

JULY | AUGUST 2005

This Old House

a doghouse
like your
house

BUILD IT.
BUY IT.
PAGE 84

PATCH FLOORS
like a pro

SAVE \$23,400
on your remodel

DRIP
IRRIGATION
made easy

patio
makeover
SNAP
DOWN
DECKING

NEW MEETS OLD
21st-century kitchen for
a 19th-century home

2195/CB-3018

AN AMERICAN REVOLUTION

BUTTONS AND GADGETS AND GIZMOS...OH MY.

**trailblazer**

WELCOME TO THE WORLD AT YOUR FINGERTIPS. WITH AVAILABLE TOUCH-SCREEN SYSTEM, CD/MP3 PLAYER** AND THE ULTIMATE IN SECURITY — A STANDARD ONE-

NAVIGATION SYSTEM,* XM SATELLITE RADIO,† REAR-SEAT DVD ENTERTAINMENT
YEAR ONSTAR SAFE & SOUND PLAN‡ — IT'S AN ADVANCED SUV. CLICK ON CHEVY.COM



Why just hang up

a self portrait



when you can

walk around in one.



The new range starts with the Castle. The original. No matter who you are, Andersen windows let you put a little of yourself in your home. A little Andersen in your house is a world of interesting options and styles that make a difference.

account. With Andersen, you'll know it's your home. Because every day you look, you'll see yourself. Call 1-800-436-4263, ext. 4000, or visit us at www.andersenwindows.com

LONG LIVE THE HOME Andersen
WINDOWS • DOORS





**THERE'S NO MAGIC FORMULA FOR RAISING THEM.
NOW THERE IS FOR FEEDING THEM.**

ALL GROWING MINDS NEED DHA.



Now With DHA
New Science Diet® Puppy Dry has the highest guaranteed level of DHA, which is a key ingredient found in mother's milk. DHA promotes better brain and vision development and helps your puppy achieve its potential. Science Diet Puppy also provides your pet with a complete balance of nutrition. It helps promote a healthy immune system along with strong muscle and bone development. So start your pet off right with New Science Diet Puppy Dry with DHA.

NOTHING KEEPS YOUR PET HEALTHIER™
www.ScienceDiet.com



ADVERTISEMENT



STANDING RESERVATIONS FOR YOUR DOG

BROUGHT TO YOU BY HILL'S SCIENCE DIET®

A house isn't a better grid everyone feels comfy, right? And so dog lovers would discount the habits and personality of the family dog when arranging the family living quarters. So consider a few tips from experts on how to create an eating space where your four-legged family member can enjoy meals in a healthy and comfortable setting.

A social dog who eats at regular intervals may prefer to eat in the kitchen, which tends to be the busiest room of the house. Therefore a low kitchen cabinet into a easy dining nook by mounting a feeder inside the door at a level appropriate for your dog's height. It's a highly practical way to eat the table in seconds and after dinner, just close the door to return the kitchen to its pristine state. Keep a water bowl nearby, preferably on a mat to keep the floor clean.

Perhaps your dog likes to graze throughout the day, but you would rather keep the feeding station off the beaten path. An ideal solution is tucking a simple rolling feeding station, made of plywood and castor wheels, under a shelf or counter in the laundry room. The wheels make it easy to set up and clean up, and while the placement is away from traffic, the food is still conveniently out and for your dog.

If your dog has put on some unsightly bulge and needs to get ready for summer season, try building a treadmill bench with a seat that opens. Keeping the food and bowl out of sight helps your dog think less about eating, and you can ration feed appropriately to manage your dog's weight in a psychologically comforting way.



STOCKING THE RIGHT FOOD FOR YOUR DOG WITH HILL'S SCIENCE DIET®

During the first year, puppies grow up quickly. So that your puppy off with the right condition with Science Diet Puppy Dry, the enhanced with the highest guaranteed levels of DHA (2.5%), the equivalent based on mother's milk, DHA promotes better brain and vision development and help keep your puppy healthy for a long period.

If you suspect your puppy starts to get too green dog (mostly in summer), the adult Science Diet Adult Light formula provides essential nutrients to help build protein, muscle, joint, and bone development for growing dogs. Feed puppies up to 12 months that will weigh less than 55 lbs. For adult dogs weighing 55 lbs or more, Science Diet Adult Light formula provides extra help for maintaining healthy bones, joint cartilage and muscles.

For adult dogs, Science Diet Adult dry formula has the highest levels of vitamins E and C. These antioxidants help improve immune system going strong.

If your adult dog is prone to weight gain, Science Diet Adult Light is a low-fat, low calorie way to manage his bulge.

When your dog reaches 7, he could start reaching a little older dog (mostly after that). But Science Diet Senior 7's dry is specially formulated to extra support his joints and cartilage, so he keeps that old up tempo.



features

86 A Doghouse Like Your House

Provisions of American architecture made to measure for man's best friend

98 Security

How dedicated homeowners in prison-oriental and a blended local carpenter rebuilt a breached ideal beach house—one plank at a time

104 Cooking Up a Classic

When time flies, their 19th-century farmhouse kitchen under the 21st century's Pennsylvania couple found a new life in the Old House

110 Build It and They Will Swim

A pool is one of summer's greatest pleasures. But getting from fantasy to backyard reality takes some hard work

116 When You Want Something Done Right, Do It Yourself

They did their own plumbing, built their own cabinets, even made a kitchen sink! Hopwood was too daring for a couple of guys restoring their 1933 bungalow



ON THE COVER

- 18 Group together: checking
- 31 New music old
- 35 Hybrid grills
- 58 Pool grinders
- 57 Patch wood floors
- 79 Digging plan
- 86 Doghouses
- 116 Save \$23,400

Environment: Missouri

TOO BAD YOU HAVE TO GIVE IT BACK.

The Home Depot® is the best place to rent the right tools. We have a lot of choices and have more tool locations than anyone else. Anything that makes your project easier we rent it. Large tools. Small tools. In-between tools. Superior tools. Like Hinder and Girth. Well, we'll even show you how to use the equipment properly and safely. The Home Depot. You can't be in. We can help.



Tool
Rental



SHIFT thinking



WORKING LONG
29 FEET
OF UTILITY-TRACK RAIL TO
SHOW YOUR CARGO WHO'S BOSS.

THE FULL-SIZE NISSAN TITAN

2011 404 HORSE-POWER 5.6L V8 ENGINE 100

OPTION 1ST AND ONLY FULL-SIZE TRUCK WEIGHT-DRAWN JACK SYSTEM

OPTION 4-DOORABLE BED EXTENSION 1-DOOR-ON JACK SYSTEM

404 IN CARGO, 400000000, 400000000

©2011 Nissan North America, Inc. All rights reserved. Nissan is a registered trademark of Nissan North America, Inc.

in every issue
FROM THE OLD HOUSE 11 | CONTRIBUTORS 16
MAILBOX 36 | SAVE THE OLD HOUSE 111

around the house

- 29 **Copper the hot new finish** | **Back in a box**
How a ladder pulls for a renovation

departments

- 31 **Kitchen Design**
Add new with an eclectic, added and over time look
- 35 **Luxuries**
For gourmet grills, charcoal is hot
- 41 **House Calls**
An architect's advice on assumed porch design
- 47 **Salvage**
Vintage Kerosene takes center stage in colorful new dinner nook via glass walls
- 53 **Toolbox**
Appliances
- 57 **Upkeep**
How to replace and refinish a section of wood flooring, invisibly
- 65 **Green House**
How ACs and hedges with the Energy Star label put the green in your pocket
- 71 **Home Tech**
Together We-Fi signal through a host of links, you need our advice
- 79 **Homeowner's Handbook**
Including step-by-step

workshop

- 131 **Ask This Old House**
Bouncy pads, porch safety, tiling a basement floor, fireplace
- 139 **Skill Building**
Disposal basics, replacing screens and other lessons to take home
- 149 **Home's Notebook**
Kauai's pit finish, removing sticky screens, new filter old plastic
- 151 **Directory**



Fridays over polka dots

Donuts over greens

It's 402 over broccoli

Bricks over Mondays

YOUR CHOICE. YOUR CHASE.

Personalized Card Plan



- Choose your pay date.
- Choose your reward.
- Choose to pay online.

You choose how and when you pay

Call 1-800-U-CHOOSE
or visit choose.chase.com

CHASE

Subject to credit approval. Chase credit cards are issued by Chase Bank USA, N.A. and may be serviced by its affiliates. © 2005 JPMorgan Chase & Co.

Hands up if
you love wood.



Cabot
Wood For Good.
1-800-US-STAIN
www.cabotofusa.com

letter FROM THE OLD HOUSE

Generosity Unleashed

IT WAS SEVEN O'CLOCK on a Sunday evening and Madi Powers, the school editor for TOWN, climbed into the U-Haul for the six-hour trip to Suffolk, Virginia, where a photo shoot awaited. Jason Carpenter, the editor who a month ago wrote this month's cover story, did the same and pointed to the cargo in back. He said, "Some doghouses I wouldn't mind being in."

Jason and doghouses, but he really means five little patch palaces, each of which were built to showcase a classic American architecture style and provide shelter for the American family's best friend. They appear in "A Doghouse Like Your House," on page 56. Brothers Dale and Mark Jaffee, owners of East State Carpentry in Bucks County, Pennsylvania, had worked late nights right up to the deadline and maybe a couple hours past it lay on the building benches. We could mean the standard rule here about crossing shoulders by only a couple of hours actually being ahead of time for any construction, but that would be trivial. Perhaps only given that the brothers demand their skill and time—something like 800 men hours—for the project. Dale figures the houses, constructed with the same care they bring to restoring 300-year-old interiors, would likely stand as grand spaces if sold for profit. But when he heard The Old House magazine was an effort for an occasion as often as benefit (the ASPCA, leprosy-care and diabetes research), he and his brother and their volunteer crew wouldn't take a dime.

The U-Haul didn't make Suffolk until 5:30 Monday morning. A six-hour trip had stretched to 18, which, when calculated along with a pretty much forgotten but once there, our guys found Helen HML, another crucial volunteer, waiting for them. Helen had called us her friends to allow us to photograph their houses and rescued pups, and even brought her own home, Alice, so sure in case of the phone. She acted from her home to facilitate with our crew, which included her daughter and our son-in-law, Hyland HML, photo editor Denise Skaya, and photographer Alana Rana. Helen offered moral support, purchased photo gear, and made a proper Southern lunch. People do fine things for good causes.

We hope you'll know a thing or two from this story. Maybe the piece will even inspire you to make your own doghouse and enter our reader contest. If it does and you're lucky enough to find good friends to help, perhaps you'll know the most crucial thing we wrote to understand in the course of this project: It's a whole lot more fun when folks chip in, and you just might find you couldn't do it without them.

Sam Quicoy
SCOTT QUICKEY
EDITOR



DOGHOUSE CREW

The volunteers, FROM LEFT:

Lisa Gorkham, coordinator

Dale Jaffee, Paul

Ridgely, contractor Mark

Jaffee, Mike and Lauren

with Ridgey in front

Mark's rescued dog and her

lucky project manager

SCOTT QUICKEY

FROM LEFT: volunteer

Scott Quickey and catnip

the previous Helen HML

her daughter and TOWN

editor Mark Powers. The

photo credit: Denise Skaya

photographer's assistant Alana

Rana; photo credit

Jason Carpenter and individual

editor Mark Powers. The

photo credit: Denise Skaya

photographer Alana Rana

At Trane, we believe that you should be comfortable in your own home. So we've brought together an elite group of dealers dedicated to making you as comfortable as possible. These independent Trane Comfort Specialists™ will work with you to determine your heating, cooling and air filtration needs, then recommend the system that's right for you. It's customer service you can rely on, and it's all just a click away at Trane.com/Residential/DealerInfo.



VISITING THIS ADDRESS

ADDRESS <http://Trane.com/Residential/DealerInfo>

WILL MAKE IT A LOT MORE COMFORTABLE
AT YOUR ADDRESS.

around the HOUSE

USE IT OR LOSE IT

The latest days of the year on July 1, August 1, leaving no doubt about money in the Department of Housing and Urban Development.

Copper Comeback

New designs give kitchens old-time shine

ANTICORROSION RESISTANCE makes it perfect for plumbing, an high conductivity well suited for wiring, but it's the timeless look and durability of copper that make it a good choice for kitchen appliances and accessories.

After nearly a decade of domination by stainless steel, manufacturers are expanding their metal offerings with new products made from copper.

"People are looking for something warm," says Cynthia Castillo, national assistant manager for EXPO Design Center. This year, the retailer started selling copper oven mitts and backpacks made by Ergo Design. In coming months, EXPO plans to expand its lineup of copper sinks, faucets, small appliances, hardware, and light fixtures.

Then there's the new, \$47,500 copper range from La Cornue, the French producer of pro-style cook stoves. "It will take no time to keep its brilliant sheen," says company spokesman Alain Gira. "But if you leave it alone it will get a nice antique look with shades of blue and green."

—AMY HODGES



To learn more about copper, visit www.copper.org.



New \$400 at www.cornue.com; \$790 at www.cornue.com. Interiors \$100 at www.cornue.com. Interiors \$1,300-\$1,500 at www.cornue.com. Backdrops \$100-\$1,500 at www.cornue.com. Backdrops \$100-\$1,500 at www.cornue.com.

A LUSTROUS PAST



PHAROS FILMWORKS
Architects at the Great Pyramid of Giza, in Egypt found copper tubing for plumbing that was still in use today conditions after 5,000 years.



RENE'S RENOVATIONS
Renovations of the Great Pyramid of Giza, in Egypt found copper tubing for plumbing that was still in use today conditions after 5,000 years.



LOTS OF LINCOLN
The average man lives less than 100 years of age, most probably in a house and plumbing that's about 10,000 old-copper pipes.

PHOTOGRAPH BY MARK HARRIS

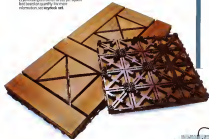
AUGUST 2005 TWO MAGAZINES 19

Was your old gray-concrete patio just you crying the blues? Then build yourself a reinforced deck in a day. Forget the sealers, adhesives, and petrolic diggers—all you need is a hand, flat surface and a little elbow grease. Modular decking from Crydick snaps together like a giant puzzle with 22 inch square interlocking plastic made of carbon colored plastic or chocolate.

These dense thickwoods are nearly impervious to moister and are rated to last 25 years if treated twice a year with an oil based sealer. The 2 inch thick woods is mounted to a plastic base and will grow in soil or water. Small gaps between slats allow water away from the wood.

ACKNOWLEDGMENTS

For product ranges from 100 to 1000 per square foot, we can quantify the exact information, see [singhlab.com](http://www.singhlab.com).

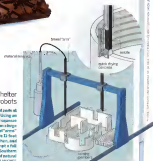


Americans know it as a **hoovering**—a metal bowl that can be tightened around the junction of a metal pipe and rubber tube for on-the-spot extraction on washing machines, garden hoses, and car radiators. In England, where the device was invented, it's called a **Johnson clip**, named in honor of Queen Victoria's 10th anniversary party.

Can you guess in which year the clip, or rather change, was broadcasted?

