it to, such as when you are transporting the saw, cold starting the saw or sharpening the blade, and more important, it quickly stops the chain in emergencies, such as when the chain gets caught or pinched. (This can cause kickback, a dangerous reaction where the saw thrusts back at the user.)

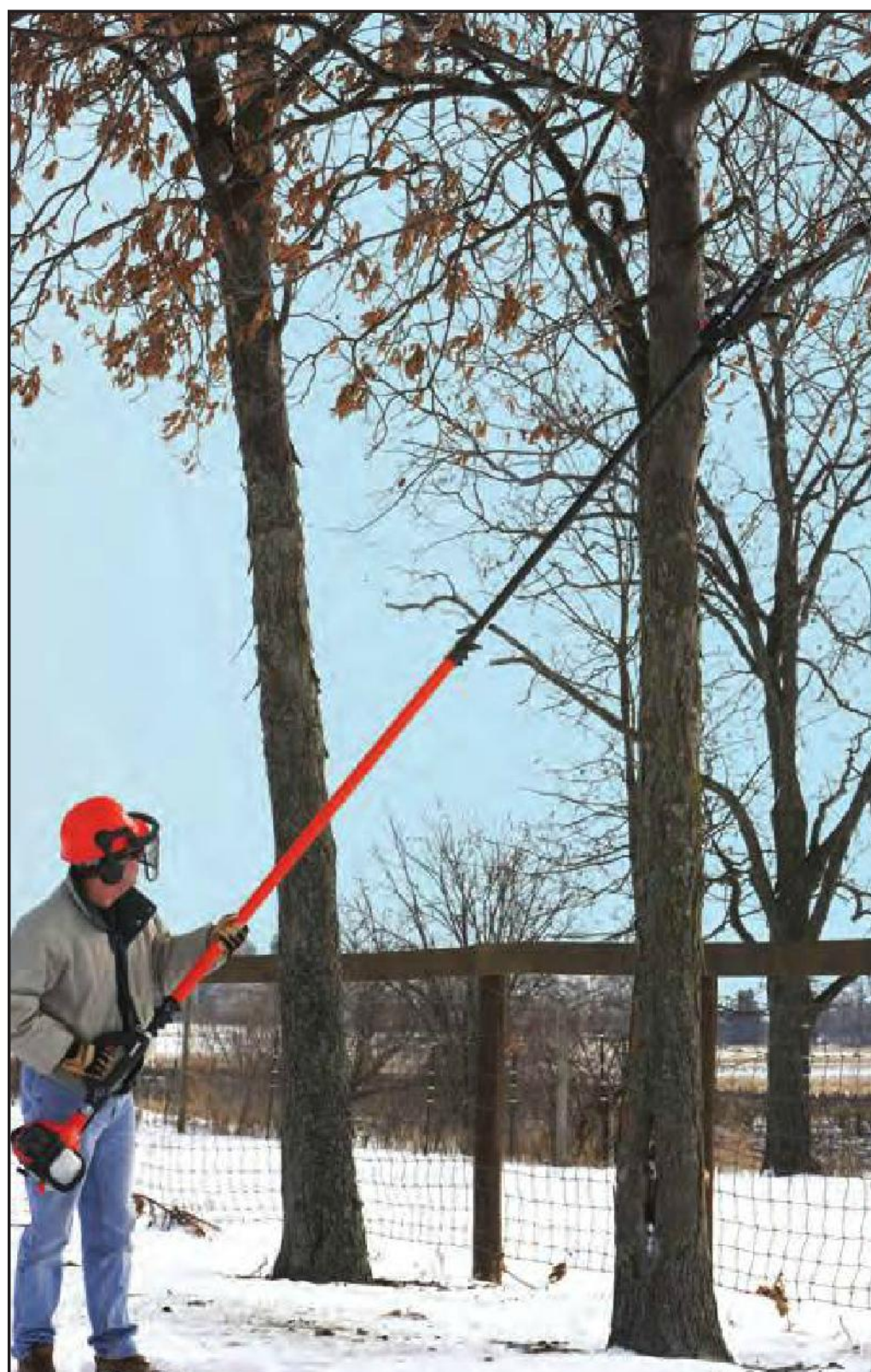
There are two common brake systems. The first is a manual hand brake, typically the front hand guard, which engages when the handle is pushed forward and releases when the handle is pulled back. The second system is an inertia chain brake. It is automatically activated when the chain is suddenly stopped and the saw is forced back or upward quickly. Inertia brakes greatly enhance safety because they activate immediately in situations when the operator might not have the time or ability to react.

The best way to prevent kickback is to use safe cutting



SAFETY TIP

The chance of kickback is greatly reduced when a safety tip is mounted on the end of the saw bar. The Ryobi RY10520 comes equipped with a safety tip that can be removed. Safety tips are rarely used on professional saws because they prevent plunge cuts and other advanced cutting techniques.



POWER POLE SAWS

If you need to remove limbs that are beyond your reach, a power pole saw or Power Pruner (the Echo trademark name that’s become synonymous with this type of tool) is a safer option. These saws are available in lengths from 8 ft. to over 12 ft.

WEB EXTRA

To learn how to use your chain saw like a pro, go to www.HandymanClub.com and click on WEB EXTRAS.



ELECTRIC SAWS

Don't underestimate electric saws. They are easy to handle and do not produce exhaust — and they make less noise than a gasoline-powered saw, making them the only option for indoor jobs such as cutting beams. The downside is that they must be used within 100 ft. of an electric outlet. But if you have a small yard, an electric chain saw might be the perfect choice.



CHAIN SAW MILLS

The thought of milling a freshly felled tree into furniture-grade lumber is intriguing to many woodworkers. You can do the job with a chain saw milling attachment, such as this Granberg Small Log Mill. Ripping logs requires more power than crosscutting, so you'll get the best results using a saw that is powered by at least a 60cc engine and a chain designed for rip cuts.

techniques (see Web Extras), but many saws — especially those intended for homeowners — are equipped with additional protective features. Some saws incorporate anti-kickback bars, which have narrower (more pointed) tips than standard bars, so the area of the bar where most kickback is initiated is smaller. Another safety feature, an anti-kickback or safety chain, has extra guard teeth that limit how aggressively the chain can cut. And on some saws the chain at the tip of the bar can be covered with a



CORDLESS ELECTRIC SAWS

Cordless electric chain saws are lightweight and provide enough power for pruning and trimming small branches. They are an even more attractive option if you already own tools that use the same manufacturer's battery platform. The Craftsman C3 features a 10-in. bar and is powered by a 19.2-volt battery.

safety tip or bar-tip guard (see top right photo, p. 38) to prevent that section of chain from engaging in the wood.

Your chain saw should also feature an interlock or throttle-lock trigger. Gas models feature one trigger or lever on the top and one on the bottom of the rear handle. The bottom lever is the throttle trigger. It accelerates the engine. The top lever is the lock-out trigger. It must be pressed for the throttle trigger to operate.

Learning how to safely operate whatever saw you choose is essential. Most manufacturers provide some user instructions with the saw, but you'll find even more resources, such as free instructional videos, on many saw manufacturers' Web sites (see SOURCES ONLINE). For the sake of your own safety and efficiency, don't ever "wing it" with a chain saw — make sure you're well-informed before you tackle that tree branch.

SOURCES ONLINE

For online information, go to www.HandymanClub.com and click on WEB EXTRAS.

Black & Decker
800-544-6986
www.blackanddecker.com

Craftsman
800-349-4358, www.craftsman.com

Dolmar
(770) 569-4945
www.dolmarpowerproducts.com

Echo
800-432-3246, www.echo-usa.com

Homelite
www.homelite.com

Husqvarna
800-487-5951, www.husqvarna.com

Jonsered
www.tiltonequipment.com

Makita
800-462-5482, www.makita.com

McCulloch
www.mccullochpower.com

Poulan
800-554-6723, www.poulan.com

RedMax
800-291-8251, www.redmax.com

Ryobi
www.ryobitools.com

Solo
(757) 245-4228, www.solousa.com

Stihl
www.stihlusa.com

Tanaka
800-829-4752
www.tanakapowerequipment.com

CHAIN SAW MILLS

Granberg
www.granberg.com

Procut
www.procutportablesawmills.com

YOUR MAIN SQUEEZE

T50 R.E.D.™ PROFESSIONAL MANUAL STAPLE GUN and 1" BRAD NAIL GUN

Check out these other
great R.E.D.™ Tools



EBN320 R.E.D.
Electric Brad Nail Gun



ET50 R.E.D.
Electric Staple Gun



Featuring



Arrow Fastener's R.E.D. Reliable. Ergonomic. Durable.™ tools are built with one thing in mind: Building tools that work when you work, no matter the time of day or the condition of the job.

Arrow builds them right so you can build them right.



Like us on Facebook.
www.facebook.com/ArrowFastener

- ✓ **U.S. PATENTED DRIVE TECHNOLOGY**
Sets staple/nail right on virtually any surface
- ✓ **UP TO 60% MORE POWER***
More versatility on the job
- ✓ **EASIER TO SQUEEZE***
Less fatigue on the job site
- ✓ **HI/LOW POWER SETTING**
Drive into hard and soft surfaces
- ✓ **QUICK LOAD MAGAZINE**
Get work done faster
- ✓ **BRAD NAIL GUN**
The only manual tacker to fire a 1" brad nail



PROFESSIONAL FASTENING
— SINCE 1929 —

www.arrow-red.com/handy

*As compared to Arrow® T50® staple gun.
U.S. Patent Nos. 7,637,407, D620,330, and D620,331



SOFFIT SOLUTIONS

Fixing airflow problems from damaged soffits creates a healthier home

BY MIKE BERGER



Damaged soffits can restrict or alter your home's airflow, resulting in a variety of moisture-related problems.

Just as it's difficult for someone with a broken nose to breathe, it's hard for your house to breathe when its soffits are damaged or the vents are blocked. And your house *needs* to breathe: Proper attic ventilation is vital to maintain a healthy indoor environment and to ensure the longest life for the materials that make up your home.

Houses are designed so that air flows into the attic through ventilation openings in the soffits. As the air cycles around the attic space, it carries heat and moisture up through the roof vents and out of the house. This cycle of air being drawn in through the soffits and pushed out through the roof vents prevents rot in the sheathing and roof-framing members, and it minimizes temperature differences between the attic and the air

outside, lowering your home's energy costs, preventing ice dams from forming and reducing humidity in the attic space.

Over the years various materials have been used for soffits. Wood and wood products such as tempered hardboard were early choices, and in some parts of the country they are still widely used today. But now one of the most popular soffit materials is aluminum. Available in a variety of colors (although white, tan, green and brown are the most common), aluminum soffits and their fascia coverings and moldings are low-maintenance, DIY-friendly products that provide exceptional ventilation and are easily cut and installed using standard tools, so even first-timers can achieve professional looking results in a soffit repair or replacement project.

WHAT YOU'LL NEED TO BUY

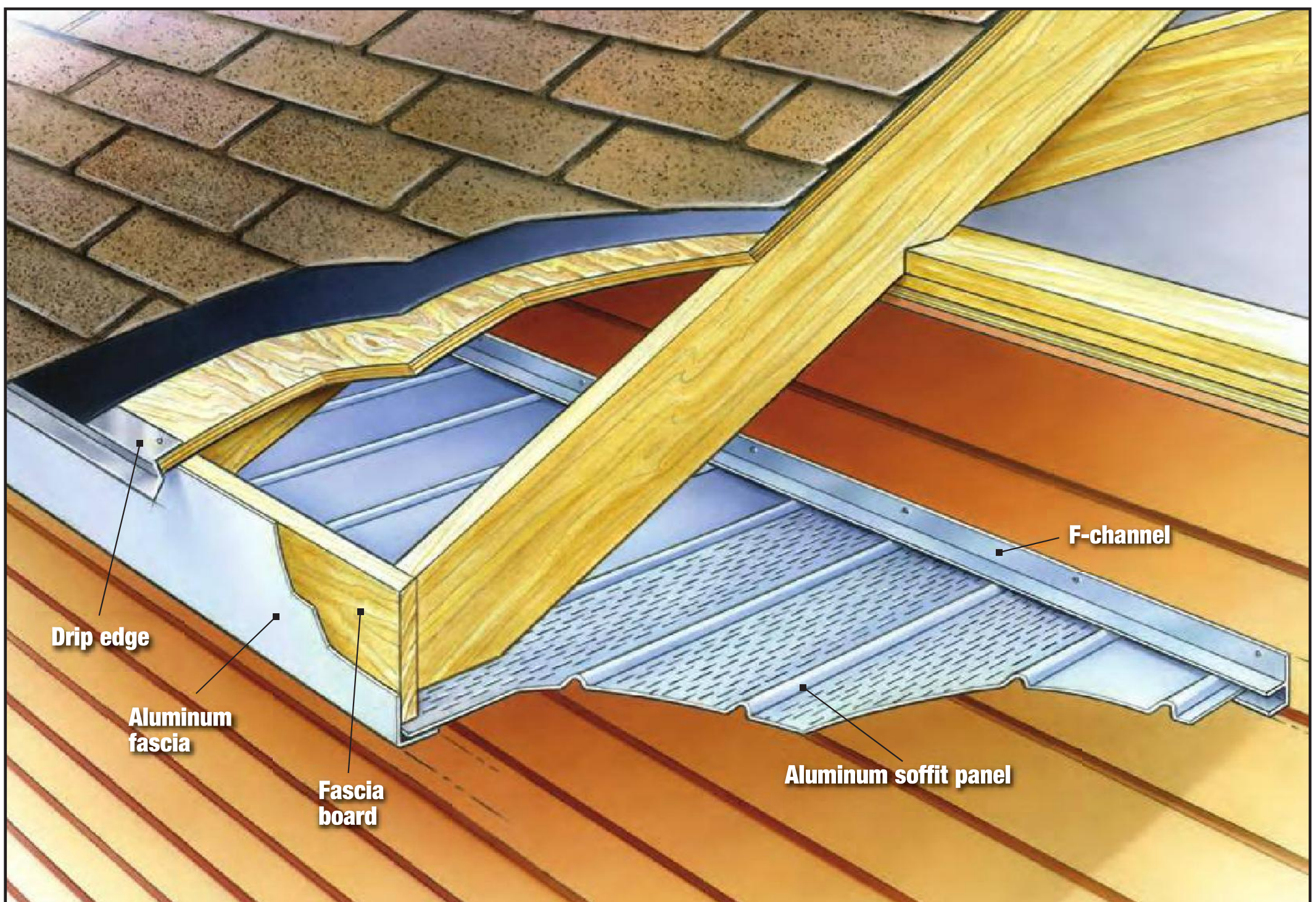
For most soffit projects, the materials are fairly simple and easy to work with. Soffit panels come in vented or unvented 12-ft. lengths and are typically 16 in. wide. Vented panels (top left photo, p. 44) have thousands of small perforations that allow air to flow into a home's attic space, but the holes are small enough to keep out all but the tiniest of insects.

To calculate how many 12-ft. soffit panels you'll need, multiply the width by the length (in feet) of each complete soffit surface, add them all up to get the total square footage and divide by 16 (the square footage of one 16-in.-wide panel). Add 5 percent extra for waste and overlaps.

Aluminum fascia covering can be installed directly over existing wood fascia boards. It has a lip at the

PHOTOGRAPHY BY SCOTT JACOBSON, MIKE BERGER AND MICHAEL ANDERSON
ILLUSTRATION BY TECH ART & DESIGN

TYPICAL ALUMINUM SOFFIT CONSTRUCTION



bottom that laps over the outer edge of the aluminum soffit, and it comes in 6- and 8-in. widths. Measure the width of your fascia boards to determine which width to buy; then measure the length of your home's fascia (in feet) and divide by 12 to find the number of 12-ft. strips you'll need.

In addition to soffit panels and fascia covering, you'll need aluminum J-channel or F-channel to hold the soffit panels in place against the house walls. J-channel has one longer side that's intended for use as a nailing fin and is typically fastened to the underside of an existing wood or hardboard soffit. F-channel is similar to J-channel but has an additional nailing fin and can be nailed directly to the house wall when there is no overhead nailing surface (top left photo, p. 44). Purchase the same length of J- or F-channel as fascia covering.

When working with aluminum, it's important to use fasteners that will not react through galvanic action

when touching the metal surface — plain steel nails and staples are not acceptable. Use 1-1/2-in. aluminum or stainless steel ring-shank nails, or if you plan to use a pneumatic crown stapler (a tool that will greatly speed up the installation process), use Monel staples, which will not suffer from galvanic corrosion.

PREPARING THE SURFACES

If you're repairing existing aluminum soffits and fascia, remove any torn or otherwise damaged sections (photo 1, p. 44). Check for loose nails along the J-channel, and make sure that any existing aluminum you're leaving in place is sound.

If you'll be installing new aluminum panels over a wood or hardboard soffit system that has small vents, remove the old vent covers to allow for free air movement once the new aluminum panels are installed. Measure the existing vent holes to determine whether there is adequate

ventilation, and enlarge them if necessary. As a rule of thumb, there should be approximately 1 sq. ft. of vent opening for every 300 sq. ft. of ceiling area, but because of regional differences in temperature and humidity, ventilation requirements vary. Check with your local code authority to learn about the requirements for your area.

Examine existing fascia boards to make sure they are sound enough to hold the new fascia and soffit nails. Replace any soft or rotted sections with straight pine boards of the same width and thickness.

INSTALLING SOFFIT PANELS

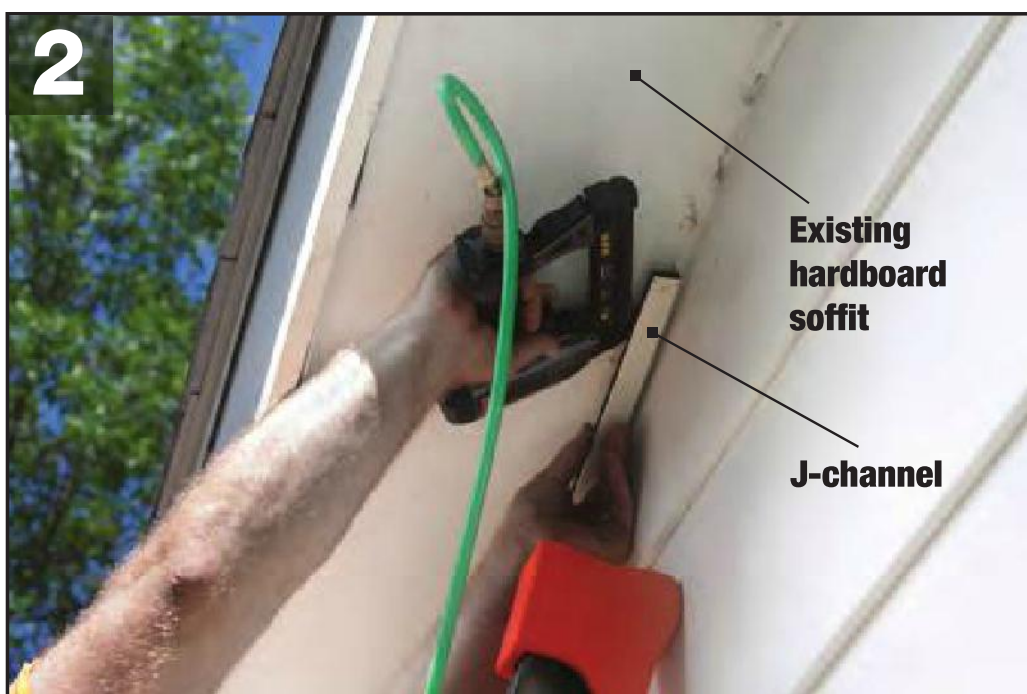
If you are installing aluminum soffit panels over existing wood or hardboard soffit panels, use a pneumatic crown stapler to attach aluminum J-channel to the underside of the existing soffit panels where they meet the house walls (photo 2). Otherwise, fasten F-channel directly



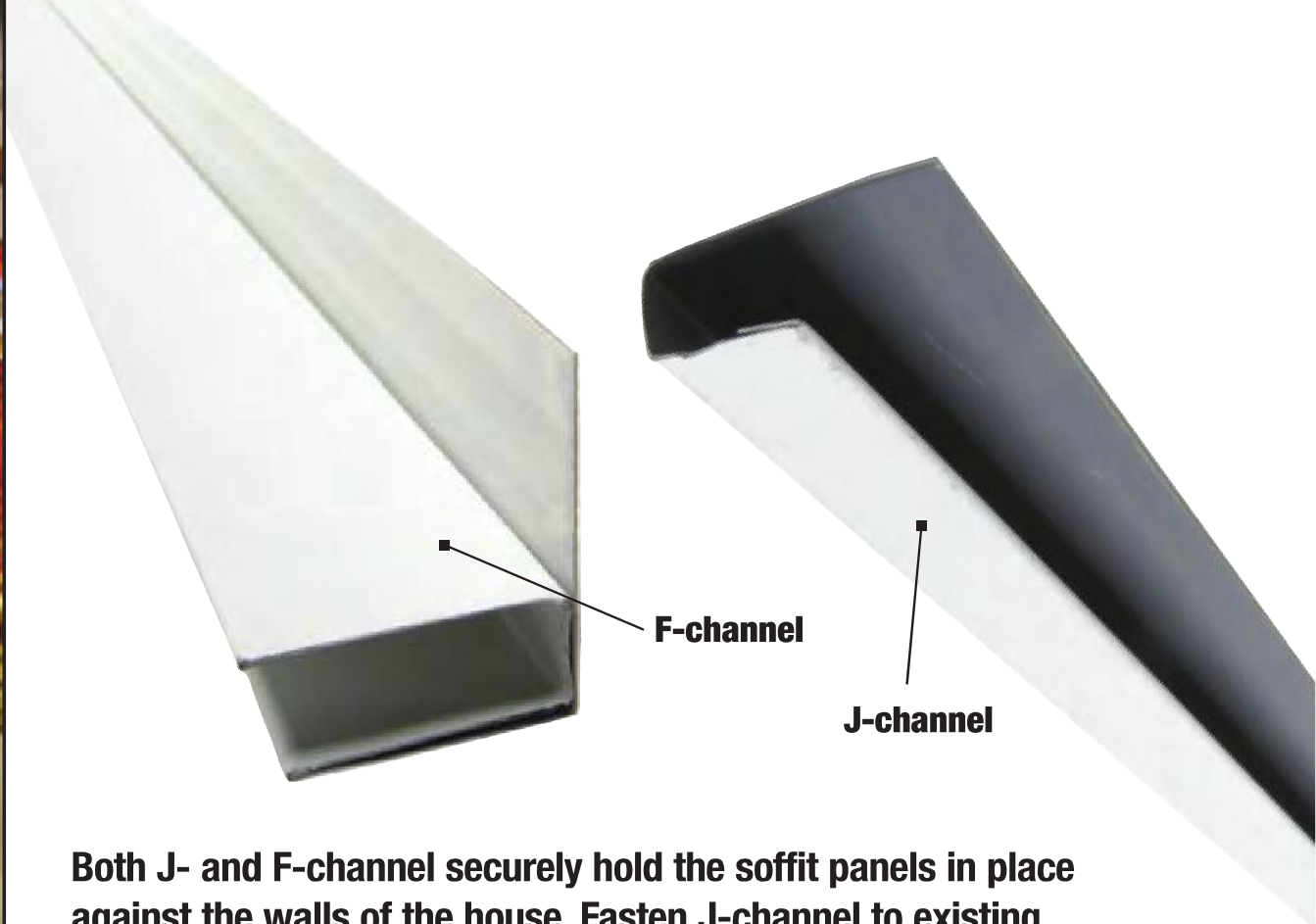
Vented aluminum soffit panels are sold in 12-ft. lengths and have thousands of tiny holes that allow air to flow up into the home's attic space.