A. 1877 B. 1883 C. 1903 D. 1920

Dr. William A. de Wap, Jr.
1000 Ave. C



Inventor sees the future of the shelter market in the arms of robots

[illegible]

Delivery, as illustrated in Figure 2, is

© 2006 Pearson Education, Inc. All rights reserved. This publication is protected by copyright. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage or retrieval system, without permission in writing from Pearson Education, Inc.

**For times when
there is little room
to work and even less
room for mistakes.**

The bathroom can be a tough place to work.

Every scene is crisply shot. What is surprising for good reason: take the annual 400-hour IFE, a two-day week conference now in the final week

the process of under the water. And the ship.

Multi-part machines provide complete control of the cutting through a series of three horizontal counter-rotating rollers. So when you're finished, you can be proud to call that work your own. If you have any questions along the way, please call 1-800-446-6211 so that demand can

DREMEL 400! XPR



circa 750



circa 1207



circa 1990



circa 2005



2005 Ford F-150 Super Duty® with 3.5L Power Stroke® engine, 4x4, 170 hp, 240 lb-ft torque, 5-speed PowerShift® automatic transmission, 60,000-mile warranty, 5-year/100,000-mile powertrain warranty, 5-year/100,000-mile bumper-to-bumper warranty, 5-year/100,000-mile rust-through warranty, 5-year/100,000-mile power window warranty, 5-year/100,000-mile power door lock warranty, 5-year/100,000-mile power mirror warranty, 5-year/100,000-mile power seat warranty, 5-year/100,000-mile power window warranty, 5-year/100,000-mile power door lock warranty, 5-year/100,000-mile power mirror warranty, 5-year/100,000-mile power seat warranty.

THE EVOLUTION OF PROTECTION. FORD F-150.

©2005 Ford Motor Company





TOO LATE TO SAVE

When the city of Newburgh, Illinois, went to sleep on April 20th, one of its oldest and sturdiest residences, and our pick for this issue's Save This Old House, was standing. When folks awoke the next morning, half of the 20th-Century Revival had been torn away by a backhoe. By late afternoon, the entire building was leveled.

The Lake County Jail located across the street couldn't see parking lot, and the brick structure was in its way.

Local preservationists thought they had time through September to find someone to rescue the house. But the county—which plunked down more than \$300,000 for the property last summer—says the deadline expired in March.

There's nothing in writing to substantiate either side's claim. What is for sure is that one of Newburgh's last great architectural gems is now gone, and our back-page is nothing more than a confusing jumble.

Had the house been designated a National Historic Landmark, James William Tate, chairman of Newburgh's Historic Preservation Commission, knew would have won this fight. The designation, administered through the National Park Service, prevents demolition of historically significant structures. "We are now working to landmark as many of our old buildings as we can," he says.

It's that sense of urgency that underpins the new book on Save This Old House columns. It's not a matter of "if" the house in Newburgh was torn down, it's a matter of "when" the other old houses will be gone. It's only after they are gone that communities realize what they had. "Our historic resources are what give a place its character and identity," says Tate. —AMY RUDIS



10
USES

Soap

To determine if what you get when you load down the costume suits of fat by words. You, it's just soap. known mostly for cleaning dirt from grimey hands. But with a little creative repurposing, soap is both in bar and liquid form—can simplify a bunch of DIY projects.

Use soap to:

1. Drive nails easier, without risk of splitting the wood, by first rubbing it on the nail shank.
2. Smooth rough boards with a moistened finger.
3. Remove wallpaper (and by mixing with water, water and spraying it on the walls).
4. Lubricate the ends of sticks of string or twine.
5. Clean dirty windows by rubbing the wet edge of soap along them.
6. Turn some heads more easily by adding some bar to the ends.
7. Keep garden bugs off plant leaves by mixing it with water and spraying the solution on the leaves, underside.
8. Cut in a lighter line with a hand saw by rubbing the blade with it.
9. Defect gas leaks by mixing it with water and rubbing it on suspect pipe joints. If bubbles form, you have a problem.
10. Snap aluminum or vinyl siding into place easier with a slip tool that's been coated with the liquid.



A 20' x 35' extension of you.

Nothing looks like it. Nothing feels like it. Trex® composite decking and railing looks beautiful and is easy to care for. It even comes where

after decking out. Now let's get started on your dream. For colors, finishes and expenses, get a free copy of DeckScapes™ by visiting trex.com or calling 800-695-TREX ext. 444.



Trex
Create Your Space™

THEY CAN'T FOOL ME!



ORIGINAL ARMORED

ORIGI. The master was Sunday Britains. The movement to be in while announcing a Day of the American Indian. World War II was never far from the mind's eye. The British and the day late service in World War II. But US soldiers also found their way to the top and brought the technology back home, where only manufacturers could be found, including "Jiffy" from the center.

DISCOVERIES

Easy Way to Fund a Restoration

A Dumpster-bound lantern turns into a six-figure find

BEFORE TOM PETERSON BOUGHT his Brookline, New Jersey, house last year, he did a walk-through with members of the local historical society for advice on what a restoration project should be preserved during renovations. The circa-1830 limestone house had been a solid zero-and-a-half of its original character crumbled over the years.

Then appeared to be a catalog of value remaining, with the exception of four antique hanging fixtures. The smallest one, a dusty Arts and Crafts lantern with a 10½-inch square faceted copper top and four stained-glass panels, "looked like a piece of junk to me," says Peterson. And had he not been worried to preserve the lantern, "it would have ended up in the Dumpster."

Peterson realized his good fortune when he examined the lantern. "I saw a maker's mark—a little cartouche—that said Craftsman Workshops. So I knew it was authentic." Gustav Stickley, the most well-known designer of American Arts and Crafts furniture, metalwork, and lighting, founded the Craftsman Workshops in Eastwood, New York, in 1901.

Peterson brought the lantern to the Rega Arts and Auction Center in nearby Lumberville. Owner David Rega knew immediately it was a rare find. "I thought, 'Oh boy, this is a really beautiful piece.'" He put a modest estimate of \$20,000 to \$30,000 on the lantern and ran a photo of it on the catalog cover for an upcoming auction.

Sitting in the audience at the auction last September, Peterson and his wife, Becky, were stunned when the bidding, which started at \$18,000, shot to \$95,000 and concluded at \$110,000. When the gavel finally struck, the price had reached \$316,300 (\$164,240 with buyer's premium). Rega, with 30 years in the business, had never seen anything like it. "Things go for two or three times higher than the estimate," he says "but never at that level," citing mid-five figures as the highest. "There were pretty serious proven collectors." The notice paid the high price over for a Stickley light fixture, and the dealer looked for any object from the workshop.

Restoration on Peterson's house is winding down. And thanks to the lantern windfall, he's been able to fund his restoration like a pro-style Viking stage in the kitchen and a reproduction of a wooden walk-in in the master bathroom. The experience gives new meaning to that old saying: "One man's trash...oh, you know the rest." —JILL SCARLETT



ABOVE: The Arts and Crafts-style lantern is complete with a faceted copper top and its original square ceiling cap. LEFT: Gustav Stickley and one of his

PHOTO: JEFFREY M. HARRIS FOR MOHAWK



Location is everything

MOHAWK
Mohawk makes the move

Cordless Drill Lesson

NEVER IN A CITY OF APARTMENT dwellings, of buildings with superlatives, of unified union enterprises. Now, New York, also a megacore—and a good one for throwing down's sake—may be probably not unified too; super- or corporate. Or anyone, really, who knows much about such and what they're used for. Without this error could escape from a decent piece the megacore can on conflict drive down—the various parts for being both addressing across and both New York as many are the old and new who have been so far away from it for themselves, or like TV's fall of them. With this in mind, the editors here at The GulfTimes directed to see some news straight—and want you, dear reader, on the way of persons in conflict.

GLOSSARY

THANKS IF YOU ARE EVERY TRADING
SHARPS NOTER TURNED-HELD
SEASON OF WOULD IT BE

Torque: Accelerated force. The higher the torque, the more working power to drive wheels. **RPM (revolutions per minute):** Measured by the number of times a lot can spin in 60 seconds. Look for a range as opposed to just one high number. Low rpm for maximum torque. High rpm for low top speed.

BTPO (knots per minute) Measured by the number of spinning Mowat hammer drills (hardened impact) hit one deliver 1000 seconds. The higher the number, the more powerful the motor.

Druck its adjustable jaws held the bit in place. Based according to the diameter of the largest shaft it can grip—generally 1½ inches. Vx both.

Shank Was this numbered did we do down the

Variable-speed trigger: Regulates speed with the pressure of your finger. Light pressure for instance, allows for a soft start so your bit doesn't chip off at work or bedtime.

air being blown. Set it as low and as often as how much pressure you apply (the rpm won't exceed its pressure limit).

Colleges: The higher the battery voltage, the more power it will deliver. More volts tends to make for a heavier battery.

Amphibious: The higher a battery's reserve hour rating, the longer the boat's run time.



Most of the eggs produced
by wildfowl and ducks, no
matter how large, are
marked by faint, wavy
lines and are usually in
one of two egg boxes.

Play the next apartment dealer who tries to bring pictures of his customers and their greenbacks back to his office. The police will be on hand to help, and you can't lose.

With 800 natural isolates of *Staph. aureus*, the bacterium through which staphylococci multiply, we have found that the bacteria are not as hardy as we thought. In fact, they are very fragile.

[illegible]

Thousand-year-old soils
are used to prove that
cotton ground coverages are
absent within

Hyacinthoides siliquosa leaves
contaminated with lead

...the ...

© 2004 Blackwell Publishing Ltd, *Journal of Internal Medicine* 255: 105–112

Challenge: The higher the cost of a new owner, the more likely it will choose to

Amphiprion: The higher a breeding, the larger the pool.

The craftsmanship shows,
the glue doesn't.



New Elmer's® Sustainable Wood Glue

For over 50 years, Elmer's Wood Glue has been the woodworkers' choice for strength and ease of use. Now we've made the best wood glue that you can easily stain. It's specially formulated with real wood fibers to accept stains beautifully. You can use it for everything from jewelry to signs to crafts, indoors and out. Try a 4-ounce test packet and be the woodworker who chose Elmer's and the rest.



Ammonia for water used (lb)

won't be - it's aarp = 0

1500-1504

THAT STAYS AROUND



The Plan

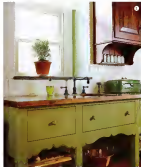
>> Expand a cookie-crumble-size kitchen into a gourmet cook's workspace

What They Did

- 1. ENLARGED THE FOOTPRINT** Out came the old sink wall to make way for a 30- by 22-foot addition. The shared kitchen/dining room wall was also removed to 4½ feet to make space for a new powder room. The net result: double the space at 280 square feet.
- 2. RELOCATED THE APPLIANCES** The addition forms a galley workspace. Centered on the wall, the range forms a triangle with the prep sink and fridge.
- 3. CREATED AN EATING AREA** The new smaller area where the old kitchen had been holds a large table and chairs.
- 4. REASSIGNED AUXILIARY SPACES** Such as the kitchen's back door is the family-smith entrance. The architect/homeworker created a new mudroom in the vestibule. The powder room was relocated and the existing space converted to a pantry.
- 5. MADE DEEP SELLS FOR DISPLAY** The architect/homeworker bumped out the windows 16 inches, enlarging the narrow room visually and allowing space to hold plants and artwork for a window seat.



B BEFORE The kitchen was cramped and out of style.
AFTER Now a Frigidaire freestanding sink is set into a backsplash cabinet with a curved corner which the homeowner repurposed from her grandmother's kitchen. Countertops and floors are a matched booktop.



"A hundred years ago, kitchens had furniture for cabinets, not built-ins, so we wanted our kitchen to reflect that."

—BILL MATTIN, ARCHITECT/HOMESWEET

The Details

>> Old-fashioned finishes and materials add to this expanded kitchen's antique look

- 1. THE CUSTOM PREP-SINK CABINET** from Range Craft has a copper countertop with an integrated copper-plated faucet and pullout produce trays below. The edge of the prep sink and the entire kitchen was matched by a vintage look box for the right of the sink and a raised box.
- 2. PIERCED-TIN CABINET DOORS**, designed by Dyer Dyer are a replacement of a pair and add texture of interest. Most paired tin (left) right conceals the period Sub Zero vent.
- 3. ETCHED-FROSTED GLASS** marks the entry to the pantry. The nearby backboard magnetic shelfboard and minitask were formed by the cabinet maker to match surrounding built-in.
- 4. THE EATING AREA** occupies the old kitchen's work zone. The homeowner's blend the exposed brick from the boiler room and tiled and adjacent wall with a cherry ring cabinet and bookcase.
- 5. A WINDOW SEAT** occupies an alcove next to the bookcase with Jackie Merin's cookbook collection. The cherry top is bowed out for comfort. Painted peeling on the base echoes that above the range hood.

For more ideas design ideas: bookhouse.com/ideas

1. THE BROTHERS—A complete new generation of outdoor cooking appliances. The new charcoal grill, the new charcoal smoker, the new gas grill, the new gas smoker, the new gas grill/smoker, the new gas grill/smoker/smoker.



THE BROTHERS—the new generation of outdoor cooking appliances. The new charcoal grill, the new charcoal smoker, the new gas grill, the new gas smoker, the new gas grill/smoker, the new gas grill/smoker/smoker.

1. THE BROTHERS—the new generation of outdoor cooking appliances. The new charcoal grill, the new charcoal smoker, the new gas grill, the new gas smoker, the new gas grill/smoker, the new gas grill/smoker/smoker.

Remove the grill from the grill.



1. THE BROTHERS—the new generation of outdoor cooking appliances.

The new charcoal grill, the new charcoal smoker, the new gas grill, the new gas smoker, the new gas grill/smoker, the new gas grill/smoker/smoker.

The new charcoal grill, the new charcoal smoker, the new gas grill, the new gas smoker, the new gas grill/smoker, the new gas grill/smoker/smoker.



SOUTH WING.

NORTH WING.

Expansive elegance. Enjoy the new Command Seating™ for a better view. The new Ford Five Hundred. It elevates the sedan. Visit fordvehicles.com.

*Well-equipped at \$22,840**



FIVE HUNDRED
Built for the road ahead.

*MSRP. Price excludes destination, tax, title, license, and dealer fees. ©2006 Ford Motor Company. All rights reserved.



NO MATTER HOW HOT.

NOTHING PROTECTS LONGER THAN A FLOOD FINISH.

Because nothing penetrates like a Flood finish. Take Flood's CWI-UV[®] and CWP-UVS[®]. Fortified with Penetro[®], CWI-UV and CWP-UVS penetrate deep into wood to protect from the inside out and provide a rich, gorgeous look. And that's guaranteed protection. No matter what Mother Nature throws at it.



Do something amazing[™]

Q

I want to add a screened porch to my 1960s rambler. What are the basic design elements to consider so that it looks good and works well?



TEXT AND ILLUSTRATIONS BY JEAN BERKAMP LARSON
BERKAMP LARSON ARCHITECTS, MINNEAPOLIS, MN

A

I GREW UP IN A HOUSE with a screened porch, and they're near and dear to my heart. I'm pleased that you're willing to invest in this space. In my part of the world, where winters are long, most of my clients quickly calculate that they will only be able to use a screened porch for half the year, and they account to protect, let-be-it legs. I suggest throwing out the quantitative calculations and instead imagining the anticipated day in early spring when the French doors from the house are flung open and the smells and sounds of the outdoors come seeping in with the freshness of the new season.