1 **If your house has existing aluminum soffits, remove any damaged sections. Don't reuse old components, as they're likely to have weak spots that will tear in windy conditions.**



2 **Attach J-channel to the old overhead soffit boards. If there are no existing soffit panels, use F-channel instead and fasten it directly to the house walls.**



Both J- and F-channel securely hold the soffit panels in place against the walls of the house. Fasten J-channel to existing overhead soffit boards; fasten F-channel directly to the wall.

to the walls by firing crown staples through the nailing fin.

When it comes to cutting the 12-ft. aluminum soffit runs to length, there are two ways you can achieve professional results. If you have access to a portable panel saw (or can rent one), you'll save a lot of cutting time. Install a 40-tooth carbide-tip blade in the saw, lay the soffit panel across the cutting tracks and pull the saw backward across the aluminum (photo 3, p. 46).

If you don't have a panel saw, use a circular saw outfitted with a 40-tooth carbide-tip blade installed so that it rotates backward. Lay the aluminum soffit material across a pair of sawhorses and push the saw forward along the cut line.

Insert the end of the first soffit panel into the J-channel, with the grooved side facing the direction in which you'll be working. Use a square to make sure that the soffit panel is properly aligned; then fasten the opposite end of the panel to the underside of the fascia board (photo 4). I used staples and a pneumatic staple gun to speed the installation process, but you could use a hammer and nails if you don't have an air compressor.

Install additional soffit panels in a similar fashion by sliding them into the groove of the previously installed panel, inserting the end into the J-channel and fastening it to the underside of the fascia board.

INSTALLING FASCIA COVERING

Once you've installed the soffit panels, you're ready to cover the fascia boards with aluminum, starting at the end of one of the eaves. Attaching the aluminum covering to existing fascia boards is easy: Simply slide the fascia covering up under the roof's drip edge so that the aluminum fascia's lower lip covers the ends of the soffit panels; then drive nails through the aluminum into the bottom edge of the fascia board (photo 5).

Where the eaves meet the rake edges of the roof, you'll need to form a 90-degree angle in the aluminum fascia covering. One of the easiest ways to do this is by using a locking sheet-metal tool to fold the metal and form the angle (photo 6).

You'll need to cleanly cut the fascia covering not only to length but also to the proper angle for covering the rake

STRONG ENOUGH TO PROTECT THE WORLD'S WETTEST DECKS. AND YOURS.

Cave of the Winds decks at Niagara Falls, USA.

**Thompson's
WaterSeal**



Millions of gallons of water drench the decks at Niagara Falls each year. That's why they use Thompson's® WaterSeal® products – the most powerful protection against water damage, guaranteed* – to protect the Cave of the Winds decks at Niagara Falls, including the famous Hurricane Deck.

Available in over 100 colors, Thompson's® WaterSeal® wood protectors and stains contain special inhibitors that protect against mildew and fading, so your deck looks beautiful for years to come. Trust the Thompson's® WaterSeal® brand for superior, long-lasting protection from the elements...no matter how extreme. Learn more at thompsonswaterseal.com





When it comes to cutting the soffit runs to length, a sliding panel saw will greatly speed the cutting process — just remember to pull the saw backward along the cut line.



Insert the first soffit panel into the J-channel. Make sure that it's square to the house and the fascia board; then fasten it to the underside edge of the fascia board (inset).



To clad the fascia boards in aluminum, simply slide the cladding up under the roof's drip edge and nail it to the underside edge of the fascia board (inset).



Use a locking sheet-metal tool to cleanly create bends in the fascia covering.



When cutting the fascia covering, first score it with a utility knife; then use the locking sheet-metal tool to cleanly snap it along the score line.



To create a clean line at the roof peak, allow one section of fascia to extend past the peak's vertical line; cut the opposite fascia covering to the proper angle and install it so that it overlaps.

edge of the roof. First use a utility knife to score the aluminum along the cut line; then use the locking sheet metal tool to snap away the excess material (photo 7).

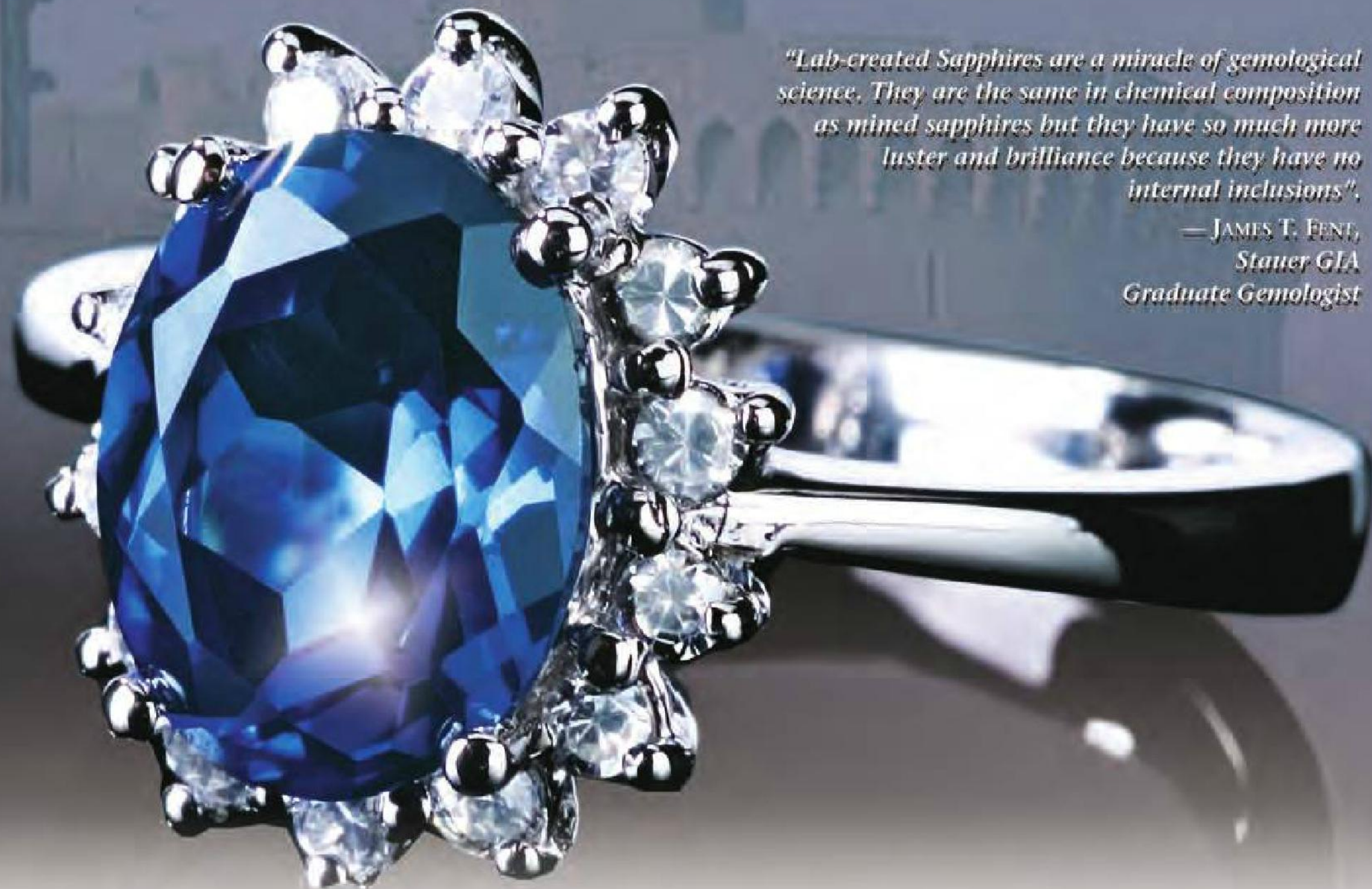
When you're ready to cover the rake ends, start at an end where the rake meets the eave. Work up toward the peak of the roof, allowing the fascia covering to overlap the vertical line of the roof peak; then work from the other side of the roof's rake edge, nailing the fascia covering in place as you go. Cut the last fascia covering to the appropriate angle so that it overlaps the other section of fascia covering at the peak and forms a clean, vertical line (photo 8).

When your project is complete, recycle any old aluminum you've removed as well as any scraps or cutoffs from the new aluminum. Then sit back and breathe easy — your house certainly will, and you'll have a healthier home thanks to your hard work.

SOURCES ONLINE

For online information, go to www.HandymanClub.com and click on WEB EXTRAS.

Irwin Tools
800-464-7946, www.irwin.com



"Lab-created Sapphires are a miracle of gemological science. They are the same in chemical composition as mined sapphires but they have so much more luster and brilliance because they have no internal inclusions".

— JAMES T. FENT,
Stauer GIA
Graduate Gemologist

The World's Most Wanted Ring

*Inspired by the engagement that has become an international sensation—
The stunning Royal Proposal Scienza™ Sapphire can be yours today for only \$99!*

Fairy tales are for real. If you need proof, look no further than the ring that transformed an ordinary English girl into a genuine princess. The world has been buzzing ever since the young prince popped the question. And with a brand new royal romance in full bloom, one legendary sapphire has returned for a second chance at happily-ever-after. Now you can share in the magic with the spectacular *Royal Proposal Scienza™ Sapphire Ring*, available exclusively from Stauer.

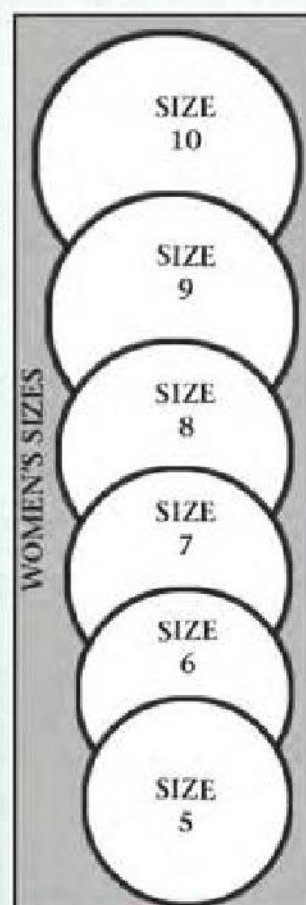
Don't miss your chance to treat her like a princess. Inspired by what many are calling "the most romantic ring ever made," our *Royal Proposal Scienza Sapphire* sparkles with as much passionate color and fire as the genuine sapphire and diamond original... without the king's ransom price tag.

In 1981, Prince Charles slipped a brilliant blue sapphire onto the finger of shy Lady Di and the whole world fell in love. Nearly thirty years later, his son William used the very same sapphire to win the hand of his own beloved Kate. Almost immediately after Prince William announced his engagement, luxury jewelers across Europe were flooded with requests to create similar rings. But even the wealthiest patrons may

have to wait months for their own custom versions. We have one waiting for you right now.

The "ring that everybody wants" won't wait forever. Call today to claim your very own version of the "Most Desired Ring in the World" for the unbelievable price of only \$99! Our version features an impressive 2½-carat lab-created sapphire oval, prong-set in a band of sterling silver. The regal blue beauty is surrounded by a sunburst of 14 lab-created DiamondAura® rounds that sparkle with even more clarity and fire than mined diamonds.

The breakthrough science behind "happily ever after." The difference between our lab-created gemstone and the original royal sapphire is that the natural sapphire has flaws called inclusions.



USING THE RING SIZE CHART
Place one of her rings on top of one of the circle diagrams. Her ring size is the circle that matches the inside diameter of the ring diagram. If her ring falls between sizes, order the next larger size.

Possessing an identical chemical composition as natural gemstones, lab-created sapphires are genuine sapphires that have no inclusions because the heat and pressure are controlled in the laboratory. The result is that scientifically grown stones look superior to most mined stones.

Our Royal Guarantee. Wear the Stauer *Royal Proposal Scienza™ Sapphire Ring*. For any reason, within 30 days, you don't feel like royalty, simply return it to us for a full refund of the purchase price.

JEWELRY SPECS:

- 2 ¾ ctw DiamondAura® ring
- .925 sterling silver setting

Not Available in Stores

Royal Proposal Scienza™ Ring

(2 ¾ ctw)—\$99 + S&P

Available in ring sizes 5-10

Call to order toll-free, 24 hours a day, 7 days a week.

1-888-201-7655

Promotional Code RPR138-01

Please mention this code when you call.

 **Stauer has a Better Business Bureau Rating of A+**

Stauer®

14101 Southcross Drive W.,
Dept. RPR138-01
Burnsville, Minnesota 55337
www.stauer.com

Smart Luxuries—Surprising Prices

Builders' Show Blockbusters

HANDY's top picks from the 2011 NAHB International Builders' Show

BY MIKE BERGER

Traditionally one of the best places to see what's new, hot and innovative in building products and technology, the International Builders' Show in Orlando, Florida, lived up to its reputation again this year. Here are a few of our favorite discoveries from the event.



SWINGING SIDELIGHTS

Therma-Tru's new vented sidelights (for its Fiber-Classic Oak Collection and Smooth-Star product line) allow light and fresh air into your home without sacrificing energy efficiency or style. Available in both single-door and French-door configurations with plain glass or a variety of decorative options, these sidelights feature security locks and hardware and allow for continuous light and ventilation without the inconvenience and obstruction of storm doors or sliding screens.



REDESIGNED CLASSICS

Arrow Fastener Co. is introducing a redesigned lineup of many of its iconic products. Dubbed the R.E.D. (for reliable, ergonomic and durable) series, it features improved performance, easier use, more comfortable grips and better overall ergonomics. The T50 R.E.D. manual staple gun, for example, can fire 1-in. brad nails as well as staples, has an adjustable depth of drive and, according to the manufacturer, is 50 percent easier to squeeze than the original T50 stapler and delivers up to 40 percent more power than competitors' models.



NO-NAIL HARDWOOD FLOORS

If you're looking for a faster and easier way to install hardwood flooring, Elastilon may be just the ticket. Long available in Europe but new to the U.S. market, Elastilon is a nontoxic and emission-free membrane that allows peel-and-stick installation of 5/16- to 1-in. solid hardwood. To install, simply unroll the Elastilon membrane to cover the subfloor. As you lay the flooring, peel away the membrane's plastic backing and press the flooring planks into the exposed adhesive. Adjustments are possible for up to 20 minutes; then Elastilon forms an inseparable bond with the hardwood, creating continuous tension that prevents gapping, warping or buckling.

PHOTOGRAPHY COURTESY MANUFACTURERS



ask **me**

Will the right TEMPUR-PEDIC pillow change *your* life?

Ask your neighbors.

Ask your friends. Find one of the millions of people

who spends every night with one.

There are actually 11 different kinds of TEMPUR-PEDIC Pillows, including our famous NeckPillow, the popular ComfortPillow and our plush new TEMPUR-Cloud™ Pillow.

There's a TEMPUR-PEDIC pillow that's right for you.

"Ask me why I love my TEMPUR-PEDIC® PILLOW."

© 2011 Tempur-Pedic Management, Inc.

EXPERIENCE THEM FOR YOURSELF AT:

Brookstone®

**BED BATH &
BEYOND**

RELAX THE BACK™

Call 800-433-4508 for more information or visit TempurPedic.com to see our complete pillow line or to find a retailer near you.



The most highly **recommended** bed in America.™



THREE TOOLS IN ONE

Rockwell's new 12-volt Lithiumtech 3rill Driver features 800-in.-lbs. of driving torque, and it performs the functions of a two-speed drill/driver, a screwdriver with an adjustable clutch and an impact driver. Its Energy Star-rated fast charger features a universal USB port to charge cell phones, MP3 players or laptops, and it completely charges the driver's lithium-ion battery in 30 minutes. (According to the manufacturer, after only 15 minutes the battery will be charged to 75 percent capacity.) The 3rill Driver is part of Rockwell's Free Batteries for Life program, so registered owners receive free replacement batteries for as long as they own the tool.



FRIENDLIER FIBERGLASS INSULATION

Besides boasting at least 30 percent post-consumer recycled content and 50 percent total recycled content, Owens Corning EcoTouch insulation has achieved Greenguard certification for safety in environments where children spend significant periods of time (homes, schools, daycare centers, etc.) and is verified to be formaldehyde-free, meeting stringent certification standards for indoor air quality. According to the manufacturer, the insulation will help to keep a home comfortable, increase energy efficiency and reduce heating and cooling bills.

Where there's smoke, there's fire.



TUNE IT WAY UP



ngksparkplugs.com

AGING IN PLACE

One noticeable trend at this year's show was universal design. At its core, this concept embraces design that works well for physically challenged and elderly people as well as the general population. Considering the rising costs of health care and the aging U.S. population, design that enables people to safely remain in their own homes as long as possible is becoming not just a luxury but a necessity.

Bathrooms can be especially challenging to make safe and accessible, but we saw two great examples of universal design for the bathroom from Delta. The company's 60-in. Transfer Tub features an exaggerated side "bump" that offers a safer transfer point for people with limited mobility who are getting in and out of the tub. A bench allows bathers to sit at a comfortable height, and it can be flipped up or removed, allowing the Transfer Tub to be used like a conventional bath/shower unit. Ergonomic handles and integrated grab bars provide stability and assistance when entering and exiting the tub. Best of all, the tub is sized to fit within a standard opening, making it an ideal choice for retrofit installations — meaning you don't have to tear your bathroom apart to make it more accessible.



Delta's Transfer Tub (left) and Traditional Shower system (right).

Taking the concept of universal design even further is Delta's Traditional Shower System, which blends safety and accessibility with stylish lines that prevent the unit from looking institutional. Like the Transfer Tub, it fits into a standard bath/shower alcove, making it ideal for remodeling projects. Its most distinguishing feature is the arched center grab bar, which adds architectural detail as well as safety and convenience and serves as a slide bar for the hand shower. With a low 2-in. threshold and a hinged seat, the unit provides easy access to users of many ages and abilities. — MB

STOP
SQUEAKING AND
KEEP PNEUMATIC
POWER
TOOLS
LUBRICATED.



3-IN-ONE. MAKES YOUR JOB EASIER.

ITS PRECISION-DRIP SPOUT DELIVERS LONG-LASTING PROTECTION RIGHT WHERE YOU NEED IT, GIVING YOU THE CONFIDENCE TO TAKE ON ANYTHING. SINCE 1894. 3INONE.COM



SMOG-EATING ROOF

BoralPure Smog-Eating Tile is the first concrete roofing tile that promises to reduce the actual formation of smog. Working much like a catalytic converter does in a car, the tiles use a catalyst that's embedded in the upper portion of the roof tile itself. When exposed to sunlight, this catalyst speeds up oxidation, reducing nitrogen oxides (a major component of smog). According to the manufacturer, in one year, 2,000 sq. ft. of installed Smog-Eating Tile mitigates the same amount of nitrogen oxide produced by one car driving 10,800 miles.



OFF-THE-GRID BACKUP POWER

Generac's new EcoGen generator is the first automatic standby generator that is warranted for off-grid use as part of an alternative energy system. It works in conjunction with existing solar- or wind-power energy generation; when the power from these sources dips below an acceptable level, the inverter charger automatically signals the generator to start up. The unit runs on environmentally friendly propane, which is energy-efficient and already available in most off-grid locations. The generator feeds AC power to the inverter, which recharges the battery back to a suitable power level and automatically turns the generator off when it's no longer needed.

consumes less. warms more.
introducing the stylish, new super-efficient *envi* wall-mounted heater

SAVE ^{up to}
50%
or more on
your heating costs.

economical. safe. simple.

Say goodbye to rising heat bills! The super safe, low wattage, *envi* heater costs as little as 4 cents per hour to heat an average room. It is fanless, has no moving parts yet is cool to the touch. Leave it running 24/7 with peace of mind for your children, seniors and pets. The *envi* is totally silent, eco and allergy friendly and is stunningly beautiful in any décor. The *envi*, a revolution in home heating, is designed with "dual stack convection" and has a 3yr warranty. Sold nationwide at fine retailers.