Now that you know how I feel about screened porches, we can talk about the elements to consider when adding one to your home.

1 | Site Orientation

The first and most basic consideration is the site and its orientation to the sun. Will the porch be located to the north, so that it generally—into-season warmth? Or is from the north side of the house, making it a cool refuge from summer swelter? Think also about what surrounds the house. Which views and sounds would you like to capture? Do you want a quiet

ADVISING UP YOUR CASE
A porch added to the front of the house, ABOVE, can be left half-open or screened, creating a more gracious entry. A front porch also adds dimension to the long, flat facade of most rambler. The frames for screened porches are typically custom-made, so the style can be basic and ordered or more playful. RIGHT



events in the garden, or a social gathering place? A porch on the back of the house will feel far more public than one tucked in the back, which can be an asset or a liability, depending on what you expect from this outdoor living room.

2 | Rooflines

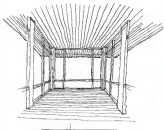
If you want to create a seamless addition to the house that looks like it has always been there, start with the roof. The long, low-pitched eaves of the mainline grow out of the frame style. These low-hanging eaves pay homage to the bungalow, something to keep in mind if your intent is to maintain the timeless aesthetic. The good news is that the simple roof of a member makes adding on easy. One approach is to match the existing roof pitch and style and the length of the overhang and the fascia boards. But a new porch can also be an ideal opportunity to add a little zip to an otherwise uneventful facade. One way to do that is to increase the overhang. As the overhang gets longer, the roof seems to be reaching out into the horizon. It will take on a hovering character, with some struts that will distinguish your member from the others on the street (see illustrations, right).



EXTENDING THE ROOFLINE
The porch overhang should be at least as long as that on the existing house roof. The horizontal extent of a member lends itself to an extended overhang—no less than 3 feet. Continue the linear theme with screen panels that are oriented horizontally.

3 | Circulation

A clear path to the screened porch and good circulation within it will make a big difference. The answer to the question of circulation begins with the question of air. Is it a place to enter or a place to sit? What kind of furniture do you envision and how will it be arranged? How does the porch connect to the outside? The porch is then a transition space between outside and in. Design the rooms so that doors have a place to land and circulation does not need to cut through the conversation group living space.



THE VIEW FROM INSIDE

A full wall combined with a full wall and lower screening is the way to go for the best viewing. Horizontal rail with screen lines that lead the eye outward.

4 | Materials

The materials you choose will determine whether your porch feels like a part of the house or an extension of the garden. For example, if the wall that abuts the house has exterior siding and the floor has the same material as on the patio outside, it will tend toward the outdoors. By contrast, exterior grade concrete and hewn stone, along with a concrete floor on the floor, will give the space an interior feeling. In either case, look to the existing materials, colors, and details of your member and either match them or design a material that complements the original house.

5 | Screen Walls

The columns of the porch are a primary part of its style, and it's important not to undercut them visually. Whether simple heavy timber, tapered Craftsman, or classic columns, they should look good with the existing house. A well-designed screen wall is put together so that there are no visual gaps. If the columns, frame, and screen panels are all in the same plane, the porch runs the risk of looking dull and flat. However, when the columns are the most prominent, with the frame



ADAPTS EASILY TO YOUR LATEST CULINARY ADVENTURE.

WITH THE LG PANORAMA REFRIGERATOR, LIFE'S MORE FLEXIBLE.

With its flexible organization and storage 3-door design and adjustable shelves that allow you to create a wall-to-wall storage space of up to 30 inches, the LG Panorama can accommodate even the most exotic foods and ingredients. Add to this its exterior filtered water dispenser, convenient Thin-A-Drawer and 5-gallon-sized bins, and this is a refrigerator adaptable enough to be a different companion every week.

Discover the full line of LG premium home appliances at www.LGusa.com, or call 1-800-243-0000.



sagged back inside screen panels set within, the shadow lines give it a sense of depth and bulk that makes it look integral to the house rather than tacked on (see illustration, right).

Accessories

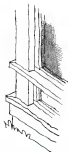
Consider adding unexpected elements to your screened porch, like a fireplace or a potbelly stove to extend the season. A built-in grill makes the room a bona fide open-air kitchen and dining room. Cooling fans can add a breeze when the weather isn't cooperating, and a built-in bookshelf could be filled with summer reading. Speakers in the ceiling seamlessly add music or the ball game as the background. Incorporate elements from the house's past into your porch, a bench swing or a hammock encourages you to lounge off people to stop for a moment and savor the season.

GOT A QUESTION FOR AN ARCHITECT?

Get inside the column an architect will answer reader's home-design queries if you would submit an e-mail. Tell how to use your address to the best layout for a museum. In choosing the right way down to your space, send your question along with copies of photos or floor plans. In House Calls, The Old House magazine, 1885 Avenue of the Americas, 27th Floor, New York, NY 10008. If your question is selected, the answer will appear in an upcoming issue. Call to the volume of mail we cannot answer unpublished questions.

SCREEN PANEL DETAIL

Layers of depth in the screen assembly give the porch-side feature an air of built-inness. Here, the porch's screen frame, and screen panel are each on a different plane. The horizontal slats stand proud of the porch posts, keeping the window's long lines uninterrupted.



For more screened porch designs: blackhouse.com/porchids



The Smarter Way to Paint!



PAINTMATE PLUS

Reg. \$24.97
- \$16.98
Total: \$14.97

The Ultimate All-In-One Roller and Paint Container™

- Power trigger easily feeds paint from tube to roller head.
- All-in-one painting tool makes painting easier than ever.
- Easy fill and clean-up.
- Holds 22oz. of paint



\$10 REBATE

POWER ROLLER HOME

The Easy Way to Beautify Your Home™

- Powerful pump delivers paint to the roller directly from your one gallon paint can.
- Fingertip paint flow control.
- XTRA features include Paint Trim Pad.

Reg. \$79.99
- \$55.99
Total: \$24.97



\$25 REBATE

history Detectives

IT'S A STORY, FIND IT, AND THEY KNOW HOW TO FIND IT.



MONDAYS 9PM ET/PT
pbs.org/historydetectives



PBS

Be more

Mother Nature already owns two-thirds of the earth.
Now she's got her eye on your place.



Are you covered? 1 888 724 6903 FloodSmart.gov

©2005 Federal Flood Insurance Program

WARNING: Homeowners insurance doesn't cover flooding. Call your insurance agent to further protect your home.

Feat of Clay

► Ornate or plain, matte-glazed or glossy, vintage American tiles can bring a colorful new dimension to your walls.

BY AMY B. HUGHES PHOTOGRAPHS BY JOSHUA PAUL

TODAY CERAMIC TILES are mostly uniform, machine-made squares used to create tidy, washable surfaces in kitchens and baths. But a hundred years ago, tiles were covered with vibrant colors, intricate patterns, and bold figures to enhance the look of foyer floors, wainscoted dining rooms, walls, and living-room fireplace surrounds. American tiles produced from the late 1870s through the mid-1930s were a practical and eye-catching feature in middle-class houses and grand public buildings. "They were the art of the everyday," says Bill Stern, executive director of the Museum of California Design and a Los Angeles tile collector. And thanks to a growing appreciation for the styles and fine workmanship of the past, antique tiles are once again adding life to both new and old houses as backdrops, borders, murals, and floor surrounds.

CASTING BACK

Inspired by European porcelain that displayed their wares at the 1876 Centennial exhibition in Philadelphia, newly industrialized American companies soon began creating out their own tile designs. These Victorian-era examples, from the likes of American Encaustic Tiling of Zanesville, Ohio, and Trent Tile Company in Trenton, New Jersey, featured embossed designs of flowers, shells, and human figures in period dress. Each machine-pressed tile was a vision of uniformity thanks to smooth, polished clay, crisp details, and a high-gloss glaze in colors ranging from dark colors to pastels with another mottling.

By the turn of the century, though, the Arts and Crafts movement was taking hold in the United States. Cassavettes such as Henry Chapman Mercer and the Moravian Pottery and Tile Works in Doylestown,



Murals are expensive tiles with embossed designs, and a high-gloss sheen may be lost at antique joints and unglazed corners.



Throw everything you know about wood out the window.



White Surface Coated Windows



Coated Exterior Pine Core 1000P



White Coated Pine Wood



JELD-WEN® windows and doors made with Auralast® wood will remain beautiful and worry-free for years. Unlike plywood-treated wood, Auralast wood is protected to the core and guaranteed to resist decay, water absorption and termites indefinitely for 20 years. To request a free brochure about Auralast wood or any of the reliable doors and windows JELD-WEN makes, or to find a dealer near you, call 1-800-873-2462 ext. 406, or go to www.jeld-wen.com/406.

RELIABILITY for real life®

JELD-WEN.
WINDOWS & DOORS

GRAB LIFE BY THE HORNS



FARM BUREAU



IT'S ALL ABOUT THE HORSES. ALL 345 OF THEM.

FARM BUREAU® MEMBERS GET AN EXTRA \$500 CASH ALLOWANCE ON RAM. With a 5.7 liter HEMI® engine, Dodge Ram Heavy Duty is the hardest working truck around. That's why, if you're here a Farm Bureau member for at least 30 days, we're proud to offer an extra \$500 cash allowance when you buy a new Dodge.* Contact your state Farm Bureau for details. For more information, please visit dodge.com or call 877-ONWHEEL. *Offer applies to new 2008 Dodge models sold through September 30, 2008. Cash bonus is a limited registered dealer membership and a registered service mark of the American Farm Bureau Federation.



TOOLBOX



Puzzled by Jigsaws?

Our pros sort through the newest features and options to help you get a handle on this tool.

by JAGGA BARRETT, Contributing Editor of MotorWeek

IT'S NOT a new tool, but the jigsaw has had a hot and cold war in popularity over the years. It's a handy, versatile tool that's been around for a long time, but it's not always the first tool that comes to mind when you think of power tools. That's why we thought it was time to take a closer look at this tool and see if it's still worth the hype.

The jigsaw is a power tool that's used to cut curves and angles in wood, metal, and plastic. It's a versatile tool that can be used for a variety of projects, from cutting out a piece of wood for a cabinet door to cutting a hole in a piece of metal for a bracket.

There are a few different types of jigsaws, but the most common is the reciprocating jigsaw. This type of jigsaw has a blade that moves up and down in a reciprocating motion. It's a simple design that's easy to use and can be used for a wide range of projects.



The Hitachi reciprocating jigsaw is a versatile tool that can be used for a wide range of projects. It has a powerful motor and a variety of blades that can be used to cut through wood, metal, and plastic. It's a handy tool that's worth having in your toolbox.



BARREL GRIP
This new feature on the top grip for a jigsaw makes it easier to hold. The grip can be moved for a barrel grip or a standard grip. \$39.99, makita.com

A jigsaw is also called a saber saw, on account of the stabbing, up-and-down motion of the blade.

KEYLESS CORELESS
To change blades on this 18-volt cordless model, just flip the handy quick-release lever at the front. Also has a dual-blower from rotational speeds and a variable-speed trigger. \$259, dewalt.com

360 DEGREE SCROLLING
The blade on this jigsaw can be turned 360 degrees with a dial on top of the tool for making sharp turns in tight spaces. Also features a lock to keep the blade from flexing. \$99, blackanddecker.com



METAL BLADE
Steel blades with fine, easy-to-see teeth make clean cuts in steel.

For more on tools: blackanddecker.com/tools



BRIGHT LIGHT
A white LED light comes in handy for plunging cuts (see above) or any other cut. This top grip model has straight-up and down and orbital blade settings. \$399, makita.com



CORDED BLADE
Tool-free, corded jigsaw with corded blade. \$19.99, blackanddecker.com

To learn how to use a jigsaw, visit blackanddecker.com/tools



CORDELESS POWER
A fully 24-volt battery pack gives this cordless maximum power per charge, which takes just one hour. Also features a spring-loaded blade retractor and variable-speed trigger. \$229, boschtools.com

WOODBLADE
Long, thin blade makes smooth cuts in thick stock.

The first jigsaw was created in 1946, when a Bosch employee added a blade to his wife's sewing machine.



CONVERTIBLE GRIP
A convertible handle turns this saw from a top grip to a barrel grip, while a red laser line helps keep your straight cuts straight. \$99, skt.com

VISION READY
In addition to a dust blower, this jigsaw has a built-in LED light to attach to your workshop vision. Also has a free speed orbital cut and built-in LED light. \$99, skt.com



SCROLL PLATE
Removes the blade and allows you to change the blade to a scroll plate for tight turns or small.

Blade Explainer

10 Most jigsaw blades have specialized teeth for cutting on the upstroke, the number and size of teeth dictate what can be cut. The higher the teeth (teeth per inch), the finer the cut. Blades attach to the saw with a T and shaped differently depending on the manufacturer.



- A. **Thin** High-speed steel, 12-tooth blade works well on molding and coping.
- B. **Thin** High-speed steel, 12-tooth blade works well on molding and coping.
- C. **Thin** High-speed steel, 12-tooth blade works well on molding and coping.
- D. **Thin** High-speed steel, 12-tooth blade works well on molding and coping.
- E. **Thin** High-speed steel, 12-tooth blade works well on molding and coping.
- F. **Thin** High-speed steel, 12-tooth blade works well on molding and coping.
- G. **Thin** High-speed steel, 12-tooth blade works well on molding and coping.

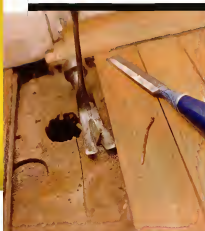


SO STRONG AND ATTRACTIVE,
WHY STOP WITH THE FRONT DOOR?

Put it, then hardly a door made that Kwikset can't make more attractive or more secure. Especially when you consider the array of contemporary designs, classic styles and elegant finishes that Kwikset offers. Or the innovative engineering—including titanium and stainless-steel components in our UltraMax Security line—that has helped give Kwikset a legendary reputation for strength and durability. No wonder more people trust their doors, inside and out, to the strength and beauty of Kwikset.

America's #1 selling lockset

See a handle on the full range of Kwikset designs and finishes.
Call 800-337-LOCK. Or visit www.kwikset.com.



UPKEEP



Before you can replace a strip of damaged flooring, you have to get rid of all remnants of the old one. These nail pulls force the original floor pop out with relative ease.

A Perfect Patch

» How to replace and refinish a section of wood flooring, invisibly

BY THOMAS BAKER PHOTOGRAPHS BY NERD CHAPPEL

BEAUTIFUL, TOUGH AND LONG-LASTING, solid-wood floors are the classic surface for any room, small house or new. But wood isn't bulletproof. An accident or a remodel can leave a floor scarred or worse. That was the problem Pat Hane was left with when he ripped out the stair-tread in his home: a bunch of 2-inch pine holes in an otherwise pristine field of white oak. The easy fix—plugging the holes with repurposed wooden bungs—would be aesthetically flimsy, a longtime flooring contractor for The Old House.

Instead, Hane made the holes disappear altogether by cutting out the damaged oak and replacing it with new. It's not a hard job, requiring only about a half-hour per hole and a few hand tools. But for the repair to be truly invisible, two things are essential: wood of the same dimension and species as the existing floor and a finish that matches in color and sheen. If you aren't sure what kind of wood you're got, take a piece to a lumberyard or a flooring contractor for identification. A good paint store should be able to help you match the finish. Or, if you don't mind doing some extra work, "harvest" a piece of flooring from inside a closet or another hidden space, where a less-than-perfect patch won't be noticeable.

More than 80 percent of American homes have wood floors, and more than 80 percent of those have oak flooring.



TIP Chopping the ends of adjacent replacement planks helps disguise the patch. "Cutting all the pieces to the same length is easier to do," says Phil Hunt. "But it will look like someone put a finger in the floor."

▶ To learn how to plug a hole with a circular saw, visit theinfopg.com

An Invisible Patch

1 | SCORE Lay a square across the flooring at least 18 inches from the damaged area. Using the square's edge as a guide, make a perpendicular cut into the wood with a utility knife. This marks the end point for the replacement flooring. If smoothing pieces of flooring, also need to be removed, score from the same way but stagger the scoring by at least 6 inches.

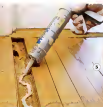
2 | CHISEL Hold the chisel blade vertically into score line with the blade's bevel facing the side being removed. Saw the tool a few sharp whacks along the score's entire length. Now move the blade about 1/2 inch away from the score, on the side being removed, and chisel out the cut (see drawing). Alternate paring these vertical and diagonal cuts until you have chiseled all the way through the board.

3 | CUT Measure the flooring's thickness at the cut and set adjustable saw blade to that depth. Lay up the blade with the flooring's long dimension and plunge into the middle of the waste strip. Start well in front of the end cut so that the back edge of the blade doesn't touch the gap piece. Push the saw as close as possible to the board and remove the saw and extend it left to the end of the flooring with the chisel.

4 | REMOVE The side of the waste piece with the grooved edge will be loose and slide out easily. The other side has a tongue with nails in it. Slip a chisel between this piece and the existing flooring; this protects the grooved end from splitting. Then jam a hammer close under the waste piece and gently pry it up. Pull any nails left in the subfloor and vacuum all the debris.



THE MOST POWERFUL 1/2-TON V8. OUR BEST LUBRICANTS. APPOINTMENTS. OUR MOST ADVANCED RIDE. AND OUR MOST LEVEL OF ENGINEERING. ALL IN BEHIND THIS GRILLE. YOUR GMC COULD BE ALL WE ARE. PROFESSIONAL GRADE. **SHIMMERS DENALI**



TIP Start building adhesion skin over spacers. Apply adhesive only when you're ready to lay the replacement piece adhesive the replacement's adhesion.



5 | PREP For the replacement strip to fit in tightly the bottom lip of the groove must be removed. Use a chisel or a table saw to trim it off. (The result can clearly be seen in photo 6.) Now squeeze a thick bead of polyurethane adhesive over the subfloor. The adhesive will hold the piece in place better than fasteners alone and will also prevent squeaking.

6 | SET Immediately set the replacement piece, forcing it into the groove and pressing down on the face until the strip is ground side flush with the neighboring tongue. Every 6 inches (but no closer than 4 inches) drive a nail. Drill a 1/4-inch pilot hole for each nail. Once the nailhead is flush with the wood's surface, then use a nail set to sink the head just below the surface. The new piece will be slightly higher than the surrounding floor.

7 | SAND Tape off the surrounding floor with two layers of blue tack painter's tape. Sand down the patch with a random orbit sander and 60-grit sandpaper. Switch to 80-grit when the sander just begins to show the mauling face. Continue sanding with increasing fine paper (up to 120-grit) until the finish is smooth. Switch to 120-grit sandpaper and sand the surrounding floor.

8 | FINISH Apply the clear finish—in this case, Minwax's three coats of oil-based polyurethane—with a disposable brush before applying the next coat. After the first coat of poly, fill the nail holes with a color-matched putty. Sand between the first and second coats with 120-grit paper and wipe up the dust with a clean rag. Protect the new flooring from foot traffic until it's had a chance to cure for three days.

For more on flooring and floors, visit www.upweep.com

FOR MORE INFORMATION, SEE OUR WEBSITE www.upweep.com

This Is What Happens When You Weigh Long-Lasting, Non-Drowsy Allegra 180mg Against The Alternatives.



Not one of these allergy medicines can give you long-lasting seasonal allergy relief without the risk of drowsiness.

Allegra 180mg can.

For people 12 and over. Side effects with Allegra 180mg are low and may include headache, cold or backache. Please see additional important information on next page.

ALLEGRA. THE RELIEF GOES ON.



© 2005 Schering-Plough Inc. Allegra is a registered trademark of Schering-Plough Inc.

Small text and trademarks of other companies.

Enjoy tobacco in your office without stepping outside? Consider it done.

Enjoy tobacco the smoke-free way with Copenhagen® or Skoal®. Copenhagen offers legendary natural tobacco flavor, while Skoal comes in a variety of great tasting flavors that are sure to satisfy. They also make it easy to enjoy tobacco on your own terms. Try a rich satisfying pinch of long cut, or easy-to-use pouches. So maybe it's time to find your solution—and leave the smoke behind.

Break from the pack.™



Visit TrySmokeless.com for more info and savings.

©Trademark ©2005, Smoking Tobacco Co. or its affiliates. All rights reserved. Smoking Tobacco Co.



**Smokeless
Tobacco Co.**



Save Cold Cash

» How A/Cs and fridges with the Energy Star label put the green in your pocket

BY E.J. HERRIS PHOTOGRAPH BY AMRE COLOMBO

WALK INTO ANY appliance showroom today and you'll find dozens of those blue Energy Star stickers, slapped on the sides of washing machines and fridges.

The Energy Star program was formed in 1992, under the umbrella of the federal government's Clean Air Act. Since then, those cartoonish labels have become reliable indicators that the appliances they're slapped on are easy on the environment: They consume less electricity—thus, power plants burn less fossil fuel.

And consumers were convinced of the program's efficacy. In the 13 years since it began, they've snapped up 3 billion Energy Star-rated products, according to the Environmental Protection Agency, which runs the program jointly with the Department of Energy. Energy Star products now account for nearly a third of the entire appliance and home electronics market.

Last year, 40 types of Energy Star-rated products, including toasters, dishwashers, and DVD players, displaced the need for 1.35 trillion kilowatt hours of energy. That translates to \$10 billion in collective savings on consumer utility bills. "Smart choices make a difference when you add them all up," says Wendy Reed, an Energy Star spokeswoman.

There are important numbers from a geological perspective, especially considering that the cost of power costs for Energy Star-approved appliances



a typically 15 percent more than does nonparticipating models. With the exception of washing machines, which can cost up to 40 percent more, consumers can miss much, if not all, of that initial onlay through mail-in rebates, co-rebated through local power companies. (To see what rebates are available in your area, click the "Special Offer" link on the Energy Star website, enter your zip, and type in your zip code.) For instance, a \$50 rebate on a \$530 Energy Star-rated Frigidaire dishwasher purchased in Anaheim, California, almost makes up for the difference in price between that appliance and an almost identical \$475 one a Energy Star-rated dishwasher from GE.

From there, any additional savings on your annual electricity bill is gravy. That same dishwasher will consume 40 percent less power in just than a non-Energy Star equivalent, which pays \$18 in your pocket each year the appliance is plugged in.

To cut your energy consumption and bills even further, you need to first understand how the dishwasher qualifies for the Energy Star rating. To be in with, every appliance has to meet a federal efficiency standard, which is the acceptable power-consumption level set by the Department of Energy. This means that what's out there is at least

somewhat environmentally sound.

From there, Energy Star does a further sort within each appliance group. It works with the manufacturers and with consumer advocates to set a mini-



Last year, Energy Star helped consumers save \$10 billion on their utility bills.

mum standard for efficiency that's roughly equivalent to the top 25 percent of performers. All of these appliances earn stickers, even though some are greener than others. For instance, that Frigidaire dishwasher, which burns 328 kilowatt hours of electricity a year, is lumped in the same Earth-friendly category as a like model from Whirlpool that uses 367 kilowatt hours a year.

To know the difference, you need to do additional research: a visit at Energy Star's website, where product specifications are spelled out. Or, for a more hands-on approach, go down the data

that appears on those yellow EnergyGuide tags hanging off the appliance in the showroom. From the tags you can determine energy consumption in terms of kilowatt hours and average annual operating costs. You can also consult that web information on other yellow tags.

There are also energy watchdog groups that do some of the legwork for you. The American Council for an Energy Efficient Economy, for one, screens down the list of Energy Star appliances to the best of the best, typically the top 15 percent, and then posts those results on its website, www.aceee.org/energyguide.

"The easy way to know if an appliance is efficient is just to look for the Energy Star label," says Jennifer Thomas Amann, the council's senior associate. "But if you have the time and inclination, we say, there's more useful information for that extra level of discernment." And that—as your kindergarten teacher would say—will save you a gold star to put alongside your blue Energy Star. ■

For more on energy efficiency: thinkblue.com/whatsnew

thinkblueworld.com/finnecut

A typical slice of whole wheat bread is 24g and provides 5% of whole grain. An equal amount of Triscuit provides 25g of whole grain.



More whole grain than wheat bread.



Baked with 100% whole grain. Or trans fat.

©2006, 2007, 2008, 2009, 2010

How They Match Up

>>Energy Star appliances may cost more up front but save more over time

APPLIANCE	ENERGY STAR	INITIAL COST	AVERAGE ENERGY	YEARLY ENERGY CONSUMPTION	YEARLY OPERATIONAL COSTS	YEARLY SAVINGS	TIME TO RECOVER
WASHER/DRYER	★	\$142	\$60	264 kwh/yr	\$50	\$43	62 months
	—	\$157	—	265 kwh/yr	\$57	—	—
AIR CONDITIONER	★	\$636	\$40	614 kwh/yr	\$50	\$6	Unclear
	—	\$479	—	764 kwh/yr	\$78	—	—
REFRIGERATOR	★	\$223	\$40	223 kwh/yr	\$18	\$10	6 months
	—	\$246	—	257 kwh/yr	\$20	—	—
REFRIGERATOR	★	\$820	\$76	442 kwh/yr	\$36	\$7	Unclear
	—	\$1020	—	529 kwh/yr	\$45	—	—

SOURCE: ENERGY STAR, 2009. *BASED ON 2009 ENERGY STAR RATES

HELP ON THE WEB:
www.energystar.gov
www.aceee.org/energyguide
www.aceee.org/energyguide
www.aceee.org/energyguide



24/7 assistance (roadside or not)



We know you rely on your car a great deal. So, if the unexpected should happen to it, we'll be right there for you with everything from emergency towing to 24-hour vehicle assistance. In many cases, we can even put you a check that same day. At Liberty Mutual, we know how traumatic the unexpected can be. So we plan ahead, to make it a little easier on you.

Liberty Mutual Insurance Company, 1000 Liberty Avenue, Suite 1000, New York, NY 10028

To learn more about Liberty Mutual Insurance, visit www.LibertyMutualInsurance.com



Liberty Mutual

Wi-Fi Versus Your Walls

Buying the hardware is easy. To get its signal through a foot of brick, you need our advice.

BY WILSON BOTSMA PHOTOGRAPH BY TIM BRADLEY



The less penetration of a wireless network into a laptop, the better. The trick is to find a way that connects between them—walls, floors, whatever that 30-gigabit link.

IT'S THE CHALLENGE THAT COMES WITH EVERY great step forward in home technology. How do you get the old house wired up for those new-fangled gadgets? What to do with the mess lines that replaced the cord more long after the walls were planned over. Where to put wires for electricity and telephone and cable television and computers and surround-sound home theater.

Well, as for the gas pipes—people use drilled through the basement beams supporting the upper stories and run them right up through the floor. And so today the attic pipes, which poked through a corner of the room and snaked along the surface of the wall from floor to ceiling. Dents for TV cables, which got tucked to every piece of wall-to-wall in the living room.

But computers are another story. With today's Wi-Fi technology, you can have a high-speed Internet connection anywhere in the house without a single unsightly wire. But getting a Wi-Fi network to perform at its best is more complicated than just buying the hardware and plugging it in. You have to deal with

The trick to planning a wireless network is thinking in three dimensions—if you can't go through an obstacle, go around it.

Trouble finding things in your closet?
Our Willsie can help you out.



The Willsie camera will monitor up your closet, so you can see what's in it at any time.



WILLSIE

©2007 The Willsie



Use the archive to
study ancient theories.
Or something really
complicated.



Introducing the new TIME Online Archive. With the click of a mouse, all TIME subscribers now have free, instant access to over 550,000 articles dating back to 1923. For the ultimate resource for news, history, trends and, well, everything in between.



The TIME
Online Archive.
www.timearchive.com

HOME TECH

Finding the best path through these material obstacles, drive imaginary lines between the router and the places you'll want use your computers. Radio waves tend to ping-pong around a house as solid partitions, but generally speaking, if there's a hole for plumbing or ductwork between your router and your laptop, you're likely to have performance.

Once the router is installed, sit at your favorite sitting chair and see what happens. If you feel like the apartment or the hotel wall is an opponent might be slowing down your connection, try moving the router. Think three dimensions really? A router positioned above the obstruction, say on a higher floor, should be able to reach either side of it.

Take note of where your appliances are, too. Because of their size, the metal of refrigerator doors and the glass of big-screen TVs can slow down your surfing. Set microwave ovens and 2.4-gigahertz (GHz) cordless phones, because they produce radio waves at around the same frequency as a wireless router, can block your Internet connection completely. Microwaves are movable, they're not turned on much and they stay in one place. But if you have a cordless phone, you should upgrade to the 5.8-GHz kind, which operates on a different frequency, before attempting Wi-Fi.

Finally, it's worth about network security. These technology tools use somewhat of an encryption key so that outsiders can't snoop through the contents of your hard drive or poppy back into your Wi-Fi network to access the Net. It's important to activate security when you set up your router, but be sure to write down all of the encryption information given; you'll need it if you want to add new devices to the network later.

And if you break a sweat just reading about wireless networking, consider this: Once you have placed and configured your Wi-Fi network, it will fade into your daily life. In fact, as you sit in your primo lounge chair checking out the "Independent of the Day" on hollyday.com while your daughter shops for albums on iTunes and your son frigs *Friday 2* upstairs, you'll wonder how you ever survived someone as untechy and radio-buff as broadband alone. ■

For more online tech help:
www.timearchive.com/techhelp

she works with what you have.
she uncovers your style.
she may even turn your shirt into a pillow.



DESIGN REMIX with Karen McCaig SATURDAYS 8pm e/p

YOU SHOULD SEE WHAT'S ON



© 2007 HGTV
www.hgtv.com

Creative Painting Techniques

STYLISH DESIGNS AND ACCENTS FOR
ANY ROOM IN YOUR HOUSE MADE EASY

STYLISH SQUARES

With some simple layout techniques and two paint colors, you can transform a plain wall into the focal point of a room. We divided a wall into four large quadrants, then created drama by applying two contrasting colors: pale blue and khaki. The end result—a stylish and modern accent wall.