Order Online www.eheat.com or Call 1-800-807-0107

Exclusive 15% OFF Coupon Code: HANDY1511

envi
Made in the USA



POWER TO FINISH THE JOB

Craftsman's new QuickBoost battery charger, which works with its Nextec line of 12-volt Li-Ion tools, promises to bring a completely dead battery back up to a 25 percent charge in three minutes, providing an extra boost of power to finish up a job. When you push the QuickBoost button, the charger harnesses all of its energy for a three-minute quick charge. (A full charge takes about 30 minutes.) While the charger is in use, its onboard diagnostics monitor the battery's progress, indicating its power status.



EASIER CLEANUP

New Great Stuff Work Wipes are a quick and convenient way to clean up the inevitable messes involved in remodeling and maintenance projects. Thanks to the dual-sided construction (smooth on one side and textured on the other), each pre-soaked wipe (which contains no harsh solvents) works on a variety of surfaces and products, including uncured Great Stuff insulating-foam sealants, oil and latex paint, uncured caulk and adhesives, oil, grease, epoxy filler, grout, tar, ink, stain and permanent markers.

SOURCES ONLINE

For online information, go to www.HandymanClub.com and click on WEB EXTRAS.

Arrow Fastener (R.E.D. tool line)
800-776-2228
www.arrowfastener.com/catalog/red-series

Boral Roofing (Smog-eating tiles)
800-571-8453, ext. 8202
www.boralna.com

Craftsman (QuickBoost charger)
www.craftsman.com

Delta Faucet (universal-design baths)
800-345-3358, www.deltafaucet.com

Dow (Great Stuff wipes)
866-583-2583
<http://greatstuff.dow.com/products/work-wipes/>

Elastilon (adhesive floor membrane)
877-526-9663
www.elastilonusa.com

Generac (EcoGen backup generator)
888-436-3722
www.generac.com

Owens Corning (EcoTouch insulation)
800-438-7465
www.owenscorning.com

Rockwell (3rill Driver)
866-514-7625, www.rockwelltools.com

Therma-Tru Doors (operable sidelights)
800-537-8827, www.thermatru.com

A NEW MOBILE WEBSITE. AN EXPERT A CLICK AWAY.

www.sakrete.com/mobile

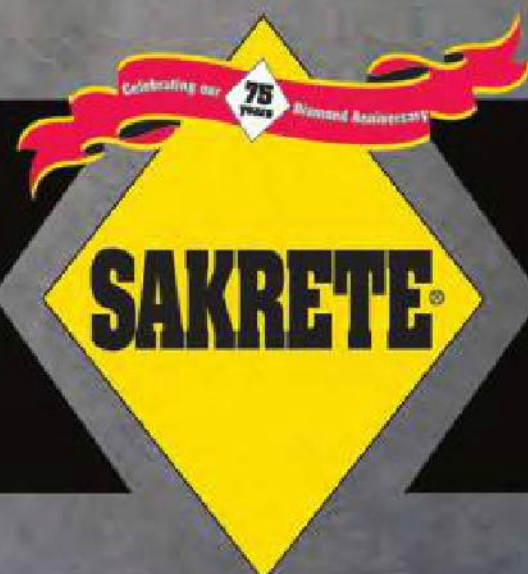


**JUST ONE MORE THING YOU CAN
MAKE WITH SAKRETE.**

www.sakrete.com/mobile



From general questions to project calculators to one-on-one support, we've got you covered at 1-866-SAKRETE, at Sakrete.com and now at www.sakrete.com/mobile. At Sakrete, we don't just provide professional-grade products, we offer unmatched customer service and support. So no matter what your project is, our team can help you make it right.



Sakrete® is a registered trademark of Bonsal American, an Oldcastle company



How to Tile a Backsplash

With proper planning and the right tools, any DIYer can set tile like a pro

BY MIKE TAVIS



A tiled backsplash is an easy upgrade to any kitchen or bath.

You don't have to be obsessive-compulsive to set tile, but it helps. In all seriousness, with a little planning, any careful DIYer with an eye for detail and the right tools can achieve great results with tile. A kitchen backsplash is a good project for a first-timer; here's how to get started.

PLAN AHEAD

With tile, investing time in the planning stage really helps you to avoid headaches later. The first step involves basic math: How much space do I have, and how many tiles will it take to fill that space? Careful measurement is essential, but you will encounter slight size variations from tile to tile. Sheets of tiles on a backing material such as paper, fiberglass mesh or plastic dots vary in size even

more than single tiles. Even tiny size differences can quickly add up to a noticeable discrepancy from your plan. That's why I like to dry-fit a row of tiles before I begin so I can see exactly where I will need to make cuts.

Another important factor to consider when buying tile is whether you want whole tiles in the corners and along edges. If so, you'll need to select tiles that fit into these spaces. If you don't mind burying your cuts in the corners and under cabinets, you'll have more leeway in choosing tile size.

Even after careful planning, it's easy to make mistakes, so buy about 10 percent more tile than your square footage requires. If you mess up when cutting a tile, save it; you might be able to use it in a corner. Corners are often irregular, so the tiles at the end of each course may need to be

PHOTOGRAPHY BY MICHAEL ANDERSON

SELF-FEEDING DR® CHIPPER!

Just load a DR® RAPID-FEED™ CHIPPER, step back, and watch it chip branches up to 5½" thick!

SELF-FEEDING saves time and energy. Most branches can be dropped into the hopper and will self-feed, instead of you having to force-feed them.

OVERSIZED HOPPER accepts limbs with side branches — even small trees — with less time spent pruning.

TOP-DISCHARGING is standard on all models, for easily collecting discharged chips in a container or cart.

CHIPS BRANCHES UP TO 5-1/2" THICK with powerful engines up to 18 HP,

PRO-SPEC™ CHIPPER KNIFE is made of forged alloy tool steel, making it exceptionally strong with an excellent edge-holding ability.

TRACTOR OWNERS!
3-Point Hitch, tractor-mounted models also available.



71298X © 2011 CHP



CALL TODAY! Get a FREE DVD and Catalog

with complete details including model specifications, low, factory-direct prices, and our 6-Month Hands-On Trial!

TOLL FREE **1-888-213-2305**

www.DRchipper.com



Smooth Out Rough Roads with the DR® POWER GRADER!

Tows behind your ATV or Lawn Tractor

CARBIDE-TIPPED SCARIFYING TEETH loosen the hardest composite surfaces.

POWERED ACTUATOR allows you to control grading depth from your towing vehicle with a remote control.

FILLS IN POTHOLEs and wash-outs, and smoothes washboard on gravel, limestone, dirt, or sand roads without hauling in new material, shoveling, or raking.



71299X © 2011 CHP



Call Now for a FREE DVD and Catalog!

TOLL FREE **1-888-213-2305**

www.DRpowergrader.com

For the Serious Gardener...



DR® ROTO-HOG™ POWER TILLER

FAR FASTER & EASIER to use than hard-to-handle, walk-behind tillers.

BIG ENGINE POWER is ideal for large gardens, landscape projects, and food plots.

TILL A 3-FOOT SWATH with each pass — twice the width of most walk-behind tillers!

CREATE PERFECT SEEDBEDS with the smooth and deep-tilling action of 24 steel bolo tines.



PLUS!
The Perfect Cultivator.
The DR® ROTO-HOG™ Mini Tiller has twice the power of the competition.



71300X © 2011 CHP

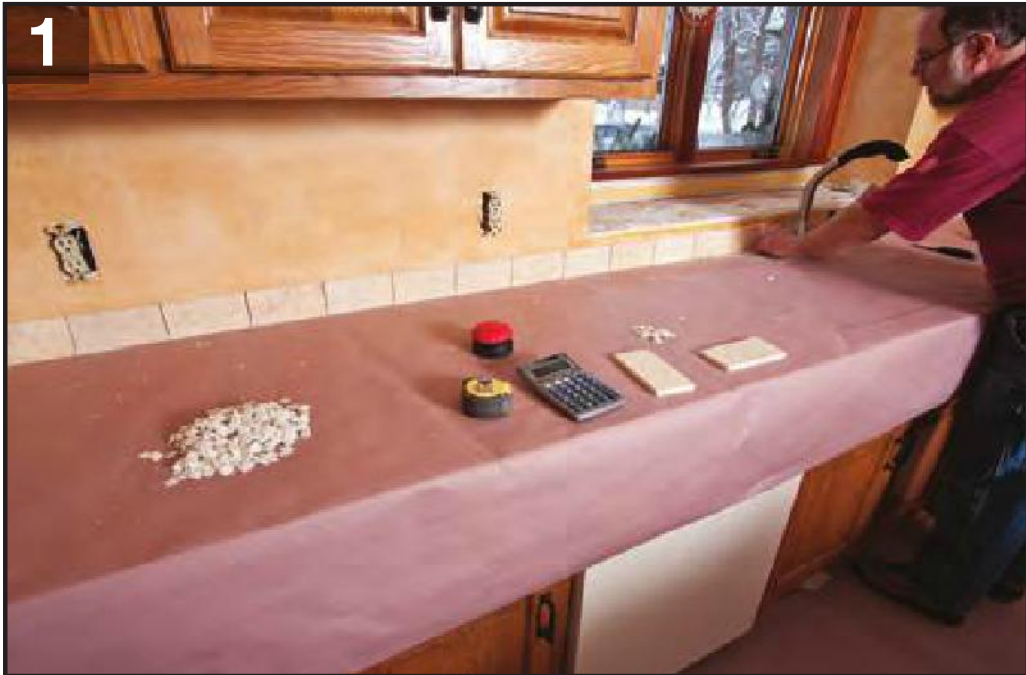


Call Now for a FREE DVD and Catalog!

TOLL FREE **1-888-213-2305**

www.DRrototiller.com

HOW TO TILE A BACKSPLASH



1 Dry-fit a row of tiles so you can plan where cuts are needed. Bury your cut tiles in corners, or adjust the spacing so you end up with whole tiles at the ends of your courses.



2 Mix your grout to the consistency of smooth peanut butter. Let it sit for 10 minutes and then remix. Make sure there are no chunks of unmixed grout.



3 Apply the mortar with the flat side of your trowel or a mud knife and scrape away the excess with the notched side. Do this in a couple different directions to obtain an even coat.



4 In tight spaces where it is difficult to trowel, butter the back of the tiles with mortar and then set them. Be sure you don't use too much mortar, or it will squish out around the tiles.

custom cut. Sometimes, especially in older homes where there may be multiple layers of paint, plaster or caulking, a good scraping prior to setting the corner tiles may be necessary.

In addition to tile, you'll need mortar or mastic and a tiling trowel. The size of the trowel depends on the size of the tile: Bigger tiles typically require a trowel with bigger notches. For most wall tile, a 3/16- or 1/4-in.-notch trowel is the right size.

You also may want to rent a tile saw. Although a traditional tile cutter, which first scores and then snaps a tile along the score line, is very good for simple, straight cuts, a tile saw makes working in corners and

around switches, outlets, cabinets and range hoods much easier. You use the tool in the same way that you use a table saw. (Remember to push the tile through slowly.) To cut a curve, you first draw it on the tile and then make a series of parallel cuts up to the line. Remove the tile between the cuts with tile nippers or pliers. After you cut the tile, smooth the edges with a diamond file.

SET THE TILES

Once your layout is complete, it's time to start mounting the tiles on the wall. First, you need to apply bonding material. I've used both mastic and thinset mortar on many

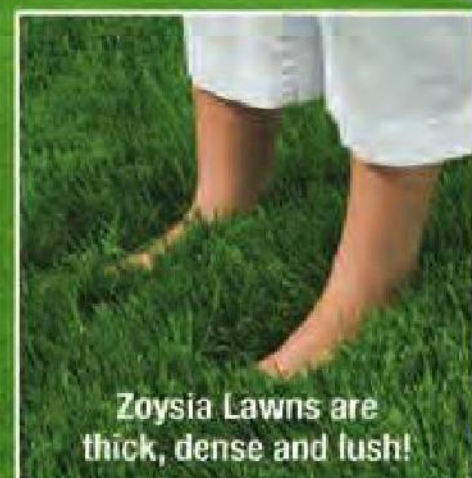
occasions, and I greatly prefer thinset. Mastic works well and is easy to apply, but I always get it all over my fingers and end up feeling like a candy-coated apple. Thinset wipes off easily and stays pliable longer, giving you more opportunities to move tiles around as you work. If you keep a bottle of water to mist the thinset ahead of the area you're immediately tiling, you can prepare larger areas at a time without worrying that the adhesive will dry before you've set the tiles. In addition, thinset provides better durability in tiled areas that will be exposed to moisture.

Follow the mixing directions on the package, or use premixed thinset.

SAVE When You Grow A Zoysia Lawn From Plugs!

From Plugs

To A Fabulous Lawn



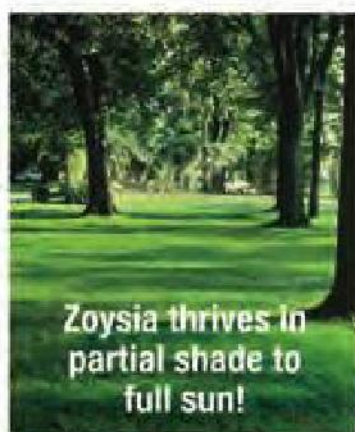
Zoysia Lawns are thick, dense and lush!

GRASS SEED WILL NEVER GROW A LAWN LIKE THIS!

Save Water! Save Time! Save Work! Save Money!

Grass Seed Is For The Birds!

Stop wasting money, time and work sowing new grass seed each spring, only to see birds eat the seed – or rain wash it away – before it can root. Plant a genuine Amazoy™ Zoysia lawn from our living Plugs only once... and never plant a new lawn again!



Zoysia thrives in partial shade to full sun!

Zoysia Grows Where Other Grass Doesn't!

Zoysia is the perfect choice for hard-to-cover spots, areas that are play-worn or have partial shade, and for stopping erosion on slopes. North, South, East, West – Zoysia will grow in *any* soil, no ifs, ands or buts!

Each Zoysia Plug You Plant In Your Soil Is **GUARANTEED TO GROW** Within 45 Days Or We'll Replace It FREE!

To ensure best results, we ship you living sheets of genuine Amazoy™ Zoysia Grass, harvested direct from our farms. Plugs are not cut all the way through. Before planting, simply finish the separation by cutting 1"-sq. Plugs with shears or knife. Then follow the included easy instructions to plant Plugs into small plug holes about a foot apart. Our guarantee and planting method are your assurance of lawn success backed by more than 5 decades of specialized lawn experience.

Eliminates Endless Weeds And Weeding!

No more pulling out weeds by hand or weeds sprouting up all over your lawn. Zoysia Plugs spread into a dense, plush, deep-rooted, established lawn that drives out unwanted growth and stops crab-grass and summer weeds from germinating.

Environmentally Friendly, No Chemicals Needed!

No weeding means no chemicals. You'll never have to spray poisonous pesticides and weed killers again! Zoysia lawns are safer for the environment, as well as for family and pets!

Cuts Watering & Mowing By As Much As 2/3!

Many established Zoysia lawns only need to be mowed once or twice a season. Watering is rarely, if ever, needed – even in summer!



We ship at the best planting time for you!

Meyer Zoysia Grass was perfected by the U.S. Gov't, released in cooperation with the U.S. Golf Association as a superior grass.

Stays Green In Summer Through Heat & Drought!

When ordinary lawns brown up in summer heat and drought, your Zoysia lawn stays green and beautiful. The hotter it gets, the better it grows. *Zoysia thrives in blistering heat (120°)*, yet it won't winter-kill to 30° below zero. It only goes off its green color after killing frosts, but color returns with consistent spring warmth. Zoysia is the perfect choice for water restrictions and drought areas!

Our Customers Love Their Zoysia Lawns!

One of our typical customers, Mrs. M.R. Mitter of PA, wrote how "I've never watered it, only when I put the Plugs in... Last summer we had it mowed 2 times... When everybody's lawns here are brown from drought, ours just stays as green as ever!"

Order Now And Save!

The more Amazoy™ Zoysia Plugs you order, the more you SAVE! And remember, once your Zoysia lawn is established, you'll have an endless supply of new Plugs for planting wherever you need them. Order now!

FREE! PLANTING TOOL With Order of 400 Plugs or More!

Saves time, work and effort when making holes for Plugs!

©2011 Zoysia Farm Nurseries, 3617 Old Taneytown Rd, Taneytown, MD 21787

www.ZoysiaFarms.com/mag

Order Your ZOYSIA Plugs Now — Harvested Daily From Our Farms And Shipped To You Direct!

ZOYSIA GRASS SUPER SALE — SAVE OVER 50%! Get Up To 900 Plugs — FREE!

Please send me guaranteed Amazoy as checked:

# PLUGS	+ FREE Plugs	FREE Bonus	Retail Value	Your PRICE	+ Shipping	SAVINGS
☐ 100	—	—	\$ 8.95	\$ 8.95	\$ 5.00	—
☐ 200	+ 100	—	\$ 26.85	\$ 17.90	\$ 5.00	30%
☐ 400	+ 200	Free Step-on Plugger	\$ 62.65	\$ 35.80	\$ 7.50	40%
☐ 500	+ 300	Free Step-on Plugger	\$ 80.55	\$ 44.75	\$ 10.00	42%
☐ 600	+ 400	Free Step-on Plugger	\$ 98.45	\$ 53.70	\$ 12.50	44%
☐ 900	+ 700	Free Amazoy Power Auger	\$ 168.15	\$ 80.55	\$ 15.00	50%
☐ 1000	+ 900	Free Amazoy Power Auger	\$ 195.00	\$ 89.50	\$ 17.50	54%

☐ Extra Step-on Plugger \$8.95 + \$3 Shipping ☐ Extra Amazoy Power Auger™ for 3/8" Drill \$24.95 + \$5 Shipping

Mail to: ZOYSIA FARM NURSERIES
3617 Old Taneytown Road, Taneytown, MD 21787

Dept. 5752

Write price of order here \$ _____

Md. residents add 6% tax \$ _____

Shipping \$ _____

ENCLOSED TOTAL \$ _____

Card # _____

Name _____

Address _____

City _____ State _____

Zip _____ Phone _____

We ship all orders the same day plugs are packed at earliest correct planting time in your area.

Payment method (check one)

☐ Check ☐ MO

☐ MasterCard

☐ Visa

Exp. Date _____

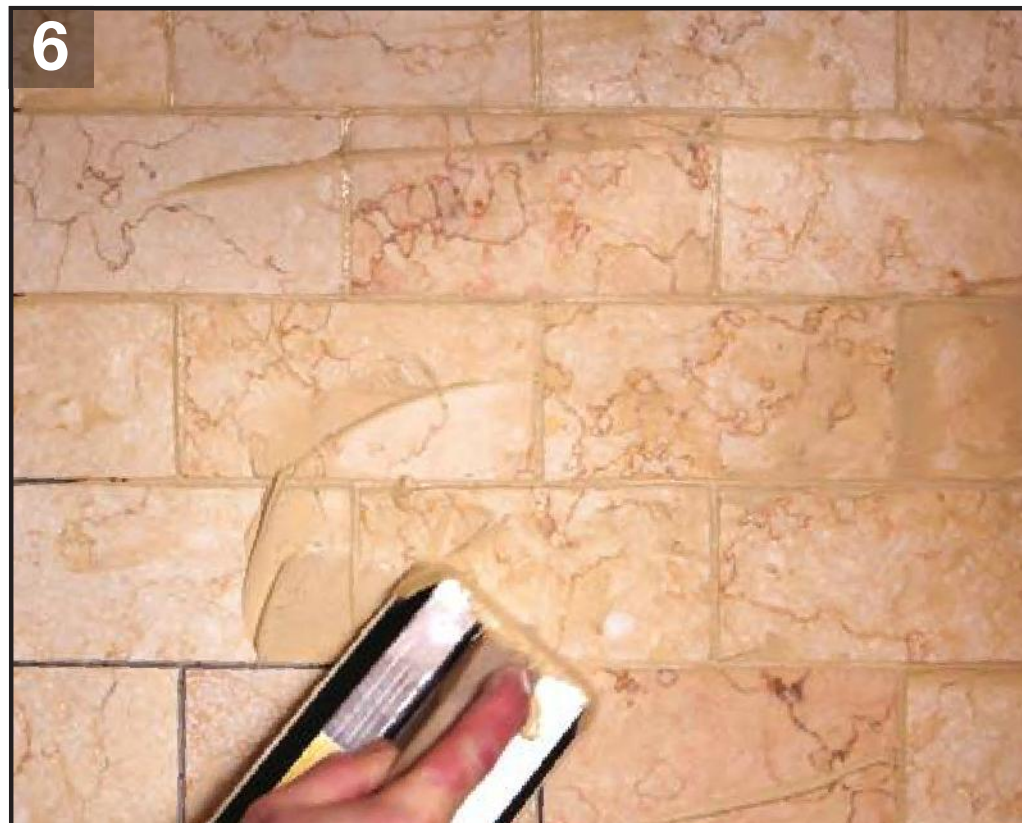
Amazoy is the trademark registered U.S. Patent Office for our Meyer Zoysia grass.

Order Now! www.ZoysiaFarms.com/mag

Not shipped outside the USA or into WA or OR



5 Use spacers between tiles. Make sure that the tongues of electrical devices sit on top of your tiles. You can cut or nip small notches for the screws if necessary.



6 Apply the grout with the edge of your float held at about a 45-degree angle to the surface. Work it in well from a couple of directions, and scrape off the excess as you go.



7 Let the grout sit for about 20 or 30 minutes and then wipe it off with a damp sponge. This is the time to even out any high and low spots and fill any holes you find.



8 Let the grout sit for a half hour or so; then wipe off the haze with a damp cloth. Use a gentle touch to avoid removing grout from between the tiles.

If you mix it yourself, try to achieve a texture like that of peanut butter. The mortar should hold a firm ridge without sagging when you trowel it, but it should not be stiff or crumbly.

I'm not very good at applying mortar with the smooth side of a tiling trowel, so I like to use a 6-in. mud knife and then use the trowel to create grooves in the adhesive. I scrape the excess mortar off of the trowel with the knife and return it to the bucket as I go.

Apply a coat of mortar that's thicker than you need and then go over it with the notched side of the trowel to get the correct amount. Be

careful: If you leave too much mortar on the wall, it will ooze between the tiles, and you'll have to scrape out the excess with a small screwdriver — a time-consuming job. Spread the mortar with the trowel a couple of times in different directions to create even ridges. Then smooth over corners, along cabinets and next to millwork with your finger, removing a bit of the mortar to give it a nice, clean edge. If you find that the first few tiles don't have good adhesion, reapply the mortar, leaving more on the wall. You can compensate for small imperfections in the layer of mortar by "buttering" the back of a

tile with mortar before setting it.

Set the tile as you would brick, from the bottom up, checking that the layout is level as you go. If you want the end tiles to be symmetrical, start from the midpoint of the wall and work outward. If you know you're going to have a cut in one of the corners, start from the opposite side and work toward that corner.

Some tiles have small bumps on the sides to indicate the appropriate spacing. If your tile doesn't have these, or if you want to deviate from the spacing indicated, you'll need to use spacers. They come in a variety of sizes, depending on how large you

“ There is some variation in size from tile to tile, and no wall is perfect, so there is a real art to setting tile, and a good craftsman needs to be flexible.”

MIKE TAVIS

want the grout lines to be. Place spacers upright between the tiles, not flat on the wall. My favorite spacers are shaped like wedges; they allow me to customize the spacing by using them in different combinations.

When tiling around switches and outlets, remember to first turn off the power. Next, pull the switch out of the box, make your measurements and cuts and then set the tile behind the electrical device. Unless you are using very thick tile, you will not need box extenders when you replace the devices in their boxes, though you may need longer screws.

APPLY GROUT

When the mastic or mortar has set, usually after 24 hours, it's time to grout. Sanded grout is best for joints wider than 1/8 in.; unsanded grout is best for joints that are 1/8 in. and narrower. Grouting can be pretty messy, so mask off areas you don't want to get dirty. Mix the material to the consistency of soft peanut butter. If the grout is too stiff, it will be difficult to apply between the tiles; if it's too soft, it will run all over the place. Let the grout slake (rest) for 10 minutes after mixing; then mix it again.

If you are grouting natural stone or unglazed tile, as we did for this project, you need to seal the tile first to keep the grout out of the pores. Brush on a good epoxy or silicone-base sealant, let it sit and then wipe it off according to the manufacturer's instructions.

Apply the grout with a rubber float, holding the edge at about a 45-degree angle to the tile. Make sure to work the grout into all of the seams from a couple of directions. (Thumbs and fingers make good grout floats for small spaces.) As you proceed along the wall, go back and scrape the excess grout

from the previous section with the edge of the float. If grout gets onto cabinetry or a countertop, use a damp cloth or sponge to wipe it off before it has a chance to harden.

After you've finished applying the grout, let it sit for 20 to 30 minutes. You want the grout to start to set before you wipe it, though if it sits too long it will be difficult to remove. The first wiping isn't so much to clean the tile but to make a thin slurry of grout to fill in any low spots and to even out high spots. A bucket of water and a grout sponge work well for this.

Once you have finished the first wiping, let the grout sit for 30 minutes or so and then wipe it again, frequently rinsing your sponge with fresh water. For the second wiping, a light touch is important. You want to clean the grout off of the surface of the tile without pulling any more from the seams. I like to keep my grout bucket covered with a moist towel during the wiping phase so that if I notice a gap or hole in the grout, I can dab a bit more in with my thumb. After the second wiping, there will likely be a thin film of grout on the tile. I prefer to leave this film until the next day and then wipe it off with a damp towel.

After the grout has cured for 48 hours, seal it according to the manufacturer's instructions. This is the time to caulk the seams along the cabinets and the countertop as well as where the walls meet because grout expands and contracts. All that's left is to replace the electrical devices and cover plates, stand back and enjoy the fruits of your labor.

Club Member Mike Tavis is a DIYer who lives in Minneapolis, Minnesota.

HYDE

PRO TOUGH

New MAXXGRIP PRO®

Heavy Gauge Brush & Scraper

High Carbon Steel Scraper

Heavy Gauge Wire Bristles

Choose High Carbon or Stainless Steel

Offset Tufts Reduce Raking Marks

Finger Protection

Durable Comfort Grip

HYDE

hydertools.com

800-872-4933

For a better finish, start with HYDE.®

©2011 Hyde Tools, Inc. All rights reserved.

Sprinkler-System Maintenance

Five fast fixes to keep your lawn looking lush

BY MIKE BERGER

In-ground sprinkler systems do an excellent job of keeping lawns green, plants healthy and watering chores to a minimum. Although they can provide years of reliable service when properly cared for, they occasionally need repairs, especially in the spring when they're first put back into service. Luckily, the types of problems you're likely to encounter are simple to diagnose, and their solutions are usually fairly easy. Use this quick guide to help you complete the five most common springtime sprinkler fixes.

1



Repair 1: Fixing a Broken Line

As the freeze-and-thaw cycle of the seasons causes the ground to shift, over time the sprinkler system's main water-supply lines can crack or separate. You'll know this has happened if you find a consistently wet or muddy spot where a line is buried. To fix it, first dig away the soil to expose the buried line. If it has simply pulled apart, clean the pipe ends; then use PVC solvent to reattach the pipe. (Wait a day before you reactivate the system.) For cracked PVC lines, use a hacksaw to cut away the damaged section and then replace it. If, however, you have black polyethylene supply tubing (PE), cut the line at the break, insert a brass coupling into the tube ends and use hose clamps to secure the tube ends to the coupling.

PHOTOGRAPHY BY LIZ ANDERSON, LARRY OKREND AND MARK MACEMON

WHEN IT COMES TO HARD WATER, SHE'S NO SOFTY.



Morton® System Saver® II Water Softening Pellets help make your home life better—with softer skin and hair, brighter clothes, and longer lasting appliances. Plus, System Saver II is phosphate free and has a patented formula with time-release action. You'll find softening your water isn't so hard after all.



2



Repair 2: Replacing a Sprinkler Head

Just as lines can break, sprinkler heads can snap off. To replace one, first dig away the soil until you expose the entire sprinkler head and the coupling that joins the head's riser to the supply tubing. Unscrew the damaged head from the riser; then unscrew the riser from the coupling. Inspect the riser for any damage and replace if necessary by screwing the new riser into the coupling; then screw the new sprinkler head onto the riser.

3



Repair 3: Aiming a Sprinkler Head

If you've replaced a sprinkler head or changed your landscaping, you'll probably need to adjust the aim or spray pattern of the head. Adjusting the aim can be as simple as turning a screw on the top of the sprinkler head. To adjust the spray pattern, you'll need to replace the sprinkler head's flow nozzle. Different nozzles are available for different patterns, and they usually screw or snap into place.

Save 63%

20 Premium Torpedos
with a humidor
for just **\$29.95**

COMPARE
AT \$79.95

We have selected TEN different premium brands to create a torpedo sampler like none other. You'll get a total of 20 cigars in all, each giving you a flavor and aroma that rivals the much higher priced boutique blends of the cigar world. Here at Thompson Cigar, cigars aren't just our business; they've been our passion for almost a century. Don't miss this opportunity to indulge in 20 incredible smokes. Supplies are limited, so order yours today!



Get your 20 Cigar Torpedo Collection with humidor now!

20 top-notch torpedo cigars with a humidor for \$29.95 (#968772), plus \$4.95 shipping & handling.

(All shipments to AK, HI, Guam, Virgin Islands and Puerto Rico must go priority mail - add an additional \$10.00. Florida residents add 6% sales tax + appropriate county tax). Remittance of any taxes on orders shipped to a location outside of Florida is the responsibility of the purchaser.

In the event we are out of a Premium brand, Thompson reserves the right to substitute another premium brand cigar or size, of equal or greater value. All written orders MUST include your signature and date of birth. Limit one per customer.

OFFER GOOD FOR 30 DAYS • NOT AVAILABLE TO MINORS AND GOOD ONLY IN THE USA

Promo code:
T9236

1-800-466-5175

www.thompsonspecials.com

Use promo code T9236
for special pricing

AUCTION – BID on Your Favorite Cigars? Starts as low as \$1
Go to: www.thompsoncigarauctions.com updated daily!

We now carry these highly popular brands: • Swisher Sweets • Phillies • Black & Mild • Dutch Master • Garcia Vega and more... Go to: www.popularsmokes.com

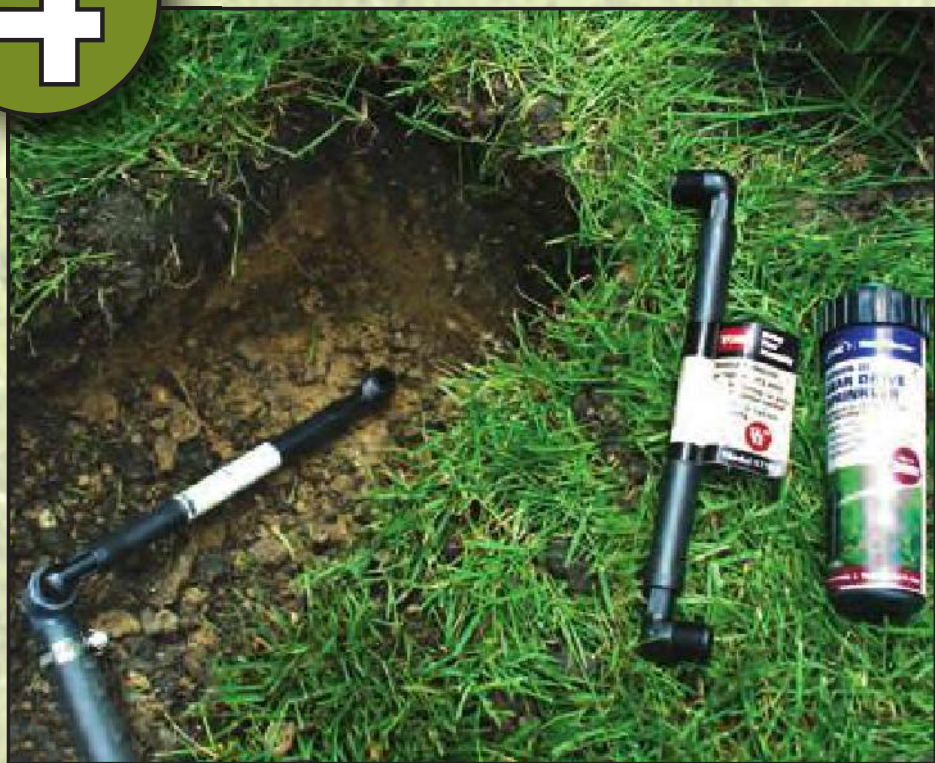


©2011 Thompson Cigar Co.



America's Oldest Mail
Order Cigar Company,
Est 1915
P.O. Box 31274
Tampa, FL 33631-3274
Fax: 813-882-4605

4



Repair 4: Moving a Sprinkler Head

If you've changed your yard's hardscaping or added shrubs or other plants, you may need to move a sprinkler head. To avoid running new supply lines, install a flexible extension. These short lines use either a saddle fitting to attach to the supply line in midrun or an elbow to attach to the end of a supply line, and they allow you to offset the sprinkler head by as much as 2 ft.

5



Repair 5: Adding an Auxiliary Line

If a line is severely damaged or if you're redesigning your system, you may need to run new supply tubing from the sprinkler system's manifold. Renting a gas-powered trencher can make fast work of cutting the soil to the correct depth for a new supply line. If you've never used a trencher, ask the representative at the tool-rental store to walk you through its operation. Be sure to call ahead of time to have your utilities marked. ♦

THE MOST POWERFUL CYCLONE RAKE EVER!

Cyclone Rake Z-10

If you have big property cleanup chores – Spring, Summer or Fall – the new Cyclone Rake Z-10 is built for you. 10 HP Briggs Vanguard® engine plus huge 10-inch diameter vacuum system gives nearly 3 times the flow capacity of the 6-inch systems commonly sold. It's perfect for Spring property cleanup, Summer lawns and heavy Autumn debris. It hitches to nearly any riding mower and turns it into a year-round cleanup powerhouse. When you're done, it folds up flat and stores in any garage or shed.



CALL TO REQUEST A **FREE** CATALOG & DVD

1-800-925-1893

or visit **www.CycloneRake.com**

Mention the Discount Code **AT411** when you call, or enter it on our web site for a special discount on any Cyclone Rake model.

©Woodland Power Products, Inc., 72 Acton St., West Haven, CT 06516

Planting for the Future

Strategically located trees can enhance your home's beauty, privacy and energy savings

BY JENNY STANLEY



If you're looking for an eco-friendly way to add character and value to your home and reduce energy costs, you'll get a lot of bang for your buck by planting trees. Besides the obvious aesthetic benefits, trees act as low-maintenance privacy screens, provide shade, generate oxygen and offer homes for all kinds of interesting wildlife.

Though planting a tree is simple, several factors contribute to its long-term success. Follow these tips to choose, plant and preserve a tree that will thrive in your yard for many years to come.

PLAN AHEAD

In most regions, spring is the best time to plant a tree because of the season's mild temperatures and moderate precipitation. Planting in spring allows the tree to become acclimated to its new environment before it faces extreme weather conditions.

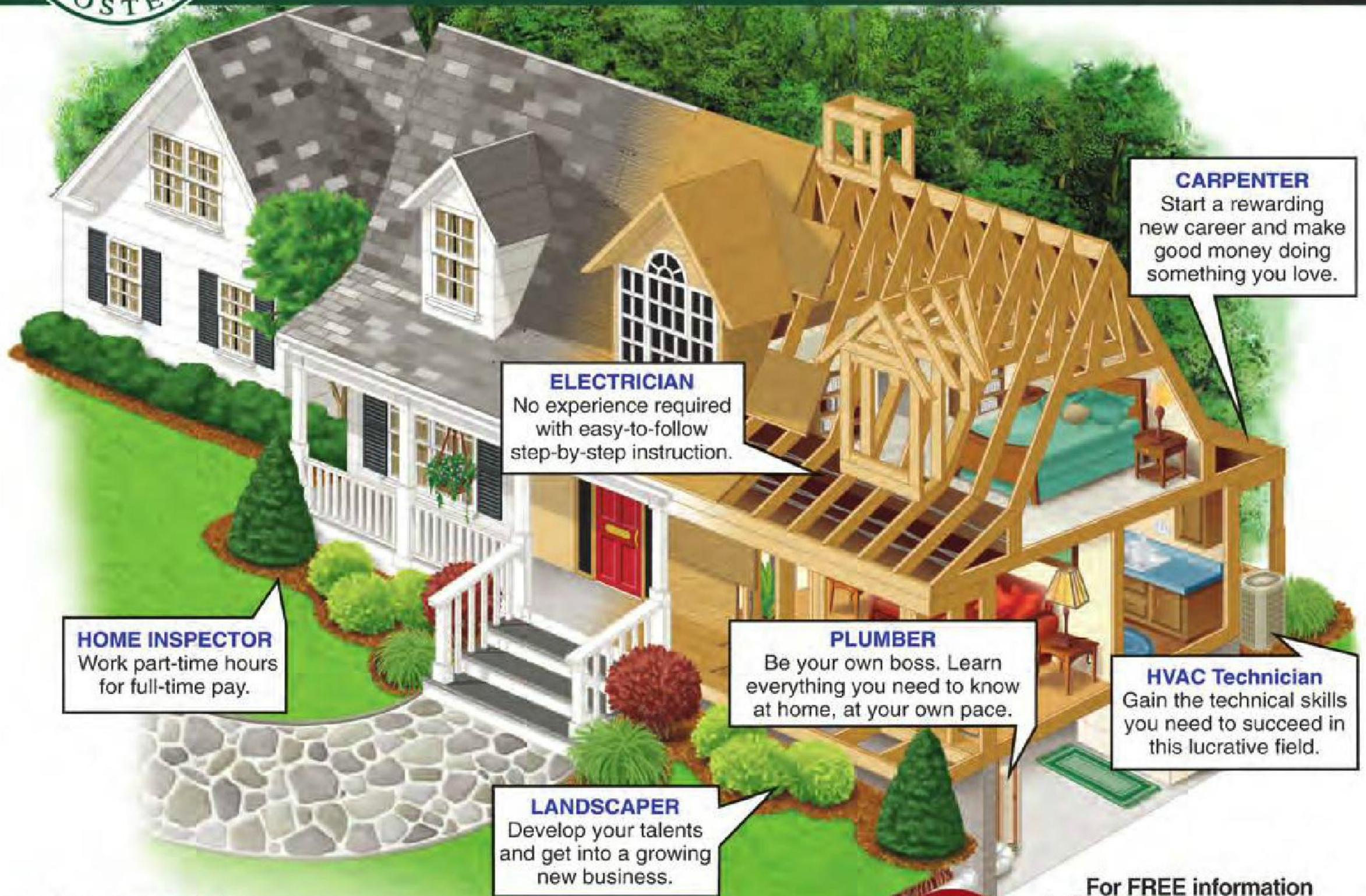
Begin by determining what type of tree is best suited for your yard. This depends largely on your climate. Consult a local nursery or check out the USDA Plant Hardiness Zone Map (see WEB EXTRAS) to find out what kind of trees will thrive in your zone. Then consider whether your potential planting site is shaded or gets direct sunlight, and narrow your choices to trees that can survive in those conditions.

Space is another essential consideration. Rather than extending deep into the earth, tree roots tend to spread in a shallow, horizontal formation (see illustration, p. 67), often requiring an area that's one to three times the height of the mature tree.

PHOTOGRAPHY BY MARK MACEMON AND JONATHAN SLOANE; ILLUSTRATION BY BECCA BASTYR



Turn Your Weekend Projects Into Weekly Cash. Get the skills you need for a great new career.



HOME INSPECTOR
Work part-time hours
for full-time pay.

ELECTRICIAN
No experience required
with easy-to-follow
step-by-step instruction.

CARPENTER
Start a rewarding
new career and make
good money doing
something you love.

PLUMBER
Be your own boss. Learn
everything you need to know
at home, at your own pace.

HVAC Technician
Gain the technical skills
you need to succeed in
this lucrative field.

LANDSCAPER
Develop your talents
and get into a growing
new business.

Do Work You Love!

You can turn your hobby into a profitable career. If you enjoy home improvement projects, Penn Foster can help you train at home to build, repair, and remodel homes, and earn great money. There's nothing like the feeling of fulfillment that comes from enjoying your job.

Make Great Money!

You'll not only save money on your own repairs, but you'll also make money on clients' home repairs. Get the knowledge and skills you need in the building trades by training at and practicing on your own home.

Learn the Smart Way.

- Study online, in print, or a combination of both.
- Expert instructors are just a phone call, message board, or email away.
- You can interact with other Penn Foster students through *eCampus*, the school's online community, which includes social networks, blogs, forums, and discussion groups.
- We offer 0% APR financing and customized payment plans.
- Current students and graduates are notified of job openings in their fields of study.
- Penn Foster graduates can take advantage of our Career Services.
- Penn Foster Career School is nationally and regionally accredited.

ACT NOW!
SAVINGS
OFFER
AVAILABLE

For FREE information
1-800-572-1607 ext. 2325
Call anytime, 24 hours a day, 7 days a week.
www.PennFoster.edu
Online enter ID# PD9S31T
Or mail the postage-paid card today.



PENN FOSTER
CAREER SCHOOL

925 Oak Street
Scranton, PA 18515
www.PennFoster.edu

If card is missing, mail coupon to:

CAREER DIPLOMA PROGRAMS

Home Service/Building Trades

- ☐ 72 Appliance Repair
- ☐ 104 Carpenter
- ☐ 06 Electrician
- ☐ 384 Furniture & Cabinet Maker
- ☐ 15 Home Inspector
- ☐ 145 Home Remodeling & Repair
- ☐ 14 HVAC Technician
- ☐ 102 Landscaper
- ☐ 151 Plumber
- ☐ 31 Professional Locksmithing

High School

- ☐ 07 Penn Foster High School
- ☐ 755 Penn Foster High School w/ Electrical Concentration
- ☐ 756 Penn Foster High School w/ Carpentry Concentration
- ☐ 757 Penn Foster High School w/ Plumbing Concentration

Finance & Business

- ☐ 70 Small Business Management

Technology

- ☐ 54 Drafting with AutoCAD®
- ☐ 27 PC Maintenance and Repair
- ☐ 83 Web Page Designer

Mechanics

- ☐ 04 Auto Repair Technician
- ☐ 55 Diesel Mechanics
- ☐ 33 Motorcycle Repair Technician
- ☐ 89 Small Engine Repair

Other Exciting Programs

- ☐ 85 Drafting
- ☐ 25 Gunsmith
- ☐ 58 Private Investigator
- ☐ 22 Wildlife/Forestry Conservation



PENN FOSTER
COLLEGE

Administrative Office
14300 N. Northsight Blvd.
Suite 120
Scottsdale, AZ 85260
www.PennFosterCollege.edu

ASSOCIATE DEGREE PROGRAMS

- ☐ 60 Business Management
- ☐ 65 Electrical Engineering Technology
- ☐ 62 Mechanical Engineering Technology
- ☐ 408 PC Maintenance Technology

Please send me FREE information on the Career School or College program I have selected above.
No obligation. Choose ONE only.

Name _____ Age _____
Street _____ Apt. # _____
City/State _____ Zip _____
Phone () _____ Email _____

Mail coupon to Student Service Center,* Dept. PD9S31T, 925 Oak Street, Scranton, PA 18515-0700.
*Under contract with Penn Foster College, AZ



Crown Molding Simplified!



**No coping.
No compound-cuts.**

Installing crown molding is one of the best ways to add instant value to your home. Our all new Crown-Pro™ eliminates the most frustrating steps of the process so you make fewer mistakes and get the job done faster!