MATERIALS NEEDED TO COMPLETE THIS PROJECT

- Latex paint - 2 colors
- Paintbrushes
- Paint roller (standard size)
- Measuring tape
- Strait-Line® Laser Level 120 (LL120)
- 3M Command™ strip included
- Painter's tape
- Painter's corner tape
- Rubber mallet (or heavy duty™ or small touch-up paintbrush)

Follow these easy steps:



1. PROJECT A LEVEL LASER LINE ON WALL

- Start 3M Command™ strip, attach LL120 so wall hole points to the left
- Use bubble and to level the red laser line
- Use red arrow to determine if "H"



2. TAPE OFF BOTTOM OF QUADRANT A

- Apply painter's tape to bottom of laser line



3. TAPE OFF TOP OF QUADRANT B

- Rotate the LL120 clockwise 90° so the arrow points to "H" (see the bottom)
- Use bubble to make sure laser is level
- When painter's tape is in the left of the laser line
- Stretch (bottom) strip along wall to corner laser level
- Use painter's corner tape to fill in corners where LL120 was mounted on wall



4. PAINTING QUADRANTS A AND B

- Paint quadrant A and quadrant B
- Let paint dry completely and remove tape



5. TAPE OFF RIGHT SIDE OF QUADRANT A

- Rotate the LL120 clockwise 90° so the arrow points to "H"
- Use the bubble and to make the laser level (stretch) up and down
- Apply painter's tape to the right of the laser line



6. TAPE OFF TOP OF QUADRANT B

- Rotate the LL120 clockwise 90° so the arrow points to "H"
- Use bubble and to make sure laser is level
- Apply painter's tape to the top of the laser line

7. TAPING & PAINTING QUADRANTS C & D

- Place painter's tape along the right of quadrant A and B. Use wall bubble to make it level and to be certain
- With second color paint quadrant C and D
- Let dry completely and remove tape. Use Rubber Mallet (or heavy duty™ or small touch-up paintbrush) to touch up any imperfections

Use the LL120 to tape off a variety of designs and shapes. Regardless of your experience with creative painting techniques, STRAIT-LINE laser products will help you add professional-level style to any room in your home. This is just one example of the design solutions made simple by STRAIT-LINE.



STRAIT-LINE
PROJECTS MADE SIMPLE



Laser Level 30®
For basic home-use projects

- Plaster
- Wallpaper



Laser Level 120®
For advanced home-use projects

- Draping and taping
- Liquid (brushed) spackle repair
- Window or sliding



INTERSECT Laser Level®
For most important projects

- Best for large tile
- Brickwork
- Floor work

Where
Perfect
and Simple
Intersect

Perfect Results, Next Simple Process.

Just place it, turn it on, watch it level itself, and follow the light, rays to see lines. The STRAIT-LINE intersect laser level marks both vertically and horizontally—at 90° (the laser line) —providing an easy-to-access intersection of the project starting point.

No more guesswork. No more unmarked marks and lines. No more wasted time. Just perfect results.

Sticks Cleanly to More Surfaces.

Only STRAIT-LINE laser levels feature innovative Command™ removable adhesive strips that 3M™ bonding tapes, or in, hands-free operation. They stick securely to more surfaces—even metals—and release cleanly without damaging or marking the surface that often laser levels can.

The STRAIT-LINE intersect level level. Perfection no longer has to be complex.

For more information visit our website or call 1-800-854-5555.

Help from a STRAIT-LINE expert.

STRAIT-LINE
PROJECTS MADE SIMPLE™



Find the right agent at remax.com®

Finding the right real estate agent doesn't have to be hard. It's easy at remax.com

Nobody sells more real estate than RE/MAX.

RE/MAX agents average more experience, more miles and more advanced designations than other agents. At remax.com you can search for an agent by location, real estate specialty, language skills and many other qualities.

Today there are more than 100,000 RE/MAX agents in offices across the country and around the world. Come to remax.com and find the one agent best suited to your particular real estate needs.

It's easy.

Equal opportunity employers. 05403
©2008 RE/MAX, Inc. All rights reserved.
Each RE/MAX® real estate office is independently owned and operated.

www.remax.com



Outstanding Agents.
Outstanding Results.®

HOMEOWNER'S HANDBOOK

WEEKEND PROJECT SERIES

Installing Drip Irrigation

BY ALEXANDER SANDER PHOTOGRAPHY BY SHELLEY STRAIN

IN MOST PARTS OF THE COUNTRY, trying to keep your backyard plants alive through a long, hot summer requires an open tap like you know's soon after your last fragrant blossoms. Which isn't so great if you're not a conscientious gardener and you're only allowed to use sprinklers in the designated days. If the best solution is a good ol' fashioned, daily watering, then the best way to water is with more irrigation. The system of drip tubing and tiny spigots, past decades ago, is the best of places, maintaining water levels and water in the soil before it has a chance to evaporate.

You don't need a sophisticated irrigation network and you don't need a fancy system—a simple one will do. A good one will do it for you. Setting up a system is a lot of work, but it's worth it. You'll have a lot of time to spend in the garden, and you'll have a lot of time to spend in the garden. You'll have a lot of time to spend in the garden. You'll have a lot of time to spend in the garden.

COST
\$40 to \$100 per 100 square feet of garden bed
TYPICAL TIME
2 hours

DIFFICULTY
Moderately easy. Takes an hour to set up and an hour to install the tubing in the garden.

FOR COMPLETE INSTRUCTIONS, TURN THE PAGE AND UNFOLD

**ENDURES SUN,
MOISTURE
AND POSSIBLY
THE NEXT
ICE AGE.**



www.verandainfo.com



Introducing Veranda™—a beautiful and surprisingly affordable new composite material for decking. It looks and feels like real wood but never warps, bleeds, rots, or splinters the way wood can. It's so resistant, it stands up to intense moisture and the sun's heat. Veranda never needs sealing, staining, or painting, which takes away the hassle of constant upkeep (not to mention the money you'll save in the long run). Plus, the reversible boards allow you to choose a wood grain or textured finish. With Veranda decking, fencing, and lattice, your family can have a yard that will never show its age.



Gray



Beige



Dark Brown



VERANDA™
Enduring Products. Enduring Beauty.

{ overview }

largest of mini-irrigation is drip tubing. 1/2-inch or 3/4-inch holes fitted with tiny plastic nozzles, called emitters, that allow water to drip out at a regulated pace without clogging. The tubing snakes around and among plants and trees to get water where the soil is. You can buy that tubing either prepackaged with emitters factory or the surface every 30 inches, or unpunctured which you drill the holes and attach the emitters to the outside of it. Unpunctured tubing can be used to deliver a system layout or to connect sections of tubing where you don't own the company also sell splicer hose, laser perforated rib water hose, the soil without emitters.

All manufacturers have seasons that are specific for different types of plants—springs for ground cover, flowers for hanging containers, and single seasons for trailing plants of the grasses. The Pro's, for right or more information? But few offer a list with everything included. We will need to take a look at your garden—become micro-irrigation experts so much better, it is not appropriate for levels—and find out a configuration of the tubing and accessories, thereby some parts separately. Or can take the drip kit manufacturer, many will have your garden plans and provide you with an efficient design and materials list free of charge.

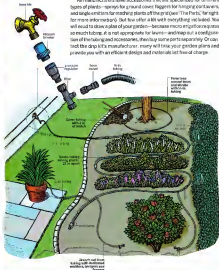


ILLUSTRATION BY GREGORY NEMEC

{ step by step }

1



Connect to an outdoor faucet

Screw the vacuum breaker to the pressure regulator if your hose bib doesn't already have its own vacuum breaker. This part will prevent contaminated hose water from backwashing into the house's supply line.

Attach the title to the person or regulator

Connect the hose swivel to the threaded opening jutting out from the side of the filler. This has a barbed end to accept the cut end of the tubing and hold it tight.

Press the entire assembly to the base by RIGHT



2

4c Lay out the tubing

Attach a length of unperforated tubing or garden hose to the hose bib long enough to reach from the bib to the plant beds.

Using barbed connectors, attach the roll of 1/4 inch tubing with emitters to the unperforated tubing at the edge of the plant bed.

Snake I he tubing with emitters around the plants near their roots. LEFT: Keep the lines of tubing about 12 inches apart. Use stakes to hold them in place whenever necessary. INSET:

Whenever the tubing has to turn at a sharp angle or branch out to another section, cut it and reattach it with tee or elbow connectors. Cut the end of the tubing when you are finished, leave it open so you can flush it with water later.



3



Lay tubing around shrubs and trees

Position lines of 1/4-inch tubing around the torso and shoulders.

Use a hole punch to punch the 7/8 inch tubing where the bag will begin.
Insert a small ice connector into the hole.

Attach one end of 7/8 inch tubing with endfiters to one side of the tree. Now make a loop shape around the trunk of the tree. This loop should be big enough to pull end halfway out to the edge of the tree's canopy. Cut the tubing and attach the end to the other side of the tree. RSH/IT

4

Position sprayers for ground cover

Where the plantings are so dense it's difficult to snake tubing of the roots, snitch out with micro-sprayers.

Press the 1/2-inch tubing with a hole punch; then insert a small straight connector. Attach a length of super-fine 1/2-inch tubing long enough to reach the location of the micro-sprayer. Connect the other end of the 1/2-inch tubing to the macro-sprayer.

Clip the sprayer to a stake and position it in the ground cover. LEFT

Use a similar method to snitch out with single emitters (a rose bedder, for example), loggers, or other specialized drip heads. RIGHT

Close off the tubing end

Once all the tubing and attachments are placed, turn on the water for a minute to flush dirt out of the tubing.

Turn off the water. Slide a 1/2-inch end clamp onto the open end of the tubing. Hold the end, then slide the other loop of the end clamp over the latched piece to hold it in its crimped position. RIGHT

5

6

Cover the tubing with mulch

Clean up around all the tubing and make sure all connectors are tight and no emitters are blocked or clogged. Turn on the water and check for leaks or bad connectors.

To keep the water from evaporating before it reaches the plant roots and to give the garden a measured appearance, cover all the exposed tubing with about two inches of mulch. LEFT

For more information: thehouse.com/shortcuts

the parts

Micro irrigation is made up of many specialized components, from tubing to connectors to emitters. Here's a look at some manufacturers' offerings.

CONNECTIONS Barbed fittings, Tees, and elbows hold sections of tubing tightly together in all configurations. Flare, barb couplings, part of the Gardener's Drip Kit, \$40



SMALL-EXIT For a discrete exit, a small pressure-regulated manifold connects directly to a hose or even an existing sprinkler riser. Nine 1/8-inch outlets exit via 1/2-inch tubing cut to any length, evenly spraying a whole plant bed. Toro Drip Watering System, \$30



TUBING In various widths and configurations, tubing is the vein of a drip system. (A) 1/2-inch tubing, and (B) 1/2-inch tubing. Toro Rain Bird's Gardener's Drip Kit, \$40. (C) Flareless emitter hose, \$30 for 100 feet. (D) Toro Rain Bird's Drip 1/2-inch tubing with emitter, \$30 for 100 feet roll.



EMITTERS Using a punch provided with the tubing, (A) you can install emitters (B) that drip at different speeds—either 0.5, 1, or 2 gallons per hour. Make a mistake? Use the plugs (C) to cover your tracks. Toro's Rain Bird's Drip Kit, \$40



BEAMS Some spray patterns, some a cooling mist, and others just drip. (A) Flareless 8-Pattern Sprinkler, \$3. (B) Toro Rain Bird's Drip Sprayer, \$3 for \$3. (C) Rain Bird spot watering emitter in Gardener's Drip Kit, \$40



TIMER A timer with slide-in frequency and duration, installed between the hose bib and the control unit, allows you to water the plants on a regular schedule. Toro Electronic Rain-Bird Timer, \$35.

PHOTOGRAPHS BY MARK WEISS



5 CLASSICS OF AMERICAN ARCHITECTURE, MADE-TO-MEASURE FOR MAN'S BEST FRIEND

INCA, WE ARE NOT DARRING UP THE WRONG TREE WITH THE STORY (and, yes, there's just the first of a whole bunch of really bad wordplay you'll find in the next handful of pages). Truly, we think doghouses are right at home in *The Old House*. From our point of view, the five classic rules that follow make perfect sense given the love affair that most Americans—and certainly our readers—have with their pets. But we also think these doggie dwellings are a pretty good way of passing the time, showcasing centuries of TUFF up doggie. Our dog-eye view takes it outside* word of classic house styles, from a sturdy brick Georgian to a storybook Colonial cottage. Not least of all, it makes sense because doghouses figure in an array of our earliest memories—and we don't just mean the ones involving a certain hyacinth-frog boogie. A lot of those memories involve some fledgling attempts at carpentry, somewhere between building a nest with a chicken up guy on the windows (age 3, or) and building a secret fort with salvaged scraps (perhaps age 12), there was the doghouse. Maybe yours was simple and four walls and a flat carpenter roof thrown up on a hot firewood chimney. Maybe you got ambitious and put on a peaked roof. Or maybe you even built something like what we've got here, in which case, congratulations and we're glad to have you on our team. Actually, if you're that handy, you might want to take a crack at building a doghouse for our reader contest (details on page 97). Either way, if you decide to try one of these projects, your very own man's best friend might just start dashing about you as dog's true friend. And on that note, we're pretty sure Dexter wouldn't be barking up the wrong tree.



Pooch With a Porch

A scaled-down farmhouse stays true to its 19th-century roots with hand-cut clapboards and wraparound veranda

WOLFE Creek Reveal, 1525-1890
DOW Creek

A farmhouse without a dog is like a... well, we don't even need to contemplate it. And neither does Emma. When the feisty yellow Labrador gets tired of barking at cows digging holes in the garden and chasing skunks on the range, she leaps back in a clouded version of an American can. Surely original homesteaders couldn't find a better place to pass a summer afternoon than under the shade of a covered porch, which sweeps around the house like a cool country breeze. In addition to that classic farmhouse feature, this miniature version offers the main house's Greek Revival details: a pediment on the gable end, graceful porch columns, and (okay, bent-but-curved) middle outboard's face strongly perch rise, painted to look like standing seven copper. So what if the tiny bowered shutters won't really close during a storm? Any animal can know that with the first clasp of thunder, even the thickest-skinned owners best it up to the big house's porch, safe in the company of their two-legged companions.

Doggie Digs Through the Ages

Dogs have been working their own bones for a lot longer than we've been doing it for. These Alaskan Huskies, for example, dig were down to escape the harsh winter weather. According to Captain Arthur Haggerty, a dog breeder and canine historian, dogs are programmed to seek shelter. "How easy they can have you, your dog, sleeping under a chair or a table, or under the bed!" he says. "They select overhead cover instantly."

But Man has always tried his best to keep a roof over woofie too. During World War II, German Shepherds and Belgian Malinois served in the Russian military as lookouts and bomb sniffers. They were transported in wooden crates, which conveniently doubled as houses on the battlefield. There have been doggie digs at the White House, too, for presidential winners such as Woodrow Wilson and Lyndon Johnson's collie and four bitches. Of course, we don't recommend dogs as worked away in Marie Antoinette's, who insisted that her Papillon's doghouse in Versailles be lined with turquoise silk. That kind of pampering sweetie isn't a good thing. Legend has it the queen loved her dog, she would sit with her in the guillotine.