Crown-Pro™

**Free Crown Installation
Video with Gary Striegler**
online at www.kregtool.com

Other New Products



Square-Cut™



Multi-Mark™



Get the whole story online!



www.kregtool.com

800.447.8638

HOW TO PLANT A TREE



1 Mark the height of the tree's root ball on your shovel for a visual of how far to dig. Make the hole a couple of inches shallower than the marked height.



3 Flood the hole with water before you backfill with soil. A constant stream from a hose helps to ensure that plenty of water reaches the roots.



5 To help more water reach the roots, push the end of a garden hose a few inches into the dirt.



2 Place the tree in the hole and cut back the burlap. If the roots are too tightly wound, make a few 1/4-in.-deep vertical cuts in the root ball and gently unwind some of the roots.

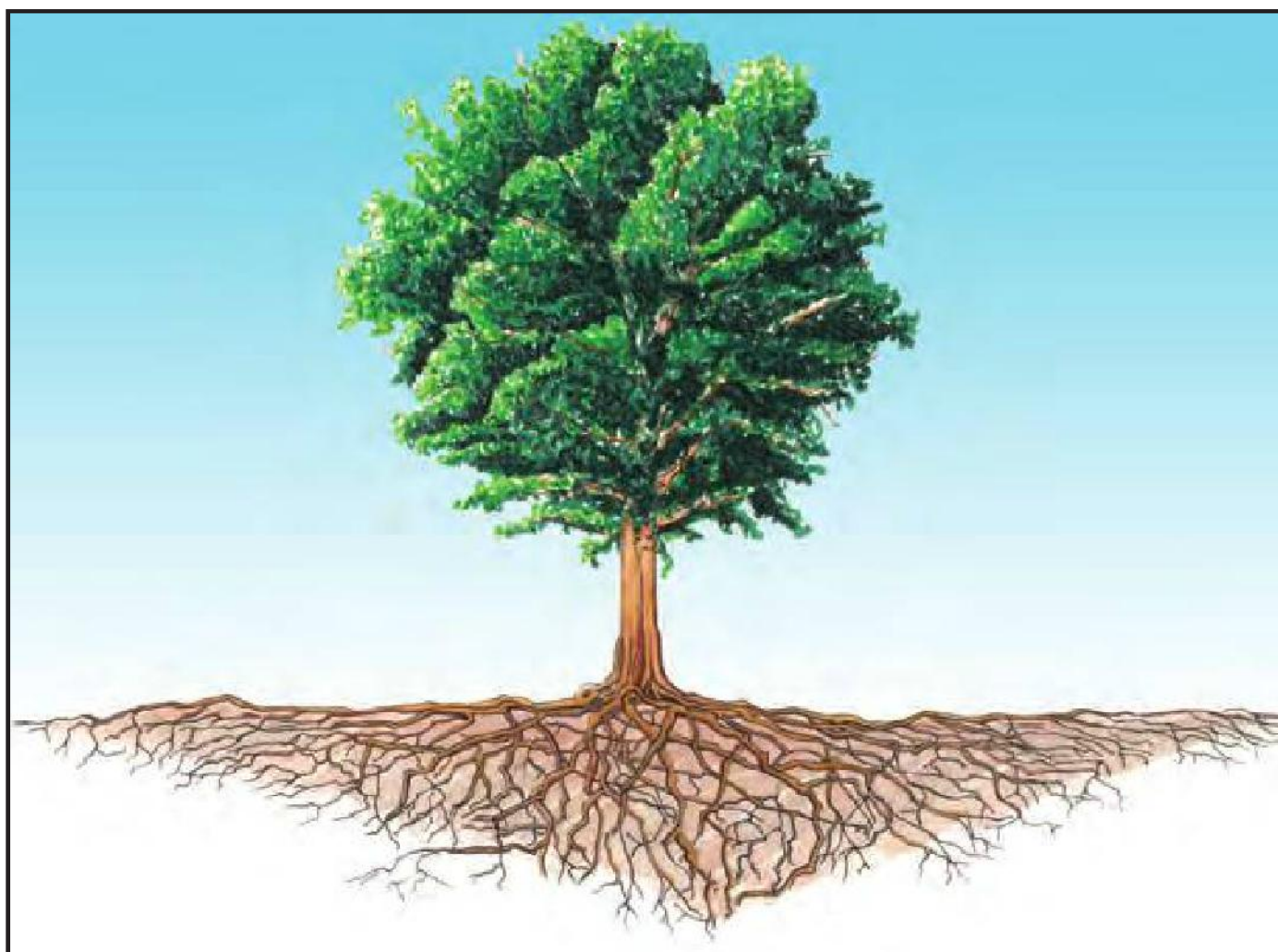


4 Cords tethered to stakes can help support an unstable tree. Use small sections of an old garden hose to pad the points of contact.

The location where you choose to plant should be free of underground utilities, aboveground power lines and other obstacles that could cause problems in the future. (Remember to call 811 to have underground utilities marked before you dig.)

Planting trees in specific locations can help to reduce heating and cooling costs. You might want to try these energy-saving strategies:

- During winter months, evergreen trees planted along the northern and northwestern exposures of a home can help to block frigid winds, resulting in lower heating bills. For maximum benefit, the U.S.



Tree roots grow more shallow than deep, spreading out as much as one to three times the height of the tree.

Department of Energy recommends planting windbreaks at a distance from your home that is two to five times the mature height of the trees.

- During the summer, a deciduous tree (one that sheds its leaves in the fall) planted along the southeast exposure of a home can provide morning shade; the same type of tree along the southwest exposure can offer afternoon shade. According to American Forests, a nonprofit conservation organization, effective shade placement can lower air-conditioning costs between 10 percent and 50 percent. As a bonus, deciduous trees also allow the sun to warm a home during the winter after the leaves have fallen.

- The U.S. Department of Energy recommends shading your air conditioning unit and says that doing so can increase its efficiency by as much as 10 percent.

As you plan, consider how much yard work you're willing to do. If you loathe raking, a deciduous tree may not be the best choice. Likewise, flowering and fruit-bearing trees require ground cleanup throughout the year. And some trees are more susceptible to insects and disease. Be

sure to weigh all of the pros and cons as well as aesthetic factors including shape, color and texture in making your selection.

When you're ready to buy a tree, inspect it at the nursery to make sure it's healthy. Check that the tree has a firm root ball that is adequate for the size of the tree; the roots should not be circling the base of the trunk. It should have a strong leader, or main stem, with a good trunk taper. Branches should be smaller than the trunk and spaced appropriately for the type of tree. (Consult a nursery professional if you need help with your inspection.)

DIG IN

Once you've selected a tree, it's time to get your hands dirty. First, mark the center of your planting location with a stake; then use spray landscape chalk or the blade of a shovel to mark a circle around the stake that is approximately two to three times the diameter of the tree's root ball.

Remove the sod within the circle and dig until the depth of the hole measures just a couple of inches less than the height of the root ball (photo 1). It is imperative that the tree's trunk flare (the transition between the main stem and the root system) remain exposed after the ground settles so that water and oxygen reach the top of the roots. If the trunk flare becomes buried, the tree will not survive. (You

WEB EXTRAS

To check out the USDA Plant Hardiness Zone Map, or to learn how to transplant small trees yourself, go to www.HandymanClub.com and click on WEB EXTRAS.

Deck Jig

Concealed Fastening System

- Looks Better
- Lasts Longer
- More Comfortable

Unlike traditional concealed-decking systems which rely on thin plastic clips or awkward 'pound-in' steel fasteners to hold your deck boards in place, the Kreg Deck Jig™ creates an incredibly strong wood-to-wood bond through precisely placed steel self-tapping screws.

How it Works

The Kreg Deck Jig™ guides your drill bit and self-tapping screw at a precise angle.

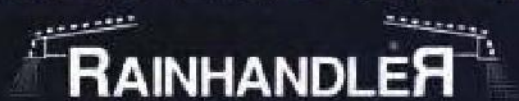
Get Ready For Deck Season with a Limited Time FACTORY REBATE OFFER!

Purchase a Kreg Deck Jig™ between April 1, 2011 - May 31, 2011 from an authorized dealer and receive a \$20 (US) mail-in rebate with qualifying proof of purchase.

For details visit:
www.kregtool.com/DJrebate6

www.kregtool.com
800.447.8638

GET RID OF YOUR GUTTERS!



Self-Cleans.

Unique louver design allows leaves and debris to blow or wash away.

Protects Property.

The Rainhandler self-cleaning system eliminates clogged, overflowing gutters and downspouts. No ground erosion. No more destructive ice dams from frozen gutters.

Protects You.

The Rainhandler self-cleaning system protects you from climbing ladders and roofs.

Prevents Erosion.

Runoff is converted to a 2 to 3 foot wide band of soft rain-sized droplets.

Maintenance-Free.

All-aluminum Rainhandler louvers make messy, leaking gutters history.

Guarantees.

Money-back satisfaction guaranteed for one full year, 25-year warranty.

Beautifies.

The Rainhandler system is practically invisible. No gutters, downspouts, leaders or splash blocks to detract from the natural beauty of your home.

Installs Easily.

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

10 SCORE!



For **FREE** info or to order call or fax
Ph: 800-942-3004, Fax: 800-606-2028

OR write RAINHANDLER DEPT AH0411

2710 North Ave., Bridgeport, CT 06604

www.rainhandler.com/ah

Buy on-line! Enter code **AH411** at checkout
for extra 10% **SAVINGS**



When pruning, cut at a slight angle away from surrounding branches, and leave about 1/4 in. of the branch.

may even need to dig down in the root ball to uncover a tree's trunk flare.) **Note:** If your soil contains large amounts of clay, you'll need to safeguard against glazing, which occurs when the smooth sides and bottom of the hole form a barrier that is difficult for water to pass through. To prevent glazing, score the sides and bottom of the finished hole with a shovel.

Always handle the tree by the burlap-covered ball, not the trunk, to avoid breaking any roots. Carefully position the tree in the center of the hole and cut back the burlap and any wire or twine surrounding the ball (photo 2). Fill the hole with water (photo 3) before you start backfilling to ensure that all of the roots get a healthy drink. Next, fill the hole with the displaced dirt, working it into crevices with your shovel. Tip: Bury the end of a garden hose a few inches into the berm to help more water reach the roots.

GO FORTH AND NURTURE

Once the tree is in the ground, you may need to stabilize it with stakes and cords. Thread the cords through small sections of foam or an old garden hose at the points that touch the tree (photo 4). To prevent weed growth and help retain moisture, cover the berm with a 2- to 3-in.-thick layer of mulch, keeping it 6 in.

DECK & PATIO OWNERS!

Enjoy Your Outdoors More With...

ShadePorch!

Sunroom/Screenroom

With Windows & Screens

Mounts on your deck or patio with...No site prep! No permits & No taxes!*

- Turn your deck or patio into a beautiful, bug-free outdoor room!
- 3" thick, ENERGY STAR® insulated heat-reflective roof protects you from the sun.
- Cool in summer & warm in winter!
- Withstands heavy snow loads and strong winds.
- Includes Easy-Slide floor-to-ceiling windows with screens, door & roof!
- Easy-to-assemble kit installs in just a weekend!

www.goshadeporch.com

Savings Code: 1621

or call: 866-557-1772

SunPorch-Dept. 1621, 495 Post Road East, Westport, CT 06880

FREE Catalogs & Prices!

ASK ABOUT ENERGY STAR

ShadePorch® Sunroom Screenroom

1621HMC

*Varies by locale

or so away from the trunk. After the first day, water the tree generously about once a week (photo 5). As the season progresses you can water less frequently, but be aware of dry spells, and water the tree as needed.

You probably won't need to prune a newly planted tree until the following year. In general, you should prune a little each year between late winter and early spring before the leaves appear, although some species such as birch and maple should be pruned in late summer to prevent bleeding. (Ask your local nursery about pruning recommendations.)

When you're ready to start trimming, first cut all dead branches and suckers (small, fast-growing shoots) flush with the branch that they sprouted from. Next, check whether any leader branches fork narrowly, which can cause a weak crotch as the tree grows larger. If so, remove one side of the fork. Follow that up by eliminating any branches that grow inward or that rub against others, small branches that crowd larger ones or any branches that are too low on the trunk. You'll also want to remove problem branches such as those that could interfere with power lines or buildings. Don't try to prune everything at once; spread the process over several years.

The proper way to prune is to make slightly angled cuts with sharp pruners, leaving about 1/4 in. of the branch (photos, opposite). This allows the area to heal without compromising the strength of any adjoining branches. As the tree ages, you may need to prune larger pieces using a handsaw or chain saw. Consult a professional for help cutting branches that are extremely high or large.

SOURCES ONLINE

For online information, go to www.HandymanClub.com and click on WEB EXTRAS.

American Forests
www.americanforests.org

Arbor Day Foundation
www.arborday.org

U.S. Department of Energy
www.energysavers.gov



Attracted by
the beauty.
Loved for the
performance.

DeckRite is the beautiful, durable, low maintenance vinyl covering designed for applications on decks, patios, balconies or breezeways. It is slip resistant, mildew resistant, and one of the few waterproof decking systems that may be used over living or storage areas to keep the space below dry.

3912 E. Progress • North Little Rock, AR 72114
1-888-450-DECK • www.deckrite.com

World's Safest Pool Gate Hardware

MAGNALatch

World's #1-Selling
Safety Gate Latch

- Highly child resistant
- Key lockable
- Fits new and existing gates
- Will not rust, corrode or jam
- Vertical & horizontal adjustment

TRUClose

Self-Closing Gate Hinges

- Quick & easy to install
- Safe & easy tension adjustment
- No external closing springs required

Find these products under the brand

STANLEY

Designed & Manufactured by
D&D Technologies
www.ddtechglobal.com

LOWE'S

Let's Build Something Together™

Lowe's and the gable design are registered trademarks of LF, LLC and Let's Build Something Together is a trademark of LF, LLC; all are used with permission



Latch release is out
of a child's reach
and key-lockable for
added safety

HandyWorks

Your vote will help decide who wins this month; next time, enter a project of your own

BY JENNY STANLEY

WHAT'S UP DOCK

To complement their lakeside home in Shawnee, Oklahoma, Club member **Elton Agee** and his wife, **Linda**, designed and built this covered dock that features one boat slip and plenty of extra space for fishing and relaxing by the water. Because the lake is shallow along the shore, Elton and Linda had to extend the dock into deeper water by incorporating four 20-ft.-long sections of walkway into the design. The couple used 14-gauge square metal tubing for the frame and raised the wood surface slightly above the floats to minimize water exposure and increase longevity.



HOMERUN SWING

Inspired by the WORKSHOP article “A Summer’s Swing” from the August/September 2009 issue of *HANDY*, Club member **Dan Sargent** of Culver City, California, built this simple yet beautiful outdoor swing. “The plans were easy to follow and quite helpful for an amateur workman like me,” Dan says. To add a personal (and portable) touch, Dan designed and built a sturdy custom frame from which he suspended the swing. He used redwood for the entire project to complement its California setting.



MANTEL TO THE MAX

Club member **Lou Minna** of Northville, Michigan, recently installed a new gas fireplace in his living room — but he didn’t stop there. Lou surrounded the fireplace with a custom mantel and decorative columns that extend to the ceiling and added seven different types of crown molding for an eye-catching touch. To round out the room’s improvements, Lou also installed a Brazilian-cherry hardwood floor that features a maple accent border.

PHOTOGRAPHY COURTESY MEMBERS



SERVING UP STYLE

In response to an editor's post on the Handyman Club of America Facebook page (www.facebook.com/HandymanClub) asking members to share ways that they save money by doing projects at home, Club member **Steve Abbott** of Merriam, Kansas, uploaded photos of this beautiful cheeseboard. The project boasts several different types of wood pieced together in an interesting pattern, and it didn't cost a penny — Steve made it out of leftover scraps from holiday projects.

CRITICS' CHOICE AWARD

- **Winner:** Peter Chomitz
- of Kitchener, Ontario, Canada
- **Project:** "Custom Clock,"
- December 2010/January 2011
- **Prize:** Peter will receive
- a Dremel Trio.
- Congratulations, Peter!



Dremel Trio

SHOW OFF YOUR PROJECT

To have your project considered, send:

1. A photo of your project
2. A detailed description of your project

Address to:

HandyWorks (or GoodWorks) c/o Jenny Stanley
HANDY, 12301 Whitewater Drive
Minnetonka, MN 55343

Or e-mail to:

HandyWorks@HandymanClub.com

or

GoodWorks@HandymanClub.com

We regret we cannot acknowledge
or return submissions.

VOTE ONLINE FOR YOUR FAVORITE PROJECT

Vote online for one of these projects to receive the Critics' Choice Award. Go to www.HandymanClub.com and click on WEB EXTRAS.

WHAT'S UP DOCK
HOMERUN SWING
MANTEL TO THE MAX
SERVING UP STYLE

Voting for this issue will end May 31, 2011. The winner will be announced in the August/September 2011 issue.

QUIZ Answers: No. 1, p. 14; No. 2, p. 33;
No. 3, p. 39; No. 4, p. 24; No. 5, p. 56

GoodWorks

HANDY applauds those who extend a helping hand

CHAIR FOR CHARITY

To help raise money for the American Cancer Society, Club member **Bill Wendell** of Defiance, Ohio, crafted this rocking chair for a silent auction at a local Relay for Life event. The chair, which Bill built in memory of a friend's mother who died of cancer, was voted "best of show" at the auction. Bill used oak, ash and elm for the frame and added a cushion to the seat. His wife, **Cindy**, is proud of her husband's commitment to the charity. "This auction gives Bill the opportunity to display his handiwork and support a good cause," she says.



Club member **Bill Wendell** of Defiance, Ohio, built this rocking chair to raise money for the American Cancer Society.

Great Giveaway

For your chance to win, go to www.Handymanclub.com and click on the Contests tab. Enter every day!

Sponsored by

Cub Cadet®



Enter the Handyman Club of America's Great Giveaway for your chance to win a **Z-Force® S zero-turn riding mower from Cub Cadet valued at \$3,999**. This 2010 *HANDY* Innovation Award winner features Synchro Steer technology, which uses a steering wheel (rather than traditional lap bars) to operate all four wheels, making the mower simpler to use and easier to control. Dual rear-wheel hydrostatic transmissions automatically adjust the direction and speed of all four wheels for precise zero-turn maneuverability around lawn obstacles while its fully functioning front wheels and improved center of gravity offer additional stability on slopes and hillsides. The mower also includes a heavy-gauge welded-steel 48-in. fabricated cutting deck that uses three overlapping blades for increased airflow when cutting tall, thick or wet grass. For more information about the Z-Force® S or other Cub Cadet offerings, visit www.cubcadet.com.

ENTER TODAY — YOU CAN WIN!

You can win a prize from the Handyman Club of America. Enter online at www.HandymanClub.com or by mailing a postcard (see below). Prizes are donated by the manufacturers. Entries must be received between April 1, 2011, and May 31, 2011; the winner's name will be drawn June 6, 2011.

For December 2010/January 2011 prizewinners, see p. 79.

NO PURCHASE NECESSARY TO ENTER OR WIN. Making a purchase will not improve your chances of winning. See official rules at www.HandymanClub.com. Submit your entry at www.HandymanClub.com or send your name, member number (if available), address and phone number on a postcard to: Great Giveaway. CRID #3932, P.O. Box 3428, Minnetonka, MN 55343.

PHOTOGRAPHY COURTESY CUB CADET

Tip Trader

BY MIKE BERGER

Home and workshop hints
from Club members

CLEANER OIL CHANGES

Club member **Russ Kranz** of Beaver Dam, Wisconsin, was tired of the inevitable mess that resulted from changing the oil in his lawn tractor. He tried using buckets, hoses and rags to prevent the used oil from leaking everywhere, but nothing worked. Then he created a trough out of sheet metal to direct the used oil into the oil-changing pan. Now there's no mess, and he simply wipes down the trough when he's done with the job. Russ points out that although his solution was intended for his lawn tractor, you could use the idea for almost any outdoor power implement.



QUICK CABLE LABELING

To help him keep track of and clearly identify the function of the many coaxial cables that supply video feeds to various rooms in his house, Club member **Frank Muratore** of East Islip, New York, uses flat plastic bread-bag clips — he just labels the clip and snaps it around the cable.



FRUGAL GLUE STORAGE

When it comes to getting that last drop of glue out of a bottle, nothing works better than storing it upside down. That's why Club member **Terrance Rogholt** of Columbia Heights, Minnesota, uses small spring clamps to prop his glue bottles upside down so they're ready to use.

TIP US OFF AND WIN \$\$\$

The member who submits the best tip wins \$200. Other published tips are awarded \$50. Submit your tips by e-mail to:

tiptrader@HandymanClub.com

or mail them to:
Tip Trader c/o Mike Berger
HANDY, 12301 Whitewater Drive
Minnetonka, MN 55343

Include your name, member number, address and daytime phone number. Sketches and photos are welcome. We regret we cannot acknowledge or return submissions.



ORGANIZE YOUR LIFE



Basements are 1/3 of your usable living space. DRYLOK® Masonry Waterproofing allows you to transform your damp, useless space into usable space.

Rated #1

Easy to apply

Tintable to custom colors

Guaranteed to stop water

1-800-272-3235 | www.ugl.com



MEMBER-TESTED SEAL

This seal is awarded to products that at least two out of three testers recommend to fellow Club members. The test scores are compiled from all test reports. Ratings are based on a scale of 1 to 10, with 10 being the highest.

Member Tested

BY ROSS TANNER, PRODUCT TEST EDITOR

4,416 Club members tested \$83,665.62 in products



DOUBLE-HUNG REPLACEMENT WINDOWS

MEMBER RATING: 9.1 BEST FEATURE: QUALITY

Simonton Windows Inc., 800-746-6686, www.simonton.com

Simonton's Double-Hung Replacement Windows (starting at \$250) offer some of the most energy-efficient glass packages available and are custom-made to your home's specifications. The premium vinyl-frame windows feature a standard low-E glass package and meet Energy Star performance levels across the country. Other features include hardware in popular finishes, interior wood-grain laminates, a variety of exterior colors, custom grid patterns and a lifetime limited warranty.

Daniel Oliver, Yucaipa, CA: "The Simonton Double-Hung Replacement Windows look great; I especially like the tilt-in sash, which allows for easy cleaning and removal."

Daniel Bishop, McLeansboro, IL: "The fully plastic-welded corners, thick frame and beefy safety window guards all help contribute to an overall very sturdy window. The glass spacing is on the large side, and the windows are very energy efficient."



PUSH MOWER

MEMBER RATING: 9.1 BEST FEATURE: PERFORMANCE

Yard-Man, 800-800-7310, www.yardman.com

The Yard-Man 21-in. 3-in-1 Push Mower (\$194) is powered by a 190cc Briggs & Stratton 625 Series engine, and its 21-in. cutting deck has been redesigned for better performance. It has dual-lever height adjusters, giving users six options for setting the cutting height, and grass-discharge options that include mulching, bagging or discharging out the side. The mower boasts a two-year warranty, 8-in. rear wheels, 7-in. front wheels and a 1.9-bushel bag.

Wesley Ditzel Jr., Cranford, NJ: "Setup for the Yard-Man 21-in. 3-in-1 Push Mower took less than five minutes, and one pull later, I was cutting grass. I like that it quickly converts from mulching to bagging."

Ron Rosencrans, Nixa, MO: "The extra-long handle makes it easy for everyone to operate, and the height adjustment works great. I love the mulching capability, as it helps to maintain a healthy lawn."

YOU CAN BE A TESTER

To be a product tester, you must fill out a Product Test Profile form. To request a form, call Member Services at 800-243-7679 or go to www.HandymanClub.com and click on Product Testing Program in the left-hand column of the home page. From there, you can fill out the form online.



This icon appears next to select tested and recommended products to signify a special members-only offer. For details about the offer, go to www.HandymanClub.com, roll over the Member Benefits tab and click on Deals & Discounts.

Products earn these additional seals of approval when favorable ratings are also received from members who are trades contractors, automotive mechanics or avid woodworkers.



PHOTOGRAPHY COURTESY MANUFACTURERS

TRUCK BED RACK AND COVER

MEMBER RATING: 8.7 BEST FEATURE: EASE OF USE

Agri-Cover Inc., 866-414-5422, www.agricover.com

The Adarac Truck Bed Rack System (\$450) is an adjustable and durable rack that fits most Ford, GM, Chevy and Dodge pickup-truck beds using top-mount, one-wrench installation. It can carry as much as 500 pounds while providing an unobstructed view, and it features a full tie-down rail and a black powder-coat finish. The Access Limited Roll-Up Cover (\$579) is model-specific for a tight fit and has an automatic dual-locking system. Specially cut Tight Bite clamps maintain a superior grip and include tie-down rings for securing loads. Other features include a TrailSeal Tailgate gasket that seals the tailgate, a tension adjuster and a Slantback rear design.



Daniel Hopkins, Spearman, TX: "I use the Adarac Truck Bed Rack System to haul a variety of materials. It has proven to be extremely durable, and it looks great on a Chevy truck."

Steve Erickson, Avondale, AZ: "The Access Limited Roll-Up Cover looks great on my 2006 Dodge Ram 1500, and I especially like that it hides and secures all of my equipment."

MULTIPURPOSE SAW

MEMBER RATING: 8.5 BEST FEATURE: PERFORMANCE

RotoZip, 877-768-6947, www.rotozip.com

The RotoZip ZipSaw (\$100) combines the best features of an angle grinder and a flush-cut saw into one multipurpose cutting tool. Its 7-amp grinder motor and drivetrain are specially designed for cutting wood, metal and tile. The saw also boasts an ergonomic body grip for superior control and built-in dust collection for improved visibility and cleaner work areas. Other features include a locking slide switch, replaceable motor brushes and a removable flush guard. The ZipSaw is compatible with all RotoZip wheels as well as all standard 4-in. grinder wheels.



Patrick Vaughan, Concord, NC: "I do renovations, and the ZipSaw saved time working with drywall and plywood. I was able to make cuts quickly and neatly."

Steve Michael, Las Vegas, NV: "The ZipSaw has plenty of power, and the guard position is easy to adjust. It made nice dry cuts in tile, wood and metal."

DRYWALL ANCHOR

MEMBER RATING: 8.4

BEST FEATURE: EASE OF INSTALLATION

ITW Brands, 877-489-2726, www.easyanchors.com

The TapNLock Drywall Anchor (\$1.47 for a pack of four) can be used in 3/8-in., 1/2-in. and 5/8-in. drywall to hold wall art, mirrors, coat racks, bathroom accessories, clocks and more. Simply tap the anchor into the drywall with a hammer and use a No. 2 Phillips-head screwdriver to insert the screw into the anchor. The leg of the anchor flips up behind the drywall to secure a larger area of the wall, allowing the device to support 50 pounds.



Randall Lusk, Henryville, IN: "The TapNLock Drywall Anchor installed with speed. It securely held various sizes of military awards."

Dan Weatherstone, Weedsport, NY: "I have several other types of fasteners in my shop, but these are by far the easiest to use and install."

MULTITOOL

MEMBER RATING: 9.1

BEST FEATURE: QUALITY

Hyde Tools Inc., 800-872-4933, www.hydetools.com

Hyde's lightweight 14-in-1 Multi-tool (\$10.79) has a variety of uses and comes in handy during painting projects. It is designed to scrape paint, spread compounds, clean rollers, remove putty, open cracks, set nails, scrape contours and convex surfaces, open cans and pull nails. In addition, it includes four screwdriver bits that can be inserted into the end of the handle for quick use; the bits can be stored inside the handle.



Suzie Osterhage, Overland Park, KS: "The tool worked well for scraping down walls prior to painting, and I loved the hidden bits that allowed me to easily remove light switches and electrical covers without switching tools."

Richard Sobocinski, Pittsburgh, PA: "I like the heavy-gauge steel blade. The Hyde 14-in-1 Multi-Tool is great to keep in a back pocket for quick scraping, prying or unscrewing tasks."



KNIFE AND HEX DRIVER

MEMBER RATING: 7.2 BEST FEATURE: CUTTING ABILITY

Columbia River Knife & Tool, 800-891-3100, www.crkt.com

The Flux GoWork Pack, Knife & Hex driver (\$59.95, model 9040GWC) is a modular tool system that includes a lightweight aluminum double-rail carabiner, allowing the tools to be quickly selected and clipped to clothing or gear. The locking liner folding knife easily opens using the ambidextrous thumb disc and features a high-carbon stainless steel blade and a removable pocket clip. The hex driver functions as a standard screwdriver and T-handle driver with three included hex bits. The tool also features an LED work light.

Charles Powell, Portland, OR: "The Knife & Hex driver is compact, versatile and easy to carry. The LED light is a nice touch, and the hex driver set is extremely useful."

Mark Metcalfe, Mount Sidney, VA: "The hex driver is versatile and provides plenty of torque. I like how the different parts slide in and out of the main body."



PORTABLE COOLING UNIT

MEMBER RATING: 8.0 BEST FEATURE: QUALITY

Port-A-Cool LLC, 800-695-2942, www.kuulaire.com

The KuulAire 77 Evaporative Cooling Unit (\$499) is a portable device that cools the air using tap water and 115-volt electricity. It features two speed settings, built-in drink holders, a timer, a remote control and a low-water sensor. It can be used indoors and outdoors and also functions as a humidifier and a fan. The KuulAire 77 operates for about \$1 a day, significantly less than traditional air conditioning units, and it can lower the temperature between 5 and 20 degrees in a 600-sq.-ft. space.

Joe Goddard, Tempe, AZ: "The KuulAire 77 Evaporative Cooling Unit kept my garage cool during 110-degree weather. I like its automatic hose fill, remote control and portability."

Jason Heyward, Alamogordo, NM: "It worked well for cooling our small living room and bedrooms. Everyone who saw it was impressed with its quality and effectiveness."

DOOR SECURITY SYSTEM

MEMBER RATING: 8.9

BEST FEATURE: DURABILITY

Winner International Inc., 800-527-3345, www.theclub.com

Made of solid steel, the Door Club (\$24.99) is a home-security device that is more reliable than chain locks and deadbolts for all inward-opening residential doors. It is easily installed by drilling one hole into floor surfaces such as wood, ceramic, carpet, tile, marble and granite. The club can withstand more than two tons of direct force and is designed to keep intruders from kicking in the door. All installation hardware is included.



Mike Hollenback, Viola, IL: "The first thing I noticed is that the product has some weight to it. It makes sure no one is getting through the door."

Daniel Tamewitz, Irwin, PA: "The Door Club comes with all of the necessary hardware to secure any door in your home. I've tried numerous security devices and none could compare to this product."

IMPROVED PAINTER'S TOOL

MEMBER RATING: 8.8

BEST FEATURE: EASE OF USE

K&M of Virginia Inc., (804) 426-4366, www.painterspyramid.com



The New and Improved Painter's Pyramid (\$6.99 for a pack of 10) elevates workpieces so the entire surface can be painted at once — no need to wait for one side to dry. The pyramids feature a new lock-and-tab system that allows them to be securely fastened to

a work surface or to be interlocked for supporting long, thin or unique-shape items. Made of a high-density polymer, the pyramids will not stick to paint, stain or glue and can hold as much as 200 pounds.

Joe Kirk, Tullahoma, TN: "The ability to fasten the Painter's Pyramids to a work surface helps to keep them in place, while the lock-and-tab function is great for staining or painting molding."

Jason Shine, Gainesville, FL: "These pyramids kept my workpieces off my wood bench and made it easier to stain the edges without creating a mess."

TRIMMER AND EDGER

MEMBER RATING: 9.3 BEST FEATURE: VERSATILITY

Echo Inc., 800-432-ECHO, www.echo-usa.com

The Echo Pro Attachment PAS-225VP Combo Kit (\$349.99) is a landscaping tool that includes a power head, a trimmer and an edger. The power head features a 21.2cc Power Boost Vortex engine and a tool-free coupler that ensures a secure connection and quick attachment changes. The trimmer attachment has an Echomatic cutting head that can cut a 17-in. swath; the edger attachment has a commercial-grade, high-torque gear case and an 8-in.-long, .090-in.-thick blade for cutting along sidewalks and bed edging. Other benefits include the convenience of only having to gas up and maintain one power head, a 14.9-ounce gas tank, a five-year warranty and the option to add eight attachments.

James Hitz, Chilton, WI: "The unit is easy to start and operates with less vibration and noise than others I've used. It's also light enough that my wife can use it."

Lawrence Ayres, South Lyon, MI: "The Echo Pro Attachment PAS-225VP Combo Kit is well-made and well-balanced, quickly changes from one tool to another and has trigger lockout for safety."



TIME-LAPSE CAMERA

MEMBER RATING: 8.4 BEST FEATURE: PERFORMANCE

Wingscapes, 888-811-9464, www.wingscapes.com

The Timelapse ProjectCam (\$79.95) brings construction, landscaping and other projects to life by showing sequential photos of the process quickly from start to finish. The digital camera takes high-resolution photos at set time intervals and then automatically converts them into time-lapse videos. The videos can be used by contractors, architects, builders and landscapers in presentations and on company Web sites to showcase their work. Each ProjectCam includes batteries, mounting accessories and everything needed to create captivating videos.

Kevin Jones, Morrisville, PA: "I like that the Timelapse ProjectCam comes with different mounting devices and that the software can create a video using still images in about 30 seconds."

Jeremy Brock, Wadesville, IN: "It's durable, well-designed, weatherproof and easy to use, takes great photos and holds 12,000 high-resolution photos on its 16G memory card. Compared with similar cameras, this is a steal."



DRYWALL HOOKS AND PINS

MEMBER RATING: 8.1 BEST FEATURE: EASE OF INSTALLATION

ITW Brands, 877-489-2726, www.easyanchors.com

TapNLock Hooks and Pins require only a hammer to install, and they utilize a unique tap-in technology with a pivoting leg that securely holds the anchor in place and can support as much as 20 pounds. The Peg Hook (\$4.99 for a pack of three) holds kitchen tools, mops, brooms and dustpans; the Picture Hook (\$4.99 for a pack of five) holds pictures, mirrors and plaques; the Cable Tie Pin (\$4.99 for a pack of five) can secure and organize cords, cables and holiday lights; and the Nail Pin (\$4.99 for a pack of five) is designed for signs, fire extinguishers, thermostats and smoke detectors.

Diana Strosnider, Mount Morris, PA: "I used the Picture Hook to hang a shadow box; it was easy to install with no drilling. The Peg Hook helps keep large kitchen utensils from cluttering up drawers."

David Haugland, Wells, MN: "The Cable Tie Pin came in handy for organizing all of the cables and speaker lines for our computer, and the Nail Pin is dependable, easy to use and very durable." ◇



SEX. IT'S NEVER TOO LATE TO LEARN SOMETHING NEW.™

See for Yourself on Discreet Home Video.

REAL PEOPLE DEMONSTRATING REAL SEXUAL TECHNIQUES!

Couples who watch together not only LEARN from what they see, but often report that the videos themselves are an 'instant aphrodisiac.' That's because they show REAL couples (not actors) demonstrating the joys of REAL lovemaking.

A 'VISUAL ENCYCLOPEDIA' OF STIMULATING SEXUAL FUN!

**Better
Sex**
for a
Lifetime 8

Recommended by leading doctors and therapists, all 3 videos in the series were created to show men and women in their 40s, 50s (and older) that the BEST sex of their lives. . . can be enjoyed right now!

These videos show couples how to overcome sexual problems so common with middle age, including: erectile dysfunction . . . reentering the dating scene. . . and rekindling passion when sex has become boring or predictable.

You'll see demonstrations of imaginative sensual foreplay and lovemaking. . . new positions to try. . . oral loving. . . experimenting with "new intimacies". . . plus finding humor and joy in a long-term loving relationship.

Real loving couples show you how to make your desires come true!

See explicit instruction for intimate lovemaking beyond intercourse. . . ultra-sensual massage. . . exciting games. . . plus specific positions that provide stimulation AND satisfaction!

Order in the next 7 days and get

50% OFF 3 Better Sex Videos!
Plus, 3 FREE VIDEOS!

Video 1: The Art of Oral Loving explicitly demonstrates the proven tips and turn-ons for the very best sex of your life!

Video 2: The Art of Sex Positions is guaranteed to surprise and inspire you with new, unique and sure-to-please positions.

Video 3: Maximizing G Spot Pleasures shows advanced methods and techniques for stimulating the mysterious G Spot. Order today and get these 3 Videos – a \$60 Value – **absolutely FREE!**

For Fastest Service With
Credit Card: CALL TOLL-FREE

1.800.955.0888

Ext. 8HDY18
(24 Hrs. / 7 Days)

mail to: Sinclair Institute, ext. 8HDY18, PO Box 8865, Chapel Hill, NC 27515

Art of Oral Loving (Free with Purchase) AND
Art Sex Positions (Free with Purchase) #3766

**FREE
FREE
FREE**

Discreet, Plain Packaging Protects Your Privacy

Maximizing G Spot Pleasures (Free with Purchase) #3539
☐ Vol. 1 32 Ways to Please Your Lover #4180 \$19.95
☐ Vol. 2 Sex Play & Positions #4124 \$19.95
☐ Vol. 3 Expanding Sexual Pleasures #4125 \$19.95
☐ Buy The 3-Volume Set and SAVE 50%! #6063 **\$29.90**

subtotal \$

Check one:

shipping and handling \$ 6.00

☐ VHS or ☐ DVD

TOTAL \$

METHOD OF PAYMENT

☐ Bank Money Order ☐ Check ☐ VISA ☐ MC ☐ Discover ☐ AMEX

Card#

Exp. date

NC orders please add 7.75% sales tax. Canadian Orders add U.S. \$9 shipping

Sorry – no cash or C.O.D. 8HDY18 ©2011 Sinclair Institute.

Name

Address

City

State

Zip

Signature

(I CERTIFY THAT I AM OVER AGE 18)



**SINCLAIR
Institute®**

**50% OFF
3 Better Sex
Videos!**



WARNING: The Better Sex For A Lifetime 8 Video Series offers explicit sexual programming for adults 18 and older.

Order online at: **BetterSex.com®**

Better Sex

Better Relationships, Better Sex®



8HDY18

Search

Enter code 8HDY18 into the search box to receive \$6.00 S&H and your **3 FREE Videos.**

100% SATISFACTION GUARANTEED!

The Quiz

Can you find the following photos in this issue of *HANDY*?



WANT TO PLAY?

To enter the free Club membership drawing, submit your answers online at www.HandymanClub.com.

Entries must be submitted by May 31, 2011.
Winners will be announced in August 2011.

QUIZ WINNERS DECEMBER 2010/JANUARY 2011

Bobby Barks, Poplar Bluff, MO
Curtis Carbaugh, Marienville, PA
Charles Crockett, Wade, NC
Ken Merritt, Carmel, IN
Samuel Moore, Wexford, PA
Kelly O'Brien, Phoenix, AZ
Barbara Sisson, Edwardsville, IL
David Stoner, Sebastopol, CA
Fleddie Wall, Marietta, OH
Lori Wilke, Bowman, ND

The answers to this issue's QUIZ appear at the end of HANDYWORKS.



Handyman Club of America

General Manager
Connie Schlundt
Executive Director
Larry Okrend
Vice President,
Membership Development
Laura Burkholder
Member Benefits Director
Doug McDougal
Assistant Vice President, Member Services
Andrea Meester
Executive Marketing Director
Bruce Revman
Product Test Editor
Ross Tanner
Senior Member Benefits Specialist
Laura Fisher



President and CEO
Bryan Ellis
President, Marketing
Tony DeFrance
CFO
Kate Pope
Senior Vice President,
Business Development
Tim Carroll
Vice President, Technology
Michael Graves
Vice President, Human Resources
Betty Potasnak

Handyman Club of America members receive these valuable benefits:

HANDY Magazine
E-newsletters
Product-testing privileges
Chances to win free products
Cash for winning tips
HandyWorks coverage
Special product offers
Charter membership card
Official Club decal set
and much more!

Contact Member Services

If you need help with any aspect of your Club membership, please contact us.

VISIT the Club Web site
www.HandymanClub.com

E-MAIL the Club
memberservices@HandymanClub.com

CALL Member Services
800-243-7679

Monday – Friday, 7:30 a.m. to 8 p.m.
Saturday, 8 a.m. to 4:30 p.m. Central Time

WRITE to the Club
HCOA Member Services
P.O. Box 3401
Hopkins, MN 55343-2101

Remember to include your membership number on all correspondence and have it ready when you call.

December 2010/January 2011 GREAT GIVEAWAY prizewinners

Senco F-15 Finish Nailers:

Stephen Greenlee, West Columbia, WV
Francis Malinovsky, Hughesville, PA
Charles Patton, Youngstown, OH

Lincoln Electric

VIKING™ Auto-Darkening Helmet:

James Hempleman, Thorp, WI
Ted Jonas, Auburn, CA
Richard Lambert, Manitowoc, WI
Carlton Leikvold, Wakonda, SD
Avon Raczkowski, Hayti, MO
Don Sanders, Larsen, WI
Jerry Thorn, Palm Bay, FL
Julio Torres, Baytown, TX
Robert Voigt, Farmington Hills, MI
Todd Wallin, Churubusco, IN



MEMBER DIRECTORY

MANAGE YOUR ACCOUNT

Update your profile, pay membership dues, purchase products and more:
www.HandymanClub.com

Contact **HANDY** Editors

For questions and comments regarding editorial content:
Editors@HandymanClub.com

To submit a letter for **HANDY's** Member Mail column:
MemberMail@HandymanClub.com

Important Notice: For your safety, use caution and good judgment when following the instructions described in this magazine. Take into consideration your skill level and the safety precautions related to the tools and materials shown. North American Media Group and its affiliates cannot assume responsibility for any damage to property or persons as a result of the misuse of the information provided. Consult your local building department for information on permits, codes, regulations and laws that may apply to your project.

STUMP REMOVAL FAST & EASY!

Eliminate Landscape
Eyesores with a DR®
STUMP GRINDER!

- Make stumps **DISAPPEAR!**
- **EXPAND** lawn areas!
- **OPEN UP** fields & meadows!
- **BLAZE** new trails!
- **REMOVE** mowing hazards!
- **ELECTRIC START** models available

71297X © 2011



The DR® STUMP GRINDER uses carbide-tipped cutting teeth that take over 400 "bites" per second, to pulverize stumps into a pile of wood-chips. Quickly and easily, you can grind any size tree stump below ground level. Gone forever!

Call for a FREE DVD & Catalog!



TOLL-FREE
1-888-213-2305
DRstumpgrinder.com

TRY A DR® FIELD AND BRUSH MOWER WITH OUR 6-MONTH TRIAL!

CLEAR meadows, trails, underbrush
from woodlots, pastures

CUT 8-foot field grass,
saplings 3" thick, tough brush

CHOP everything
into small pieces



Self-Propelled
and Tow-Behind
Models

Call for a FREE DVD & Catalog!



TOLL-FREE
888-213-2305
DRfieldbrush.com

MEMBER FORUM

Expert Answers

Learn from the pros

BY DAN CARY

OLD TOOL BATTERIES: REPAIR OR REPLACE?

Q: The battery for my drill/driver isn't accepting a charge anymore. What are my options? Should I just buy a whole new tool?

Tommy Nelson
Phoenix, AZ

A: Assuming you're not angling for justification to buy a new tool, you have several options. First, if the tool is still under warranty, you should be able to get the battery replaced. Most tool manufacturers guarantee their batteries for at least a year, and some companies, such as Rockwell, now offer lifetime battery-replacement plans. A potential downside of getting a battery serviced by the manufacturer is that you typically have to ship the battery and charger to a service center, and you won't be able to use the tool (or charge any compatible batteries that do still work) until the charger returns from service.