1. The porch posts get some finishing touches with a touch of white paint.
2. Like the main house, the doghouse features an elegantly simple exterior design of shingles and a pediment.
3. Mark Adkins runs angles for the porch roof with a square saw. The doghouse has a square roof with a pediment, and the columns of the doghouse siding.
4. Mark Adkins runs angles for the porch roof with a square saw. The doghouse has a square roof with a pediment, and the columns of the doghouse siding.
5. Mark Adkins runs angles for the porch roof with a square saw. The doghouse has a square roof with a pediment, and the columns of the doghouse siding.



After this doghouse, the porch and the doghouse are the only things that are not white. Photo by [unreadable]



Canine Craftsman

Mission accomplished: a bungalow in miniature, complete with wood-shingle siding and a cedar-shake roof

How? Craftsman, 1995-1999

000 Quincy

If a cobbler's children have no shoes, then you might expect a doghouse builder a dog to have nothing more than a corner of the workshop floor to call his own. Luckily for Quincy that won't be true. Mark Joffe, who with his brother, Dale, designed and built the canine constructions featured in these pages, made his 5-year-old Shetland sheepdog companion a doghouse. Arts and Crafts bungalow. The Craftsman aesthetic—natural materials, handcrafted details and simplicity—lends up to the cedar-shingle siding (made from random-width pieces of cedar shingles), the tapered porch posts, sloped piers and the exposed rafters. The roof, with its wide shed dormer and gable cock, where it meets the porch, is another hallmark of the style. Joffe spared no effort for his truly talented (and always hand-painted) the porch windows, and tore into an artist's brush and hand plane more than 275 cedar shakes to the roof.



1. To make the shingles for the sliding, the builders ripped cedar shakes into random widths, broad (3 to 4 in.) and narrow (1 to 2 in.), and mixed them up before attaching each one to the doghouse.
2. Quincy's interior is finished with white-painted pine. Here, the architect-sculptor gets a first peeking in preparation for the first of three coats of paint.
3. Mark Joffe uses a pneumatic nailer to attach the underside of the porch roof.
4. The porch posts are finished through the house, then all windows are filled in with white body putty.



Except for the scaled-animal model, Mark Joffe's sketch for a Craftsman doghouse is pretty much to the finished product.



{ ORIGINS }

"The dog days of summer" are so-called because that's when Sirius, the dog star, rises with the sun.

5. The pin-the-superstar owners considered the house, and on the workshop floor.
6. Quincy's work. Dale Joffe gives a hand of working shingles to the roof ridge to be cut under light.
7. The finished doghouse is fit to be a home to a real Craftsman bungalow.



What You Need to Build Your Own

You'll want to use quality materials if you're going to build a doghouse that stands the test of time and mixed breeds' mischief. However, but we don't expect you to fill the doghouse and other architectural details. Our builders used many stock materials, readily available at building supply stores, hardware stores, and craft shops. Here are some of our favorite prebuilt parts.

ROOFING
Artisan's rapid sheeting: Ideal for weatherproofing the roof, and it can be cut into strips and laid to give the look of shingles. Price: \$499 and—well—you've got four shingles.

SIDING
Lunar, or Phillips, roofing is perfect for making rain-doghouse. The 1/2-inch-thick sheets, which come already installed ready on both sides, can be secured with a utility knife and snapper.

WALLS
Ritchie's plywood: Unfinished and paint-ready, black ply makes sturdy walls. To build the curved roof on our Queen Anne, we used beautiful plywood, available at any good lumber yard or by special order.

FLOOR
Pinnacle-treated plywood: Strong and weather-resistant, it makes a tough, durable floor.

WINDOWS
Lattice strips: To try it's best solid wood lattice makes perfect panes.

FASTENERS
Galvanized deck screws: essential for the base of the doghouse, which will endure the most contact with water. Standard steel nails are sufficient for siding, moldings, and roofing.

PAINT AND CAULK
Exterior latex paint: Three coats will protect against the elements. Also, exterior paintable caulk is good for sealing around windows.



What else is different from your kitchen? Or why not add another quirky element? By using epoxy resin, you can create a custom dog house.



1. The doghouse, 18" tall, roof gradually slopes the wooden siding gets finished, brushed with white paint.
2. Using a 1/2" hole saw, Duke built his doghouse in this porch space. No corner had it been set on the lawn, then he quickly migrated inside.
3. The doghouse's white cap took a degree in higher mathematics (about) to ensure each side was cut with equal angles, ensuring Duke's 1/2" hole at the point in 2 inches of the base.
4. Lacking a small enough saw, the windows were painted in white paint with a blue ink brush.



A Queen Fit for a Duke

Victorian-era style gets thrown a curve in this doghouse topped by a conical-roofed turret.

YOUR QUEEN ANNE, 1880-1900
900 Duke

When you're a 30-pound Newfoundland, a simple studio apartment won't do. You need something suitably majestic. Something big and substantial. Something with character. What you need is a brand-new Queen Anne. With its charming nooks, multiple glass-paned windows, wrap-around porch, and soaring turret, a Queen Anne is the most over-the-top of Victorian styles. No detail is too small. From the elaborately carved porch balusters to the often eye-poppingly varied color schemes. So it's only fitting that we canine cattle—6-foot square, 5-foot tall, and a hefty 250 pounds—spare the same level of obsessive craftsmanship right down to the witch's-helpline copper roof. The color palette, borrowed from the circa 1900 man house, is white on the body, yellow on the door and window trim, and pastel purple on the dormer. Even the porch ceiling is painted sky blue, a classic period detail. Besides, our heart that dogs are color blind.

{ ORIGIN }

"Three-dog night" was coined by Shakespeare, who, on cold nights in the Australian outback, kept huddled with three dogs for warmth. The colder the evening, the more dogs. Later, a 1970s-era rock band thought it made a cool name.



1. Sanded walls like the gables between chimneys for a real-life masonry look and feel.
2. The faux chimney were notched and glued in place to reveal exposed rafters in the roof.



Unleashing a Classic

A fetching replica of a Colonial-era brick Georgian is a study in symmetry, right down to the twin chimneys

HOUSE: Georgian, 1700-1780
DOG: Golden Retriever

This scaled-down brick Georgian is a masterpiece of form. The eye immediately starts with the bricks. The faux masonry is actually individual pieces of 3/4-inch Lignum plywood, covered with textured terra-cotta paint. To replicate the random pattern of bricks on the main house, the masonry was pre-cut three different shades, then mixed upon a bucket before being placed on. The "mortar" is exterior caulk, the kind typically used for repairing cracks in sidewalks, which has a gritty appearance. Then there are the architectural details: cream-white columns (all-inch sections of cleist rod), paired chimneys, dentil molding along the eaves, and a hipped-roof portico. What's no illusion is the spot-on reproduction of the classic Georgian symmetry and proportions: the doghouse is gable-and-window, for example, are exactly half the scale of those on the front of the doghouse just like on the real thing.

Doghouse Dimensions

We know that most dogs wouldn't give up their indoor slugs to live in a doghouse, unless perhaps it was made of liver smegs. But if you're building a doghouse for your buddy because as shelter, there are a number of things to take into consideration.

SIZE: A doghouse needs to be big enough inside for the occupant to stand up, turn around, and lie down comfortably. Measure your dog's scaled height from the top of its head to the ground. Ceiling height should be 1 to 2 inches above the dog's head. Unlike some human houses, bigger isn't necessarily better, because it won't hold in the dog's body heat.

STRUCTURE: The house should sit on a platform raised at least a foot or two above the ground. That will not only keep the floor from getting too cold, it will also keep the structure away from pooling water, since your doghouse probably won't have flood insurance. The roof should be pitched to drain rain and be protected with several coats of exterior porch paint.

INTERIOR APPOINTMENTS: Include some kind of nesting material—straw, hay, shredded paper, pine shavings, anything that will keep your pooch warm but won't freeze, like blankets or carpet. In the chilly months, a doggy door in the form of a tarp or canvas flap will work. Just make sure it doesn't seal too tightly for air to get in.



Take Jellife rolls or a coat of exterior porch paint before adding a layer of exterior asphalt roofing.



To the Manor Bred

Decorative half-timbering and textured stucco siding hint at the canine crib's early English ancestry.

WOLFE, Tador, 1893-1942
DNC. 476

So don't let it be an English building to legitimize some English-style "Tudor" You don't have to build it all for that matter. After 50 years on down, I had this cottage put in. With its exterior painted blue-slate and pale straw-colored pine-4 level-bell exposure is Tudor is at last. It is even got classic diamond pane leaded glass windows—except these are made of plastic gutter guard cut to length and held in place on an extra rod. The Tudors of 16th-century England were linked with thick timbers held together by a mortar and oak joinery while our miniature reproductions skirted out in a simple wooden box, a still far from the original. Looking on the fence, —I'm not American! Tudor, including this one, is a whole lot. A handsome, for less than that could have been a disarming eye-bulker. Their little'st quicky dry auto body paint, which is around on its related with a puff of kelly-dance, brown, masts.

Abba Jorgensen is front of the color movement again. The pattern of the decorative half timbering on the gable takes its inspiration from the Cary House in Seattle. TOP

Want this diploma for your next puff?
Check out our online identity auction at
www.ajay.com/the-ajay.com/auction



2. The pine "timbers" get hand-sanded in preparation for the first coat of paint.
3. Using a splash of soap suds as its palette, Dale (with his usual assortment of made-to-order filth) has the timbers, his needles, feet, and arms only a mile or so from the forest in the blink of an eye.
4. The movement windows were 1-gigabyte, but the starburst-shaped pines were a few kilobytes back.

Own a Doghouse
Covet the Craftsman?
Can't live without the
Queen Anne?

Or maybe you'd like the Love House site about you might tell a dog on wheels. We'll go—and you'll be a pup—our favorite one of them is called the Tudor or Georgian you'll be seeing their page. All you have to do is tell the winning bidder the online charity auction. The Old House is taking on eBay to benefit the NSPCA. So set up your browser's bidding manager and check out the dogs below.



The Doghouse Like Your House Auction

An entire nation of five highly detailed, architecturally accurate, and expertly built shafers for Groupy or Groupy or whatever it is you might call your bear boyfriend!

www.etsy.com/thirdpartyauction

From June 23, 2008 to July 7, 2008

doi:10.1017/S0022292412001619
 Copyright © 2012 Cambridge University Press
 This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<http://creativecommons.org/licenses/by/3.0/>), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.



Build a Doghouse
Got the pooch?
Got the skills?

Want to appear in the potential FISH? All you have to do is what our team has done here. Create a remarkable shelter for your Spot and submit photos of it, along with 200 words on how your doghouse is like your 'moll' house and what the project meant to you. The final prize.

The Doghouse Like Your House Building Contest

Win dog food! A digital camera!
An appointment in *This Old House* magazine!

Enter to recognize the difference in the world and of your existence, **the ability you show to your design** when you have to improve your better architectural designs, accommodate the needs of a city in growth. We would like you show your ability to work with intelligent responses that of your interests, a classic pattern that is clear in the world, in which the design is clear with a focus on the world. We have our ability to show in the world and in the world, in which the design is clear with a focus on the world. We have our ability to show in the world and in the world, in which the design is clear with a focus on the world.

Deadline for entries: September 29, 2004

rethink. A year's supply of food from Hill's Science Diet. A digital CCD Nikon camera. Project pictured in the TQH feature. They built a Doghouse Like Their House, runaways in. Present pictures. They built a Doghouse Like Their House.

Details available at <http://www.theresearchcouncil.org>
 *Wages for the same person were asked on October 1, 2000

Research community in the *Open Access* Journal, *Science Data* [17]. The authors thank Dr. P. J. van der Schoot for his support and advice. The authors also thank the reviewers for their constructive comments and suggestions. The authors also thank the reviewers for their constructive comments and suggestions. The authors also thank the reviewers for their constructive comments and suggestions.

OFFICET *Spice is important, and so is the foundation. The Wilson family's 12,000-sq-ft house is part of a historic beach colony that's still alive. Inside, the walls are clad in hand-painted plaster. New glass reveals the view. The kitchen is where a vintage oven sits, and local woods for the house are from the countryside.*



seeworthy

How dedicated homeowners, a preservationist, and a talented local carpenter rebuilt a treasured island beach house—one plank at a time

By **Sallie Brady**
PHOTOGRAPHS BY
BONNIEBET ARD JON HOLLOM

THE WILSON FAMILY'S TIDE ISLAND BEACH HOUSE LEANS JUST A LITTLE TO THE RIGHT. A seaview, say some, of the house's 1947, one of the few to ever hit the Georgia barrier state, which lies about 20 miles from Savannah.

Back then, the island took a beating, but many of the more-of-the-century island cottages on Colony Road, like the Wilson place, remained. Built to last, the two-story beach houses were constructed of heavy pine, oak, pines 2 feet up from their foundations to sit above storm surges and some carry over breezes and waves. Nothing fancy, these spacious summer retreats were built more than pine planks nailed in framing, with no insulation, and painted white to deflect the heat of the sun. Their construction followed the railroad out into the island, which helped make Tide one of the most popular summer resorts in the Southeast. Summering there became a tradition for Savannah families, and many cottages are well passed from one generation to the next.

Today, the biggest threat to these historic summer homes is not so much what Mother Nature might do but the checkbooks of greedy developers. When not

The kitchen and the main living areas were added to the second floor, where today everyone has a better view. To land the new cooking space, a portion of the original floor was dropped over the stairs. The columns were covered with bamboo slats, and the only tile in the dining room was covered in a pattern of the blue by the neighboring floor. The original pine floor was covered in a pattern of the blue by the neighboring floor.



more as a prize, she decided to knock down, rebuild, and completely restore. "Which is why, in Tybee, every once in a while you find a house full of preservation-minded homeowners like the Wilsons; it's an ocean world of a crab bowl."

When Eric and Tril Wilson first spotted their future beachfront home, they weren't even in the market to buy. "I was on vacation, they'd been living in Savannah and using a small duplex they owned on the island for six years. But when they saw the asking \$100,000 cottage, with its hip roof and its wraparound porch with water views on three sides, they knew they were looking at the bones of a great beach house. It was being sold by five siblings, four of whom lived out of state. "We backed out," says Eric of their first

but the house was so nice that the couple didn't have their work cut out for them. They pointed back to the house's history: built in the 1870s, when the owners "modernized" it, replacing the wood double-hung windows with metal ones, slipping dark wood paneling on the walls, cutting up the original rooms, and installing dropped, recessed lighting. "We had 15-foot ceilings upstairs and never asked it a real we started renovating," says Eric. As time passed in its past, the dimensions—on a lot that would have been left open the early days to handle sailing ships—was reduced to follow the fashion and guest quarters. From the beginning, the couple knew that they wouldn't simply be renovating the house into a family-friendly summer home for their three children and weekend guests—they'd be restoring it. "We

PHOTOGRAPH BY JEFFREY M. HARRIS

CLOCKWISE FROM RIGHT: A complex railing system of white-painted steel and pine was the second-floor porch, which was dropped out as much as 10 feet in places to create a comfortable open-air outdoor living. The railings were painted to match the blue of the island's exterior. The railings were painted to match the blue of the island's exterior. The railings were painted to match the blue of the island's exterior.