If the tool is not under warranty, you can purchase a replacement battery from the manufacturer or an aftermarket replacement battery supplier. Another option is to have the battery reconditioned or rebuilt at a battery-repair store such as Batteries Plus (see SOURCES ONLINE). Reconditioning is inexpensive (typically \$5 to \$10), but it is often unsuccessful on old or heavily used batteries. Rebuilding a battery pack involves replacing the cells with new cells. Rebuilding is currently an option only for nickel-cadmium (NiCd) and nickel-metal hydride (NiMH) batteries. Retail service stores do not rebuild lithium-ion (Li-Ion) batteries.

I recently compared the cost of various service options for an



Old battery cells that no longer accept a charge can often be replaced with new cells at a professional service center.

8-year-old 12-volt, 3-amp-hour NiMH battery from a high-quality drill/driver. Here's the breakdown:

- Recondition: not an option for this battery
- Rebuild with new cells: \$69 (including tax); two to three days for service
- Aftermarket replacement: \$77 (including tax); three to five days for delivery to store
- Manufacturer replacement: \$95 (including tax and shipping)

When I am deciding whether to replace or service a battery, I base my choice on the condition of the tool. If you have a high-quality drill/driver that is otherwise in good condition, it makes sense to replace or repair the battery. But if the tool is worn and will not function well even with new batteries or if the batteries cost as much as a new tool, it's probably time to buy a new one. (Final note: If it helps your case, feel free to skip most of my answer and just quote the end to whomever you need to convince.)

SOURCES ONLINE

For online information, go to
www.HandymanClub.com and click on WEB EXTRAS.
Batteries Plus
800-677-8278
www.batteriesplus.com

PHOTOGRAPHY BY DAN CARY

Log onto www.HandymanClub.com for links to these advertisers

SHOP @ HANDY

Create-A-Bed Build your own Murphy bed with the Create-A-Bed® Murphy bed mechanism. Step-by-step instructions and DVD included. Call 877-966-3852. **Check 1**

D&D Technologies Rust-resistant gate hardware from D&D Technologies is molded of engineering-strength polymers with stainless steel components and comes with a limited lifetime warranty. www.ddtechglobal.com, 866-256-4499. **Check 2**

Detailed Play Systems Visit the Build@Home Playground Equipment Store and save! Wooden forts, swing sets, swings and slides. We offer a complete line of playground accessories to build a fun backyard for your child. Free catalog! www.detailedplay.com, 800-398-7565. **Check 3**

DRYLOK by UGL DRYLOK Masonry Waterproofing is guaranteed to stop water. It is tintable, paintable and can be applied by brush, roller or sprayer. Comes with a fully transferable warranty. www.ugl.com, 800-272-3235. **Check 4**

Econo-Heat Introducing the envi wall-mounted heater. Patented, fanless "Stack Convection Technology." Cool exterior, slim design. Silent, simple installation, 3 year warranty, made in USA. www.eheat.com, 800-807-0107. **Check 5**

Flame Engineering Red Dragon Propane Torch Kits put the heat on weeds and other tough jobs all year long. Many models to choose from. Made in the USA! www.RedDragonTorch.com, 800-255-2469. **Check 6**

FrogTape by ShurTech Brands. FrogTape® is the only painter's tape treated with PaintBlock® Technology. PaintBlock® forms a micro-barrier that seals the edges of the tape, preventing paint bleed. www.FrogTape.com, 877-FrogTape. **Check 7**

General Tools & Instruments Relieves joint pain — General's E-Z Pro™ Mortise & Tenon jig comes fully assembled to make matching mortise and tenon joints right out of the box. www.generaltools.com/nopain, 800-697-8665. **Check 8**

Gorilla Glue is incredibly strong and 100 percent waterproof. It's the idea solution for indoor/outdoor projects. Bonds wood, stone, metal, ceramic, foam, glass and much more! www.gorillatough.com. **Check 9**

Harbor Freight Quality tools at ridiculously low prices! We buy factory direct and pass the savings on to you! HarborFreightUSA.com, 800-657-8001. **Check 10**

IceBlox Inc. Our polycarbonate snow guards feature large, forward mounted faces that help prevent the dangerous movement of snow and ice on metal roofs. www.snowjax.com, 800-766-5291. **Check 11**

Laser US Guide will save you money by updating your power saw. www.laserusinc.com, 888-767-1262. **Check 12**

Mechanix Wear is the leader in high-performance work gloves, engineered to help you work faster, safer and cleaner. Mechanix Gloves. The Tool That Fits Like a Glove®. www.mechanix.com, 800-222-4296. **Check 13**

Moduline Cabinets all-aluminum tool and storage cabinets for home and garage. "Organize with Style" and turn your workshop and garage into a professional work area. www.modulinecabinets.com, 888-343-4463. **Check 14**

Oneida Air Systems Complete dust-collection systems and network. 1hp to 40hp systems. Ductwork design service. Made in the USA. www.Oneida-Air.com, 800-732-4065. **Check 15**

O'Keeffe's Company – O'Keeffe's Working Hands The O'Keeffe's products offer Guaranteed Relief for Dry Hands and Feet that crack and split. Nothing works faster or more effectively to relieve and protect your skin. O'Keeffe's products are odorless, oil-free, hypoallergenic and non-greasy. www.OKeeffesCompany.com. **Check 16**

Osborne Wood Products Offering decorative table legs, corbels, molding and more. Though we offer a vast collection of stock items, we are also happy to quote custom pieces. www.osbornewood.com, 800-849-8876. **Check 17**

PexSupply PexSupply offers plumbing and heating supplies from top brands including Honeywell, Taco and Weil McLain. Free shipping on orders over \$300. www.pexsupply.com, 888-757-4774. **Check 18**

Precast Outdoor Fireplaces A mobile outdoor fireplace/charcoal grill that uses durable hand-made, individual, fire-rated link logs, does not require a mason, special skills or cement. www.precastoutdoorfireplaces.com, (508) 378-7742. **Check 19**

Rainhandler Patented maintenance-free modern gutter. Converts roof runoff back to rain and disperses it gently in a swath 3 ft. wide. No clogging, no ground erosion. Virtually invisible. Rugged aluminum, 25 year warranty. www.rainhandler.com. **Check 20**

SCREENEZE® makes your work look better. An aluminum base and vinyl cap snap together to build your customer the porch of their dreams. Screen panel up to 150 sq. ft.! www.screeneze.com, 800-884-6697. **Check 21**

Snorkel Hot Tubs Classic wood hot tubs. Choose our go anywhere wood-fired tubs or state-of-the-art digitally controlled gas or electrically heated tubs. www.snorkel.com, 800-962-6208. **Check 22**

Summit Chemical Co. Why use dangerous chemicals to kill insect pests? Summit Year-Round Spray Oil and Summit Mosquito Dunks kill insect pests organically. Available at fine garden centers and hardware stores. www.summitresponsiblesolutions.com, 800-227-8664. **Check 23**

Step Saver Repair your stress cracks once and for all with Stress Crack Tape. 100 percent US made, patented. www.stepsaver.com, 888-778-4537. **Check 24**

Stoner Solution Invisible Glass by Stoner, Inc. When compared to ordinary "blue water" glass cleaners, you'll immediately see how quickly Invisible Glass removes even the most difficult grime, making glass virtually disappear! www.invisibleglass.com, 888-STONER3. **Check 25**

Tempur-Pedic gives you better sleep, helps relieve your everyday aches and pains and melts away your stress with its personalized comfort. Get your best night's sleep! Free Catalog. www.TempurPedic.com, 800-433-4508. **Check 26**

The Shelburne Company Want a great lawn? Start with better grass — Amazoy zoysia grass! Learn how from Zoysia Farm Nurseries, saving customers time, work and money since 1953. www.ZoysiaFarms.com. **Check 27**

The WeatherTech by MacNeil Automotive Products. The WeatherTech® line provides interior and exterior protection for your vehicle. Protect your investment with WeatherTech®. www.WeatherTech.com, 800-441-6287. **Check 28**

WD-40 Company 3-IN-ONE Multipurpose drill oil offers and retailer purchase locations can be found on the Web site. Visit us online to learn more about how 3-IN-ONE can make your job easier! www.3InOne.com, 800-448-9340. **Check 29**

Wood-Mizer Products is the leading manufacturer of portable band sawmills, with a wide variety of mills to suit your business or hobby. www.millstothemax.com, 800-553-0182. **Check 30**

CabinetWorks Available in DIY heavy-duty mechanism only or complete all-wood beds. We feature the strongest wood foundations. Complete instructions. www.disappearingwallbeds.com, 888-249-6188.

Central Boiler manufactures outdoor wood, corn and wood pellet furnaces designed to thermostatically heat entire homes, shops, domestic water and more. www.CentralBoiler.com, 800-248-4681.

Clog Hog Remove tough drain clogs with your pressure washer or your money back. Order online and get free shipping (excludes AK, HI, Int'l). www.ClogHog.com.

Cyclone Rake — Woodland Power Products. The Cyclone Rake turns any riding lawn mower into a powerful, year-round cleanup machine. Lift and mulch all your yard debris as you drive. Request a free catalog and DVD. www.cyclonerake.com, 888-531-7253.

Pioneer Steel buildings are economical, versatile, durable, maintenance-free and easy to erect. Providing high-quality steel buildings to suit any budget. A manufacturer since 1980. www.pioneersteel.com, 800-668-5422.

Waterproof.com Do-it-yourself basement waterproofing products and information. Dry up your wet basement with The SquidGee Dry System! A leak-free basement is only a click away! www.waterproof.com, 800-828-2947.

www.woodlegs.com

866.963.5581

Fusion

by Osborne Wood Products, Inc.

Fusion *Patent Pending

Turn Any Wet/Dry Vacuum into a Cyclonic Super Vacuum!

"This product works better than I could have ever imagined!" - Leonard Peebles - Florida

No More Clogged Filters!

Separates the Ultra-Fine Dust. Dust In

- Retrofits to Any Wet/Dry Vacuum.
- No Loss of Suction.
- Easy to Empty Bucket System.

Dust Deputy® (Cyclone Only) **\$59.00**

Dust Deputy® Deluxe **\$99.00**

Dust Deputy® Ultimate (Designed for Festool CT Dust Extractors but can retrofit to any wet/dry vacuum.)

99% of Dust Here

Clean Air to Vacuum

Vacuum not included.

Made in the USA.

U.S. Patent #7,282,074 E.U. Pat. Pend.

Call Today for FREE Catalog! **1.800.732.4065**

Oneida Air Systems

Order Online! www.oneida-air.com

ELIMINATE HIGH HEATING BILLS!

CENTRAL BOILER E-CLASSIC®

Outdoor Wood Gasification Furnace

Don't wait any longer! Start saving money on your heating bill when you heat your entire home, water and more with the safe, comfortable heat of a Central Boiler outdoor furnace.*

*Furnace and system must be properly sized and installed.

CENTRAL BOILER

To learn about limited-time, money-saving offers and for the dealer nearest you, visit **CentralBoiler.com** or call **800-248-4681**

©2011 Central Boiler • ad5952

Dare to Compare... BUILDING SALE EVENT!

Clearance Prices 50% OFF accessories

MANY MODELS & SIZES AVAILABLE!

25 X 40 X 16	value \$10,200	NOW \$ 7,990
32 X 42 X 17	value \$12,500	NOW \$ 9,800
50 X 120 X 22	value \$49,900	NOW \$38,700

Compare our prices and our quality. We're all for it! Tough, rugged buildings that last! Heavy gauge AZ60 Galvalume steel. Totally maintenance free!

PIONEER **800-668-5422**

PIONEERSTEEL.COM 30 YEAR REPUTATION...BUILT OF STEEL

BRING THE HEAT & ELIMINATE WEEDS

Here's The Dirty Little Secret: IT'S FUN!

A split second of intense heat from a Red Dragon Torch Kit is all it takes to kill weeds. Many kits to choose from. Up to 500,000 BTU!! Perfect for weeding driveways, sidewalks, patios, gardens, fence rows, around hardwood trees, lawn edges, and much more. Great in winter for removing dangerous ice/snow and many other tough jobs all year long! CSA Certified.

Red Dragon **MADE IN THE USA**

Order online & receive FREE Shipping in the Lower 48 by using the Coupon Code "HEAT" at checkout!

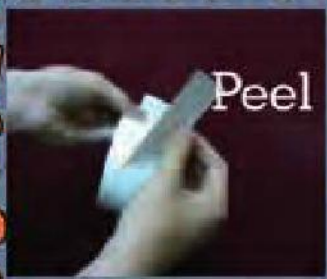
1-800-255-2469 • www.RedDragonTorch.com

Make Glass Invisible – Complete Kit for \$29⁹⁵

Get NEW products NOT found in stores!

Everything you need to make glass invisible from USA's #1 auto glass cleaner. 28-piece kit worth \$45 for just \$29⁹⁵. Includes new products plus \$15 in bonus coupons. Learn more or buy at **1-888-STONER3** or **InvisibleGlass.com**

Stress Crack Tape™



Peel "Repair your Stress Cracks once and for all"



Stick & Paint "Strong & Flexible"

"Patented, 100% US Made"

- Repair cracks in drywall, or plaster.
- Self adhesive, paint ready.
- Feathered edges blend into wall surface.
- No Skills, no Sanding, no Mud, no Mess



Buy at Sherwin Williams (vendor #0027540886) ask for sw 972-6605, or sw 969-5347 or use discount code: sct-12 online at: **www.StepSavers.com**
888-778-4537

Be a Home Inspector!

Train at home in your spare time.

Earn up to \$50,000* a year or more!

In as little as four months you can be ready to start making great money as a Professional Home Inspector. Millions of homes are bought and sold every year and most of those sales involve Home Inspectors. Whether the real estate market is up or down, people will always need shelter...the housing industry is here to stay!

Work at home and be your own boss. More and more Home Inspectors work from home, conducting actual inspections on-site but handling paperwork and other business details at home. As a Home Inspector, you also have the option of working for a home inspection or real estate company, or running your own franchise.

Get FREE Facts! Contact Us Today!

U.S. Career Institute
2001 Lowe Street, Dept. HDYB2A41
Fort Collins, CO 80525

800-758-9588 Dept. HDYB2A41
www.uscieducation.com/hdy41

Sent FREE!

Name _____ Age _____
Address _____ Apt. _____
City _____ State _____ Zip _____
E-mail _____

Accredited • Affordable • Approved!

*with experience, based on figures from U.S. Dept. of Labor's BLS website

HP010

15 Snow Guard Models



ICEJAX.com Snow Guards For Metal Roofs

EASY Gutter Leaf Protection



LEAFBLOX.com Keep Leaves Out Of Gutters

METAL ROOF ACCESSORY ATTACHMENT



ROOFCLAMP.com Attach Roof Accessories

IceBlox Inc., D.B.A. SNOWBLOX™
Toll Free: 800-766-5291
Phone: 717-697-1999
www.ICEJAX.com

Stop Dangerous Snow Slides On Metal Roofs
SnoBlox-Snojax 1405 Brandon Road Mechanicsburg, PA 17055

Laser Guide 4 Saw

Makes a Great Gift!

Add to your existing circular saws!
Bright red laser line showing where to cut the wood & **not** your fingers!

888-767-1262
www.laserguide4saw.com

100 Ft. Sewer Jetter Only \$129⁰⁰

Unclog Drains with Your Pressure Washer



LOGHOG
MADE IN USA

Get the 2011 Sacagawea Dollars with new one-year-only designs!

Order now to secure your 2-coin set! JUST RELEASED!

Historic New Release – Don't miss this chance to own these historic dollars – minted only in 2011. Sacagawea Native American \$1 coins now have reverses that change each year! This new coin, showing Sacagawea on the obverse and designs celebrating Diplomacy – Treaties with Tribal Nations on the reverse, will be minted just this year and never again!

Complete 2011 Mint Uncirculated Set
Act today and you can own this complete 2-coin set of these one-year-only 2011 issues. You'll get the "P" Philadelphia and "D" Denver mint Uncirculated dollars for just \$2.95. **SAVE 50%**, plus get **FREE** shipping to your home! With single coins released directly into circulation, this is the ideal way to get this **mint Uncirculated set** (limit 5)! Don't miss out – order yours now!

You'll also receive our fully illustrated catalog, plus other fascinating selections from our Free Examination Coins-on-Approval Service, from which you may purchase any or none of the coins – return balance in 15 days – with option to cancel at any time. Hurry for this special low price – order today!

Complete Set of One-year-only Native American Dollars!

- Latest design in a new series
- Mint Uncirculated... Complete P&D set
- Issued with this design for 2011 only
- Add a display folder to organize and protect your coins!

45-Day Money Back Guarantee of Satisfaction

FREE Gift!
when you order within 30 days
Complete 4-Coin Uncirculated Set of 2009 cents, featuring special designs honoring the bicentennial of Lincoln's birth!

Add Littleton's custom display folder to easily organize and protect your coins.
www.LittletonCoin.com/specials

The **NEWEST** 2011 Coin displays the date and mint mark on the edge!

Special Offer for New Customers Only

☒ **YES!** Please send me the complete 2-Coin Set of Uncirculated 2011 Native American Dollars for the special price of \$2.95 – regularly \$5.90, plus Free Shipping (limit 5 sets). Also send my **FREE** Uncirculated 2009 4-Coin Lincoln Cent Set (one per customer please).

ORDERS MUST BE RECEIVED WITHIN 30 DAYS

How Many Sets (limit 5): _____

Total Cost @ \$2.95 per set: \$ _____

Add a Sacagawea Dollar Display Folder & Save 28% @ \$2.50 each (limit 5): \$ _____

Shipping & Handling: \$ **FREE!**

Total Amount: \$ _____

Method of payment:
☐ Check payable to Littleton Coin Co.
☐ VISA ☐ MasterCard
☐ American Express ☐ Discover Network

Card No. _____ Exp. Date _____ / _____

Name _____
Please print your complete name and address clearly.

Address _____ Apt# _____

City _____ State _____ Zip _____

E-Mail _____

Please send coupon with payment to:
Littleton Coin Company
 Dept. 2AH402
 1309 Mt. Eustis Road
 Littleton NH 03561-3737
 America's Favorite Coin Source • TRUSTED SINCE 1945

Relieves Joint Pain

The perfect remedy for making matching mortise & tenon joints, our E•Z Pro™ Mortise & Tenon Jig is both low cost and easy to use. Made from high quality aircraft-grade aluminum, this jig comes fully assembled and is ready to use right out of the box. For exclusive online offers, visit: generaltools.com/nopain

GENERAL



E•Z Pro
Wood Joining Jigs

WALLBED KITS!

It's easy to build your own with our Tried and True Coil Spring Mechanism.

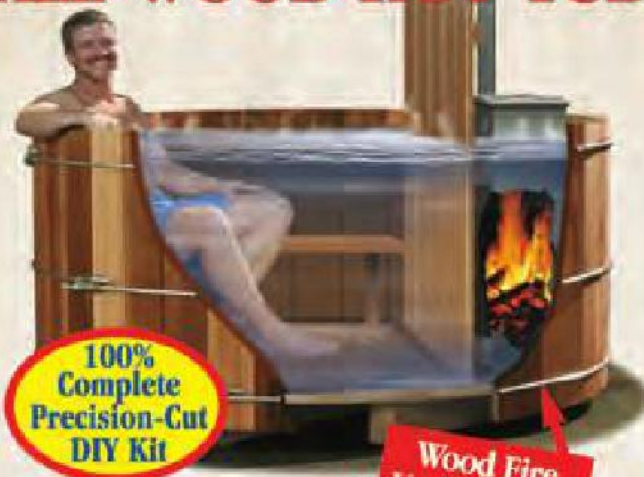
Comes with CD & full instructions.

COMPLETE BEDS ALSO AVAILABLE!

WWW.DISAPPEARINGWALLBEDS.COM

Snorkel Wood-Fired Hot Tubs

BUILD YOUR OWN ALL-WOOD HOT TUB!



100% Complete Precision-Cut DIY Kit

Wood Fire Under Water!

Heat with our **UNDERWATER WOOD STOVE** or choose from gas/electric systems.

Fascinating, practical handyman project that will provide family fun, relaxation and therapy for years to come. The perfect addition to your deck or deck plans

- Classic tub design in 10 easy-to-assemble sizes.
- Beautiful, durable, 100% clear Western Red Cedar!
- NO Electric or plumbing – build anywhere!
- Affordable – 1/2 the cost of plastic spas!
- Hydrotherapy Jets available for wood-fired tubs (elec. req'd.)
- Jetted gas or electrically heated systems also available.

Made in USA Since 1979

FREE SALE CATALOG!

CALL TOLL FREE

1-800-962-6208

www.snorkel.com Dept. AH114B

WeatherTech®

Complete Coverage...
for Whatever
You Drive!

Keep Your
Vehicle Clean!
Custom Products,
Perfect Fit!



800-441-6287 WeatherTech.com

See and Order Everything at

FloorLiner™

Shown in
Ford Focus

MacNeil
AUTOMOTIVE
PRODUCTS LIMITED

Specialists in Original Equipment and Aftermarket Automotive Accessories

©2011 by MacNeil IP LLC

SCREENEZE®

The Professional's Choice

US Patent #6378267

- No Stretching
- Reduce Labor Cost

1-800-884-6697

www.SCREENEZE.com

STORAGE WITH STYLE!



- Garage Storage
- Organization Cabinets
- Wall Cabinets
- Closets
- Tool Chests
- Custom Cabinets
- And More



MODULINE
MODULAR ALUMINUM CABINETS

For More Information Call
Toll Free: 888-343-4463
www.modulinegarage.com

Basement Waterproofing!