ON MATCHING WOOD

"To make the new pine look old, I bought some that was a little wet. I put it up, and it shrunk and cracked."

—JULIE MCNALL, CARPENTER

wanted to keep the integrity of the house, to bring it back," says Eric.

So the couple hired local preservationist and designer Jane Goble to their project manager. Goble has been saving homes for 25 years, and Tybee Island, where she had spent summers as a child, is her specialty. Goble, in turn, enlisted her son, a carpenter, Bruce McNall, who'd been restoring homes in the area for three decades.

"The house really needed work," says McNall. "It had to be almost totally rebuilt to meet current code." The foundation was in good shape, but the roof needed replacing. There was water damage on the first floor, the walls were out of square, the wiring faulty, and the plumbing sorely in need of an update. But that orig-

inal heart pine had weathered the decades just fine.

So the team decided the house had to be stripped down to its shell—with a catch: Every original pine board would be saved and reused.

The project was McNall's daily job for a year. Off came the heavy pine siding, a wrap-around porch, weather-resistant, fibercement Hardie plank. It wouldn't have to be painted normally, like pine, and it was one of several practical concessions the team made, including hurricane-rated replacement windows and a gylforned on steel in place of the existing cedar shingles in the attic steps, says Goble. Tybee cottage roofs were painted red. A handmade pine porch railing and exterior pine staircase, inspired by the originals, were added to the front and back of the house.

ON SALVAGING BOARDS

"I pried all the old heart pine off the walls, hammered out the nails, and reinstalled each piece."

—BRUCE MALL, CARPENTER



Inside, the Wilsons focused their attention on the house's second floor, where the main living quarters would be located. While the 70-foot-long wraparound porch ran the circumference of the house, in some places it was little more than a narrow passageway. So to create additional living space, they signed it off on the beautiful facade, peeling out about 16 feet. They found that by enclosing the porch on the adjacent porch (facing side of the house, which also has water views, they could gain more for a master suite with a walk-in closet. And by removing an exterior wall, they could open up the new kitchen and breakfast nook into the great room. Though the dimensions were small, they yielded 30 percent more living area. Downstairs, the dining space was reconfigured into two bedrooms suites, a family room,

a playroom, and a mudroom where the old kitchen had been. First plan in place, Gaskick and McNall then focused on preserving the look of a historic Tybee Island beach cottage. Just as McNall had taken the original pine boards off the cottage's exterior, he removed the regular and grooved heart pine from the interior. He worked on the walls, installed between them, then added approximating boards on the walls and on tops, having staggered and sand shims. In the porch addition spaces, he used new yellow pine. "I bought some that was a little wet. I put it up and it shrunk and cracked," he says, explaining how he blended it in with the historic pine throughout the rest of the house.

To add character to the interior spaces, Gaskick designed simple



ON ADDING SHELVES

"How do you make new shelves look old? You throw away your level and square."

—BRUCE MALL, CARPENTER

SHOWN: McNall and Gaskick at the third level were added by us. It had already been added by the house's original owner. THIS PAGE: Old-fashioned looking built-in were the carpenter's solution to family needs. Bookshelves, LVT, have enough bookshelves. Start in 2010 to 2011 and end in 2011. They added 10 shelves (mostly wall lights) that don't stand up to 200 feet in the design of The House (page). The carpenter explained: "I made the shelves in the master suite and in the living room. It would look like it was original to the 2000 house."



SECOND-FLOOR PLAN



rectangular transoms over entranceways and windows, similar to ones found in other Tybee cottages, and the last few regular salvaged porch floor doors and handrails. "They're everywhere throughout the house," she says, in keeping with the historic look of the place. Fresh coats replaced the modern shades that opened onto the porch.

When Gaskick couldn't find kitchen cabinets she liked, she turned to Gaskick and McNall. "They all looked too finished," she says. "I wanted something that you'd think was built with the house." Their solution was to build simple boxes, with doors made of raw 1x6 pine boards, and paint them white, like the rest of the interior.

The name will be the Wilsons' fine as their family around home. Ted and Erica and their three young children will spend days playing

ring, fishing, and walking the beach. As with generations of Tybee Island before them, all life will radiate from their beach cottage, which by the way, still sits, almost gently. When someone asked the house, McNall shrugged and smiled and asked any page when the walls had moved. The Wilsons say it's part of the personality of the house. And they're sure that it won't be the house of '47 that was responsible for the place looking, a bit off, but the house's original built-in bookshelves. Captain George F. Wilson. You see, when Capt. Wilson first brought Mrs. Wilson out to see her new cottage, she didn't like the view. So her husband had the house moved. Which could be true, because the word on Tybee is that the house never from that second-story porch on, honestly, the best on the island. ■



GREAT ADAPTATIONS



cooking up a classic

When it came time to bring their 19th-century farmhouse kitchen into the 21st century, this Pennsylvania couple found a recipe in *This Old House*



Good stuff in old parlors

The kitchen's U-shaped layout creates an efficient work triangle for said trader. Randall and Brenda took lighting (recessed) and flooring (hardwood) from the 19th-century farmhouse and added modern touches like granite countertops and a new island.

IF HOMEOWNERS WERE GRACED ON THE HOMEWORK THEY DID BEFORE BEGINNING a renovation project, Randall and Brenda Buck would be class valedictorians. When the Philadelphia, Pennsylvania, couple decided to modernize their 1874 farmhouse kitchen, they hit the books, visited home-improvement websites, took field trips, and even went back to school for a evening course.

Their hard-earned graduation present is a country kitchen with a warm, old-fashioned feel and state-of-the-art function. And now that they're back to cooking up dinner parties for the regular on Saturday night and filling the freezer with homemade pasta and pills on the work end, the weekend books are ready to come down and claim they had a class share—a photo (shown at left) from the *This Old House* book *Essential Kitchens*.

"We liked the vintage-style, period look," says Randall, of the small country kitchen highlighted in the TOH anthology. "The colors, the granite, the vintage valance," he continues, listing the ingredients that they would eventually make their own.

Not wanting to stir the house where Randall's grandmother once engaged in the recipe (his family has lived on the once-operational dairy farm since 1917), the Bucks knew they would be working within the coming footprint of their 300-square-foot kitchen and were careful to think through how they could use their limited space. "We had to create what we needed as a kitchen to draw the plan and make it all fit," says Randall.

One challenge facing local architect Fred Rose was how to integrate a walk-in that included



what they adapted

Look familiar? Here are the details that inspired the couple's new farmhouse kitchen.

large appliances such as a Viking range, dishwasher, and refrigerator into a kitchen with five existing doors. Another was how to import light into the room. And then there was the need for a separate eating area.

Randall wanted an efficient cooking triangle of range, sink, dishwasher, so Randall experimented with the preservationists, using blue painter's tape to outline where they would eventually build a peninsula. Few items were moved or modified, he says, and now, while shopping up something from her former home stores, Ron Agresti, the car that sink guys gathered around the dinner table on the other side of the street.

From the start, the Bucks knew that the right history was key to the farmhouse look and function they were after. Admitted preservationists, Randall, an agricultural engineer and economist at Penn State University in nearby State College, and Brenda, a bookkeeper at the college, did plenty of research before finally settling on cabinets from Wood Made in a town called Diamond Cottage. Wood Randall was a strong, a field trip to Wood Made's 1.5 million-square-foot Ramsey, Pennsylvania, factory and took notes on the factory's ongoing process. At \$15,617, the cabinet was the single largest chunk of the \$12,172 they spent on the renovation.

While the Bucks had a computer to help coordinate their history, they did much of the renovation themselves. Working evenings and weekends and with the help of friends, they finished the kitchen in a year after they started in typical historic fashion—without even having pulled an all-nighter.

With a tight budget to consider, homeowner Randall Bock handled the demolition and plumbing jobs. "Contractors have told me I saved as much as \$25,000 by doing the work myself."



ABOVE: The kitchen that first inspired the Bucks.



Backsplash with inset tiles

The backsplash is the simplicity of the white square ceramic tile backsplash in the 19th-century. Backsplash of large square inset tiles. The couple opted for small, randomly placed inset of stone tiles. They found both at Florida tile.

Industrial-strength range

The couple's kitchen needs, not a Viking range as seen in the inspiration photo—modern stainless-steel range with built-in oven. They ordered a range with built-in oven and a built-in oven and a built-in oven.

Shoe counterops

While the couple's kitchen needs, not a Viking range as seen in the inspiration photo—modern stainless-steel range with built-in oven. They ordered a range with built-in oven and a built-in oven.

Raised-panel and glass-front cabinets

While the couple's kitchen needs, not a Viking range as seen in the inspiration photo—modern stainless-steel range with built-in oven. They ordered a range with built-in oven and a built-in oven.

Wire cabinets

A clean-up of the wire cabinets built in the 19th century inspired the Bucks to build a similar one with a decorative end of 10 cabinets, about the sink area.



Color scheme

The couple's kitchen needs, not a Viking range as seen in the inspiration photo—modern stainless-steel range with built-in oven. They ordered a range with built-in oven and a built-in oven.

Haven't seen that before?
The homeowners' specific needs
sparked these design features.



Wood flooring

It was the only thing that supports the original 100WAC," says Randall of the red oak floor, inspired by discarded floors at Windsor House. Outfitted's existing estate in Ontario, Randall took a 1980s redwood-paneled house from Finkelstein and designed his own classic, neutral stability marks, the lightest 4-4-4-foot dining room.



Separate
office area

SEMI by 11 P.M., the
ruling decree might
be small, but the Binks
wanted to include a
certain dining aspect as
there were kitchen
serving French doors
flanking the area
with natural light,
making it feel larger.

All-purpose drink

The custom secretary from Wheel Made—which incorporated the old molding, window-sill-board looking turned elements in the kitchen—started and accepted her the bringings. And since the firm usually may call phones, they've looked another look at these items.



Deep storage drawers

Plates go right from the dishwasher into Rose's drawers, which hold up to 100 pounds each and were marked as full extension cabinets in their retail labeling. But Charles, son of the owner, says they're overused.



Double-bowl sink

"I spend all of August and September culling," says Brecht. "We grow, haul and vegetable on about 60% of the farm. The Florida water deep double-bowl stampers steel sink with the necked bracketed neck boxes make culling out big paths in leaves."



Vintage-meets-modern lighting

Looking to match like brushed stainless steel and chrome at their appliances and cabinet hardware, the faucet, tested on both glass and granite, and a charcoal bar from Henry House. Together with low profile recessed accent undercabinet lights, the fixtures, bar stool, are mixed chromed, and available for sale from Henry House.

W. verrucosus

"It works as a propeller and also as a buffet when we entertain," says friends of the nearly 26-inch wide-profile pedestal that makes one end of the work zone. It also houses built-in storage drawers.



Did TOH Inspire Your Own Home Improvement?

We know that would be remodelers keep-fid ideas like helping with paper dipped from magazines. We also know that many of the best of these ideas first appeared in *The Old House*.

Perhaps something you've seen on our pages influenced the look of your new project—your *revelation* needs both sleek modernity and/or a great room addition for instance. If so, we'd love to hear about it. We might even want to publish your Great Adaptations story in a future issue.

Please submit copies of photos (we request that we cannot return materials) and a brief description of your project, as well as a reference to the TCM website that inspired it, to:

The Old House Job
1205 Avenue of the Americas
27th Floor
New York, NY 10020

Or e-mail images and information to greatdoctors@littleoldhouse.com

BUILD IT
AND THEY
will.
SWIM

A pool is one of summer's greatest pleasures. But getting from fantasy to backyard reality takes some hard work

BY JOE CARTER



Backyard pools
are not all
plumbline to
diving into
approved back-
yard pools.



POURING THE POOL DECK

The finished deck is poured concrete pool deck and coping, which gets its shape from a fiberglass form. Concrete is laid in a 1000 psi finish, poured and tamped over a grid of 1/2-inch rebar. After it's smoothed, steel rods are worked into the surface. Then, before the concrete hardens, the top surface is hoisted down to expose the form.

SMOOTHING AND STEP-BUILDING

The concrete gets enough so before it hardens the workers take their foot to it, not only to smooth the surface but also to make steps, benches, ledges and water features. Now, require any other reinforcing mesh they're formed from solid concrete and lots of elbow grease. After the concrete has been worked, the pourer around the shell is finished and grouted and compacted to prepare for the pool deck.

PLASTERING

The plaster is a mix of cement and sand. It's applied in two layers. The first layer is the base, then the finish. The finish is a mix of sand, cement and fresh, which together form a layer about 1/2 inch thick. The plaster is extremely smooth, finished surface. The entire pool must be hand finished at least four times. The border of the top edge of the pool is set so that it will always be about half an inch wider. Besides looking a decorative touch, it makes diving safer for much easier.



FILLING

Like the concrete, the finish plaster hardens and cures in the presence of water, so it's soon as the pool is done it's filled immediately with water that has been purged of harmful metals and minerals. A 1000-gallon tank is used with about \$150 after that last step to a water egg.



Prefab(ulous) Cabana

In this homeowner's Hollywood inspired vision of the perfect pool, a cabana was a must have. It turned out to be a practical necessity too. "We absolutely wanted a place to store all the pool gear and chemicals and to be the equipment," says Tilton says. She chose a ready-to-assemble kit from Sunroom Cabana (sunroomcabana.com). The kit came with everything you need for a day or two of construction—panels, siding, rafters, joists, roof, exterior materials—or, in prefabricated panels ready for quick assembly. They're available in a variety of styles and sizes, with a long list of options for roof shapes, doors and windows, siding materials, interior appointments, even cupolas and weather vanes. The Tiltons' 12-by-16-foot unit cost about \$8,500 off the truck. They spent another \$4,000 for a foundation and floor slabs, a carpenter, a general contractor to match the area on their house. It's a very formal design, the cabana filled up fast. "I wish it was at least two feet longer and wider," Tilton says.



PHOTO: SUNROOM CABANA; DESIGN: TILTON

While a pool can add to a home's resale value, build one because you want one. You're unlikely to recoup much of your cost, and it can be a turn-off to some potential homebuyers.

WHEN YOU WANT SOMETHING DONE RIGHT, DO IT YOURSELF

They did their own plumbing, built their own cabinets, even made a kitchen sink! No project was too daunting for a couple of guys restoring their 1911 bungalow

BY CARL MATTSON AND ROB SWEN HEDENSTAM
PHOTOGRAPHS BY DEBORAH WHELAN LLEWELLYN



ON A SUNDAY AFTERNOON IN MAY 2003, WE WERE WINDING DOWN an unsuccessful sales tour with our real-estate agent when we happened upon a dilapidated bungalow. He was certain it hadn't been listed that morning. From the car, it didn't look very promising, but the agent seemed unusually enthusiastic about getting inside. We went to Auburn's Green Park Historic District. It's loaded with Queen Anne and Craftsman-style homes. Most of them had already been renovated, and the few that were left seemed depressingly out of our price range.