**Do-It-Yourself
Its Easy!**

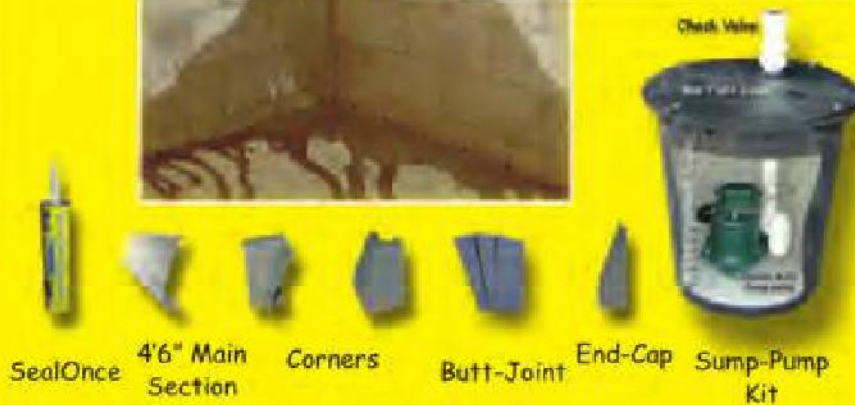
waterproof.com

For Fast Delivery. Order Online...

www.waterproof.com
3419 Osgood Place North
Stillwater, MN 55082
(651) 644-2000

Drain roof water 8ft away from your foundation. Proper water management around the foundation of your home can be very effective at keeping the water from reaching your basement.

UnderGround DownSpout Kit



When the soil around your foundation becomes water-saturated, hydrostatic pressure forces water up through the joint where your floor and wall meet. SquidGee Dry™ can cure that problem. It is designed as a hollow (PVC) baseboard to collect the seeping water and quietly drain it to your floor drain or sump pump. The only skill needed for installation is the ability to follow directions. Just seal the pre-molded corners and easy to handle main sections to the floor using the SquidGee SealOnce™ Adhesive. With the SquidGee Dry™ system in place, walls can easily be paneled or finished.



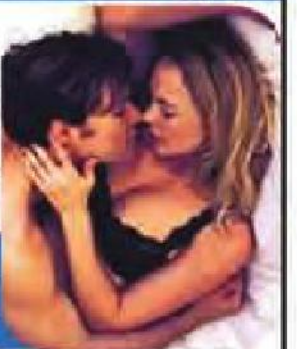
Order your kit today!
Only \$19.85
Plus \$9.50 S&H

LARGER SIZE PERMANENT

100% Money Back Guarantee!
Doctor Approved. Free 6 Months Supply!

**Male Enlargement
Up To 5 Inches And
50% Gain In Width
In 60 Days Or Less!**
PRO+PLUS PILLS

**FEATURED ON
20/20 TELEVISION
SIZE MATTERS**



**LONGER, WIDER, FIRMER
WE GUARANTEE PERMANENT ENLARGEMENT
ONLY WITH PRO+PLUS PILLS**

The exclusive ingredients of **PRO+PLUS PILLS** not found in other brands makes it possible for you to maintain your enlargement PERMANENTLY. Your new larger size can be a part of you forever. Continue to take **PRO+PLUS PILLS** to reach your maximum potential and maintain your sexual stamina and performance.

**INCREASES SIZE, STRONGER ERECTIONS AND
MAINTAINS YOUR SEXUAL VIRILITY**

We guarantee your sexual performance can improve substantially. **PRO+PLUS PILLS** boosts your sexual energy, stamina and endurance. Never go soft again and you will stop premature ejaculations.

PRO+PLUS PILLS outperforms all other brands pills and creams. Compare the results from our consumer survey.



PRO+PLUS PILLS ADVANCED FORMULA

Our exclusive formula for men with a form of **HYPOSPADIAS** or small penis. Size is less than 6 inches and need a guarantee of accelerated enlargement to reach a much larger size. Can also be used by men larger than 6 inches and need guaranteed maximum enlargement.

CREDIT CARD ORDERS TOLL FREE ANYTIME
1-866-765-PILL (7455) FAX 1-818-345-4643
ONLINE www.avidpromedical.com
www.proplusmedical.com

SEND ORDER FORM AND PAYMENT TO:
AVID PRO MEDICAL dept. 15H9A
Box 1835 North Hollywood, CA 91614

CREDIT CARD ORDERS ONLY Toll Free Anytime
1-866-765-PILL (7455) or FAX 1-818-345-4643

Phone & Credit Card Orders specify products and dept. (shown above, next to company name)

☐ Check ☐ Money Order ☐ Cash ☐ Visa ☐ MasterCard
☐ American Express ☐ Discover

CREDIT CARD NO.

EXPIRES: Month/Year **CVS CODE** 3-digit Security Code found on back of card or 4-digits on front of American Express

PRO+PLUS ADVANCED FORMULA

☐ 30 Days Supply Plus 30 Days Supply Free

Total 60 days supply Only \$60.00 \$

☐ 60 Days Supply Plus 60 Days Supply Free

Total 120 days supply Only \$110.00 \$

☐ 120 Days Supply Plus 120 Days Supply Free

Total 240 days supply Only \$160.00 \$

☐ 180 Days Supply Plus 180 Days Supply Free

Total 360 days supply Only \$210.00 \$

**SUPER FORMULAS ONLY \$25.00 EACH OR SELECT ONE FREE
WITH ANY PRO+PLUS ORDER**

Please Specify Quantities

Sexciter To Excite Women.....FREE \$

Attract-A-Mate "W": Attract WomenFREE \$

TOTAL PURCHASE: \$

CA Residents add 9.75% sales tax: \$

Shipping, Rush Service and Insurance \$20.00 VALUE ONLY \$ **12.00**

TOTAL ENCLOSED OR CHARGED: \$

Orders discreetly shipped with UPS or Priority Mail.

Foreign Orders — Money Order in U.S. Funds Only. Add \$10.00 S&H.

SIGNATURE (I am over 18 years old)

NAME (print)

ADDRESS

CITY/STATE/ZIP

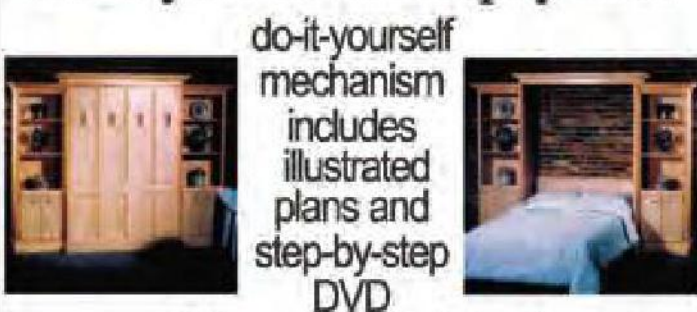
COPYRIGHT © 1996 PRO+PLUS is a trade name of Avid Pro Medical. Individual results may vary. These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure or prevent any disease.

To Advertise in the
SHOP@HANDY
Section,

Call: Colleen Hobbs at
301.482.1778

chobbs@meaghermedia.com

Save space and money...
build your own murphy bed.



do-it-yourself
mechanism
includes
illustrated
plans and
step-by-step
DVD

Create-A-Bed®
murphy bed mechanism

TOLL FREE: **1-877-966-3852**

www.wallbed.com

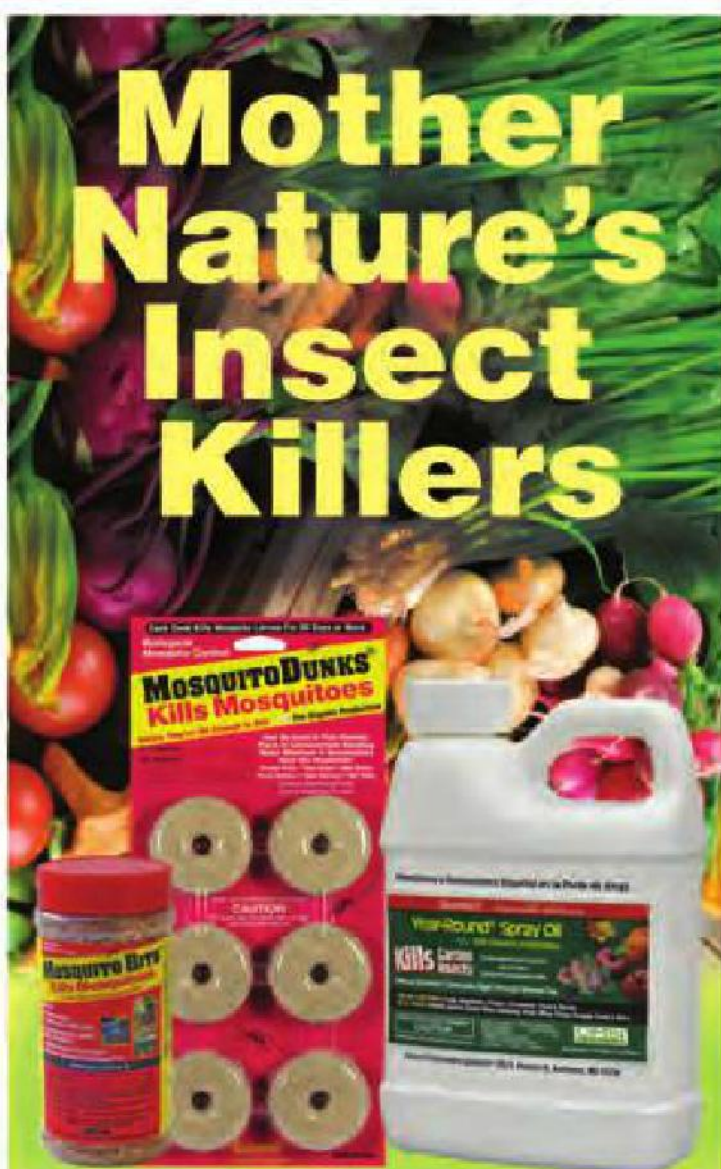
5-Minute Fence Stain



FIVE MINUTE FENCE STAIN

Stain 100 feet of fence in just 5 minutes! Sprayer attaches directly to garden hose. No masking, simply hose off overspray. One quart covers 600 square feet. Select from three natural wood tones; Natural Cedar, Dark Cedar or Redwood.

www.FiveMinuteFence.com



Mother Nature's Insect Killers

Mosquito Dunks®

- #1 biological mosquito killer
- Approved for organic production
- Kills mosquitoes before they're old enough to bite!®
- Keeps working for 30 days in ponds, bird baths, water troughs and any standing water
- Will not pollute water or harm animals, fish or birds
- Use Mosquito Bits® in marshy areas, potted plants, standing water, and other areas

Summit Year-Round® Spray Oil

- OMRI listed for organic use
- No dangerous chemicals
- No odor
- Kills aphids, spider mites, scale, thrips, leaf beetle larvae and other insect pests
- Use on garden plants and fruit trees right up to day of harvest

Available at garden centers, hardware stores and other fine retailers.

Summit®

...responsible solutions.

(800) 227-8664

www.summitchemical.com

® is a registered trademark of Summit Chemical Co.

Build Memories!

with **DETAILED** Play Systems Backyard Playground Equipment

FREE CATALOG!

Just Add Lumber!

FREE SMILES!

Do it Yourself and Save!

The Build @ Home™
Playground Equipment Store
ON THE WEB

 www.detailedplay.com

1-800-398-7565

Turn logs into lumber.

MAX dream to the

8 models to choose from

Live life to the **MAX.**

Wood-Mizer

800.553.0182
SawBoards.com

NEED PLUMBING OR HEATING SUPPLIES?

When we say fast delivery...

We mean fast.

The Largest Selection ■ The Lowest Prices ■ Delivery at Mach 10

Save 5% when you use coupon code **PEXHANDY2**
(Offer Expires 5/27/11)

 Real People. Real Service.
PexSupply.com



www.pexsupply.com • 888.757.4774

An Ounce of Hydrogen Peroxide is Worth a Pound of Cure

(SPECIAL) - Hydrogen peroxide is trusted by every hospital and emergency room in the country for its remarkable ability to kill deadly germs like E. coli. In fact, it has attracted so much interest from doctors that over 6000 articles about it have appeared in scientific publications around the world.

Research has discovered that hydrogen peroxide enables your immune system to function properly and fight infection and disease. Doctors have found it can shrink tumors and treat **allergies, Alzheimer's, asthma, clogged arteries, diabetes, digestive problems and migraine headaches.**

Smart consumers nationwide are also discovering there are hundreds of health cures and home remedy uses for hydrogen peroxide. A new book called *The Magic of Hydrogen Peroxide* is now available that tells you exactly how to use hydrogen peroxide by itself... and mixed with simple everyday kitchen items... to make liniments, rubs, lotions, soaks and tonics that treat a wide variety of ailments.

It contains tested and proven health cures that do everything from relieving **chronic pain** to making **age spots** go away. You'll be amazed to see how a little hydrogen peroxide mixed with a pinch of this or that from your cupboard can:

- **Relieve the pain of arthritis, rheumatism and fibromyalgia**
- **Treat athlete's foot**
- **Clear up allergies and sinus problems**
- **Soothe sore throats**
- **Fight colds and flu**
- **Help heal boils and skin infections**
- **Whiten teeth without spending a fortune**
- **Destroy harmful dental bacteria and heal gingivitis**
- **Help heal cold sores and canker sores**
- **Clear up foot and nail fungus**
- **Relieve the sting and pain of insect bites**
- **Soothe sore feet**
- **Relieve ear aches**
- **Soothe muscle aches**
- **Enable minor wounds, cuts and scrapes to heal faster**
- **Refresh and tone your skin**

- **Clear up acne, rashes and age spots**
- **Help heal yeast infections**
- **And much more**

Besides killing E. coli, hydrogen peroxide also destroys botulism, salmonella and other harmful organisms. It works by making viruses and bacteria self-destruct on the cellular level. Amazingly, for something so powerful, hydrogen peroxide is safe. That's because after it makes germs self-destruct, hydrogen peroxide breaks down into harmless water.

The Magic of Hydrogen Peroxide book is a valuable health improvement treasure that also shows you how to make tons of household cleaners that work better and more economically than expensive store-bought products. It's a safe powerful alternative to harsh chemical cleaners. Discover easy-to-make formulas that:

- **Kill germs on kitchen counters and surfaces**
- **Sterilize dishes, cups and kitchen utensils**
- **Make a powerful scouring powder that works wonders on kitchen sinks, refrigerators and ovens**
- **Disinfect and deodorize coffee makers, tea pots, blenders and food processors**
- **Sanitize wood cutting boards and wooden spoons**
- **Clean out and disinfect clogged drains**
- **Make hardwood floors, tile floors, grout and linoleum gleam**
- **Get rid of harmful bacteria on fruits, vegetables and meats with this safe and effective food rinse**
- **Eliminate nastiness from toilet bowls, bath tubs, showers and shower curtains**
- **Sterilize and purify toothbrushes and dentures**
- **Clean and disinfect pet stains**
- **Remove mold and mildew from basement walls, roofs and other surfaces**
- **Disinfect diapers, pacifiers and baby toys**
- **Remove wine, ink and blood stains from clothing, carpets and furniture**
- **Boost laundry detergent power and**

restore brightness and color to fabrics

- **Streak-free-clean your windows and mirrors**
- **Eliminate skunk stench on pets and foul odors from litter boxes, old tennis shoes, etc.**
- **Rid pets of parasites and bacteria**
- **Make indoor and outdoor plants flourish with a surefire fertilizer and insecticide all rolled-into-one**
- **Keep hands germ-free without expensive hand sanitizers**
- **And much more**

The Magic of Hydrogen Peroxide contains many more amazing health remedies, cleaning formulas and gardening mixtures. In addition, it also gives you a list of qualified physicians who use hydrogen peroxide in their practices to treat serious ailments. Also included FREE with each book are useful tips and home remedy formulas using vinegar, garlic baking soda and teas.

To get your copy of *The Magic of Hydrogen Peroxide* direct from the publisher at the special introductory price of \$19.95 plus \$3.98 shipping and handling (total of \$23.93, OH residents please add 6% sales tax) simply do this:

Write "Hydrogen Peroxide" on a piece of paper and mail it along with your check or money order payable to: James Direct, Inc., Dept HP165, 500 S. Prospect Ave., Box 980, Hartville, Ohio 44632.

You can charge to your Visa, MasterCard, Discover or American Express by mail. Be sure to include your card number, expiration date and signature.

Want to save even more? Do a favor for a relative or friend and order two books for only \$30 postpaid.

Remember, you're protected by our 90-day money back guarantee. If you're not happy, for any reason, we'll refund your money. Simple as that.

FREE GIFT! You will also receive a copy of the handy booklet "*How To Grow, Dry, Use & Prepare Herbs*" as our gift to you. Even if you return the book, it is yours to keep with no obligation.

Hurry! Supplies are limited so you must act now.

©2011 JDI HP106S

<http://www.jamesdirect.com>

Riveted

Small but dependable fasteners help hold our world together

BY CONNIE BASTYR

Riddle: What's the connection between the clothes we wear, the bridges we cross, the planes we fly and the buildings we erect? (Hint: The connection is a connector.)

Answer: Rivets, the fasteners that keep pants' pockets in place and bond beams in tall buildings can also bring bling to a leather jacket or unite steel panels to form an expansive hull. Until the early 1900s, mechanical fasteners such as rivets and bolts were the only practical means to adhere metal parts. Although reliable welding methods (established in the mid-1900s) simplified ship building and steel construction and altered the art of metalwork, rivets (ranging from industrial-strength to fashion-friendly) remain fixed essentials in our world.

Used since ancient times, rivets were likely part of the construction of one famous floating ark. And evidence dating to 2300 B.C. indicates that rivets secured the seams in copper-plate sculptures depicting Egypt's Pharaoh Pepi I. In a much more recent (and familiar) application, the 1873 U.S. patent for an "Improvement in Fastening Pocket Openings" jump-started a denim dynasty for California clothiers Jacob Davis and Levi Strauss, thanks to tiny copper rivets.

On a much larger scale, the Eiffel Tower's 18,000 sections were assembled with 2.5 million jumbo rivets — a construction method that would allow exhibitors to dismantle the "temporary" monument after the 1889 World's Fair. Despite some influential folks' opinions that the structure was "an odious column of bolted metal," the exhibit's fans prevailed, and the tower was spared — a fortunate turnabout for Paris and for the world.

Also joined by rivets (3 million of them), the Titanic was deemed unsinkable — or at least was believed to be able to remain afloat for days in the event of any catastrophe. Scientists now believe rivets were responsible for the ship's rapid (three-hour) descent. Records and recovered evidence show that the wrought-iron rivets used in the ship's bow failed under the strain of impact, causing gaping holes and fast flooding.



Hot rivets bonded the 18,000-plus iron pieces that make up the Eiffel Tower's latticework structure. Each fastener was fired to a red-hot state, then inserted and pounded to form a domed shape. As the rivets cooled, they shrank and tightened their hold.

Two of the most famous U.S. structures — the Empire State Building and the Golden Gate Bridge — also owe their existence to rivets. Some 60,000 tons of steel girders and rivets formed the frame of the Empire State Building. The celebrated 1931 completion of the world's then-tallest building was punctuated with the installation of a solid-gold rivet. And during the four-year construction of the Golden Gate Bridge (1933-37), countless tons of steel parts (including 1.2 million rivets) were shipped from East Coast foundries to San Francisco via the Panama Canal.

Of course, no riveting story is complete without a reference to Rosie. The name makes many people think of the woman on the iconic "We Can Do It" poster representing the female force who took up the tough work of building arms during World War II. The 1942 poster (modeled from a news photo of factory worker Geraldine Hoff) was one of a series of illustrations that Westinghouse Co. commissioned J. Howard Miller to create to inspire workers, and it enjoyed renewed popularity decades later as a symbol of the women's movement. However, the official title "Rosie the Riveter" was the name of a painting Norman Rockwell created in 1943 for the cover of *The Saturday Evening Post*. Like the hardware they're associated with, both of these famous figures have held fast as symbols of strength in our riveting history.

PHOTOGRAPHY BY PAOLO MEDDA

**THEY
CAN'T.***

**WAGNER®
CAN.**



**NOW YOU CAN PAINT AT ANY ANGLE WITHOUT
SPITTING OR STOPPING.***



EZ TILT
UNIQUE FLEX TUBE
DRAWS PAINT
FROM ANY ANGLE

**OPTIMUS
DUAL TIP**
EXCEPTIONAL
ATOMIZATION
AND FINISH

Only an innovator like Wagner can give you a smooth, professional finish at any angle. No spitting. No stopping. Our EZ Tilt technology means you can point down at floors, or up at ceilings and eaves, and always maintain a continuous flow of paint. And compared to other sprayers in the same class, as well as rollers and brushes, our Optimus dual tip gives you more uniform atomization and coverage. Any way you look at a job - up, down or sideways - you can't beat the speed, coverage and finish you get from a Wagner Power Painter.

Visit www.WagnerEZTilt.com



WAGNER®
PAINT SMART

*Based on tests of similar sprayers operated at a 90 degree angle pointed directly upward or downward with the paint reservoir less than half full.

What makes the ride

so enjoyable

is what makes this lawn tractor

like no other.



© 2011 Cub Cadet

THE SERIES 1000 LAWN TRACTORS WITH AN ULTRA-TIGHT TURNING RADIUS.

So many features set the Cub Cadet Series 1000 lawn tractor apart. Starting with incredible maneuverability right at your fingertips with an ultra-tight turning radius. Plus, an advanced cutting system that delivers remarkable results every time. And a fully-welded steel frame for ultimate durability. All of which, adds up to comfort, features and results that outclass the competition. Experience a Cub Cadet today to understand why it's a better choice.

Cub Cadet
FIFTY 50 YEARS
SINCE 1961

Visit cubcadet.com/handy to find your nearest dealer and unbeatable factory financing, including 0%*
STARTING PRICE OF \$1,499**



* Not all buyers qualify. See dealer or cubcadet.com for details.

** Product Price — Actual retail prices are set by dealer and may vary.
Taxes, freight, setup and handling charges may be additional and may vary.

Models subject to limited availability. Specifications subject to change without notice.

Cub Cadet

cubcadet.com/handy