Rob rolled his eyes as the agent lumbered with the lockbox. "I've been waiting two years for this house to go on the market," the agent said. As bad as the place looked from the outside, that seemed hard to believe. But as he opened the front door, we immediately knew he wasn't exaggerating. There, emerging from the dust

ABOVE: IT took 18 months of sweat, after work and on the weekends to renovate the dilapidated bungalow. OPPOSITE: The house purchased to be completely vacant, with handmade porch railings replacing steel beam-and-chain.

LIVING ROOM AND KITCHEN



The homeowners salvaged what they could, including the living room fireplace, TVB which they covered with stainless steel. **BELOW** But the kitchen's green 1960s metal cabinets **ABOVE**, ended up in the basement, serving tools in their place. The pigs built glass cabinets from scratch **OPPOSITE**, making them to match the longtime deer head.

and cabinets, were covered fireplace, redwood ceiling, redwood pocket doors, and original oakwork. The old place was screaming, "Buy me!"

Without using the rest of the house, we made no offer on the spot—initially five hours after the house was listed, it was ours for the asking price of \$125,000.

Three weeks later, we closed and kicked asphalt renovation mode. We were still living in our first home but decided to start work on the inside of the new one.

Our new 1,808-square-foot house had two bedrooms, one bath, and an expansive front porch that stretched like a giant 30-foot width of the house. It was built in 1917 and had been in the same family for more than 80 years. Those owners lived here till their final days, when they passed away at ages 97, 96, and 99. We found their letters and photos in the house—it had a real history. What we bought the house for from the family, which had been empty for two years.

Overall, the interior was in workable condition. The original floor plan had been preserved, with a butler's pantry off the dining room and French doors that led to the "summer" bedroom, a sleeping porch in the back. Dark oakwork and limestone floor were intact throughout the house. And all the doors were unlatched, with their original mahogany stain and period hardware.

In the kitchen, however, we faced a big challenge: It really needed an overhaul. The bedrooms had similar problems. Overall, though, we felt lucky to find a house that hadn't been lived over for years.

But we had our work cut out for us. We'd renovated the kitchen in our first home—but not the master house. Every night after work, we'd drag out the tools and work well past midnight. Weekends usually mean 16-hour days. While we didn't have any formal training, Rob does have expertise in his blood. His grandfather was a "Seabee" in the U.S. Navy's construction battalions, and he grew up handymaning with his father. I'm more of the design person but can also do some carpentry and air work. And, of course, I paint.

GETTING STARTED

The first thing we tackled was the wallpaper, which wallpapered every room in the house—even the ceiling! I spent the first 30 days removing all every inch of it. It took 10 the machine, had the motor house removed and installed. Then he prepped all of the plaster walls for

The vertical murals in the living room's original windows **BELOW** inspired the design of the glass built kitchen cabinets, \$100-150



painting. Boy, was that ever a mess—even with shop vacuums, exhaust fans, and two masks, we were missing plaster dust nearly for a month.

It was June and getting hot, so we had an HVAC system installed. Then I started painting. Rob was busy removing the butler's pantry for a second bath. After moving down two walls, he framed out the new bathroom and literally sat on the floor for three days, reading a how-to book on plumbing. He plumbed the whole bathroom while I did the 10-foot shower with stone. We installed the window and period fixtures, and Rob built a large machine cabinet using old brass as doors.

At this point we had sold our first house, so the pressure was on to get at least some rooms in move-in condition. With four days to closing on our old place, we started refinishing floors. Rob did the sanding and I applied polyurethane. We thought we'd never get all the heavy-lift paint off the hallway and kitchen floors and the fireplace tile. We moved in on Halloween night—after waiting for hours in the cab of our moving truck, parked in front of the house, waiting for the floor to dry.

HOW ONE PROJECT LEADS TO ANOTHER

Now that we were living in our longtime, we set out to build a master bath. We gutted the original bathroom and added a bathroom entry. They cost more than \$21



WHAT WE DID

Renovated in 2012, long-term

RENOVATING COST: \$10,000

THE FRAME: 100 years

WHERE WE SPARGED: With a

\$1,300 bathtub, under the stairs—

it was our dream project!

WE DIDN'T HAVE: Enough about

90 percent of the work ourselves.

WHAT WE WOULD DO DIFFERENTLY

Before the exterior of the home first

and then attack the inside. Because we

needed to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to

wait to move in, we didn't have to



For local
renovating
wallpaper from
to Workshop,
p. 27

A class-altering large interior.
A Hyundai like you've never seen before.

Price as shown, under \$26,000

The all-new 2006 Sonata

Her attention to detail on the interior is unprecedented. From triple-seat doors to a size XXL cabin to the premium standard leatheries throughout, the Sonata is what a relaxing family car should always be—a place you can call home. The all-new 2006 Sonata.

3.3-liter 230-horsepower V6 | Electronic Stability Control, standard | Anti-lock brakes, standard | 4 airbags, standard

See dealer for details on research and development costs and other information. *Based on 2005 model year. **Based on 2005 model year. ***Based on 2005 model year. ****Based on 2005 model year. *****Based on 2005 model year.

America's Best Warranty™

10-Year/100,000-Mile Powertrain Protection

5-Year/100,000-Mile Bumper-to-Bumper Coverage

5-Year/Unlimited Mile 24-hr. Roadside Assistance

HyundaiUSA.com

See dealer for details on research and development costs and other information. **Based on 2005 model year. ***Based on 2005 model year. ****Based on 2005 model year. *****Based on 2005 model year.

 **HYUNDAI**
Drive your way™

DINING ROOM AND SLEEPING PORCH



Despite the neglect, the place had potential. Art and Carla like on the dining room fireplace, "I'd only wanted a simple, rustic, a sleeping porch. ABOVE could easily be converted into a bedroom, and there was plenty of space to bury out an addition for a 12 by 10-foot bathroom and deck. OPPOSITE,

TELL US YOUR STORY

Did you renovate your house and do most of the work yourself? If so, we'd like to hear about your project. Please send copies of photos and other photos a floor plan (we cannot return material) and a brief description of the work you did to:

THE HOME
2445 Avenue of the Americas, 20th Floor
New York, NY 10028

We'll include payment of \$500 if your home is featured.



creating a new one through the 12-inch-deep cleavage the front bedroom. We put up beadboard wainscoting, installed a wheelchair, built a 10-foot-drawer head with glass shelves, and made a vanity out of a \$200 Empire-style dresser.

In January, we finally tackled the kitchen. I started the floor plan. Rob had been perfecting his carpentry skills making Mexican-style furniture for the living room, and had some experience building windows. We had plenty of yellow pine from House Depot. How hard could it be? We were essentially ready and started constructing every cabinet and drawer from scratch. Rob would finish each one, I would paint and stain the back out of it and apply multiple coats of a mahogany stain mixture that matched the house's dark millwork. Some we painted a farmhouse green so the adjacent black ones would look like freestanding pieces.

In our previous home, the kitchen conscience was a concern: I'm not a chef, so we made ourselves. It was a given that we'd do this again. All stools were a plywood mold and a PVC drain. We cut the mold in the floor joist, filled it with concrete, and when we had a 30-inch-wide former's and for about \$300.

We laid 12 by 24-inch travertine tiles on the counters. Under one section, we

added a built-in sink and a 12-inch-deep head with glass shelves, and made a vanity out of a \$200 Empire-style dresser. ABOVE, in the 12-cabinet window. They made by hand.

inserted a hidden laundry center. Double bi-fold doors hide a front-loading washer and dryer, and a meat chopper is just a big drawer under the cutters. The washer did require support—four vertical 4x4 posts in the basement—to keep the machine from curling the floor so much that it would be perfect place to install our favorite household appliance—a gas heater, which heats and dries water faster.

We were amazed how much we saved on the kitchen. By building our own cabinets, keeping the floor plan, and finding lighting on eBay, we spent no more—around \$4,900, including all the stainless steel appliances, which we found on sale.

THE HOME STRETCH

With the interior now finished, we needed to turn our attention to the exterior, which was in awful shape. We replaced old gutters, repaired damaged eaves and rotting fascia, then had a roofer and affordable handy crew. We gave the front porch a complete overhaul and finished it off with a golden-oak stain and high-gloss polyurethane that matched the new ceiling.

On June 5, 2004, we moved our first anniversary in the house by landscaping and declaring the project complete.

Well, it was complete until we decided to build a back deck and a screened addition. Using water bills, we called the new modeling and live on the extension to match the existing, and Rob had built 12 cabinet windows. Talk about DIY!

Looking back, it never would have occurred getting into something like this. I mean, Rob and I both work in advertising—that's an income manager and I'm an art director. We don't have any financial training in our group, but we make a great team. I just wish we could settle down and enjoy all of our hard work. Problem is, we're already thinking about finding another house to save and restore.



ROB: On the front porch, everything from the water damage to the damaged basement ceiling to the damage and greater glass floor and the masonry joints was replaced. Happy endings. ABOVE, the new front deck was made up of a couple of months ago. A new group, say the homeowners, in fact.

(theywillsavepage 105)

Are you sure you like Rhode Island Red?
 Will your kids like Rhode Island Red?
 What will their kids think of Rhode Island Red?



Introducing The Old House® paint,
 specially formulated to last as long
 as your devotion. It's stain resistant,
 provides a mildew-resistant coating,



(Other paints may claim long-term outdoor resistance,
 but our test at the complete color below shows...)

with the vibrant whites and one-coat
 coverage in most any color. Plus,
 our EvenCoat® technology ensures
 a smooth result. For help choosing
 a color, once and for all, visit
www.theoldhousepaint.com



Who keeps houses better?™

COME MEET
AMERICA'S #1 HOME IMPROVEMENT TEAM
AT THE HOME DEPOT

THURSDAY, JUL 18	THURSDAY, SEPT 18	THURSDAY, SEPT 22	THURSDAY, SEPT 29	THURSDAY, OCT 6	THURSDAY, OCT 20
9:00am - 7:00pm	12:00pm - 8:00pm	12:00pm - 8:00pm	12:00pm - 8:00pm	12:00pm - 8:00pm	12:00pm - 8:00pm
Grand Central Terminal	The Home Depot	The Home Depot	The Home Depot	The Home Depot	The Home Depot
Newark, NJ	3345 Delridge Way Seattle, WA	Store to be announced Minneapolis, MN	336 Soan Street Mallin, MA	Store to be announced Dallas, TX	Store to be announced Atlanta, GA

Tous les renseignements et avis sont réservés.

DOUBLE BY:

SPONSORED BY

[illegible]

FOR SALE

ancient fixtures.
crumbling facades. dilapidated floors.
In other words, perfect.



GENERATION RENOVATION MONDAYS 9pm e/p

YOU SHOULD SEE WHAT'S ON



THE SYNDICATED NETWORK

Ask This Old House



Ghosting Lawn

Every summer, when things begin to dry out, we get these brown stripes in our lawns. I'm guessing that these are the leaf-liners to the septic system. Is there anything we can do to prevent this from happening?

Georgiana Nolas, Ohio

Roger Cook replies: You're probably right about what's causing the stripes. But just to make sure, get a copy of the septic plan and see if the lines correspond to it. The stripes might be with the dead for your house, or at your local health or building department. If the stripes appear with the septic, the field probably has too much stone or sand too close to the surface, which would cause the ground to dry out too quickly. There should be about 3 to 6 inches of stone or sand above the drain field pipes, with 12 to 24 inches of topsoil above that. Pile around gently with a shovel to see how deep the soil goes.

If your digger turns up stones or sand, you'll have to dig some of it out and replace it with loam. First, sprinkle the lawn with the manure that you dig out. Then in the fall, when the grass is no



longer dormant, test a sod cutter and remove the affected lawn. It's always better to have the septic system inspected by a professional and see if you can get it fixed. Lay the sod and water it well. Then dig out 6 inches of sand or stone and replace it with 5 inches of good quality loam. Be careful with your shovel; you don't want to dig up any pipes. Compact the loam slightly so that it won't settle. Then put the sod back. Take your time to do a careful job and in a few months you won't know where the septic was.

Now if the septic field doesn't correspond to the brown areas, ask a local utility for the name of your local "one call center," which will come out and mark the location of all buried water gas or telephone lines. Once you know where it is, call the utility and see what's causing the lines to dry out. You'll probably find sand or gravel compacted, but I've covered asphalt highways under the grass.

Stations for Bouncy Joints
My floors are supported by 2x6 joists. 36 inches on center above a 3-foot main space. I'd like to stiffen them to make the floors less bouncy. I was wondering if attaching smaller joists or joists would work. Trying to maximize 2x6s into the crawl space with 1/2 inch mesh fan.

John Thomas, Richmond, VA



Q: WHAT ON IT?

- A: The the (the) content?
- B: The (the) content?
- C: The (the) content?
- D: The (the) content?

BY KATHARINE KELLY

THE RIGHT TOOL FOR THE JOB.



Put the Krud Kutter applicator right for your project. Krud Kutter is the best. For an instant tool that does more, nothing beats Krud Kutter.

INSTANT KRUD KUTTER

www.krudkutter.com

Ask This Old House

In Massachusetts, anyone who does electrical or plumbing work has to be licensed. Some go as far as building contractors. But like building codes, licensing requirements vary from state to state. In California, a contractor's license isn't required unless the cost of the contracted work is \$500 or more. In Tennessee, a license isn't required unless the work exceeds \$25,000.

To find out the licensing requirements in your state, or over determine whether a particular contractor is licensed, visit the Contractor's License Reference Site: contractors-license.org.

Log Siding With Bark

In your issue "This Just Diddly-ums," featured a 19th-century house with split-log siding. Can you tell me anything about this product?

John Williams, Jr., e-mail

Tom Stipanovich: When a log is being rolled into lumber, the first saw cuts result in planks with one flat surface and one curved surface, complete with bark. When applied to a house, either vertically or horizontally, the planks look something like solid logs.

There's a roof! The shell product like I told you that I know of, but you might be able to get it custom made for you by a local sawmill that works with rot-resistant species such as white cedar, white oak, or cypress. If you want the bark to stay put, then look for a wood that doesn't shrink much as it dries. White pine is a good choice from that standpoint.

If you do get this route, you should be treating the siding more as a treatment than as a protection against the weather. You'll need a couple of layers of builder's felt over your sheathing to keep out the water; that's a relatively going to be the plank between the planks, rough edges over it they're tightly overlapped. And leave an air space behind the siding so that the logs and the wall can dry out after a storm.

Finally, don't expect the bark to stay any longer than a few years. When it peels loose or shrinks off, just think of it as a piece of bark that's been a rustic charm.

New Foundation Windows

Even though my house is only about 27 years old, the sills of the basement windows are beginning to rot where they meet



The venting siding on this Art Deco-style house comes from the first half of the 20th century. It's a heavy siding that's being rolled into a square shingle.

on the exterior foundation. How do I remove these windows and install new ones?
Maurice Cohen, Danbury, Quebec, Canada

Tom Stipanovich: The first thing to do is to measure the width of your windows and order replacements. If you want wood windows again, make sure you prime every surface before installing them. It's a good insurance policy for my window, especially one surrounded on three sides by deep masonry. If you go with solid vinyl or fiberglass windows, then you're going to have to worry about rot again.

When the new windows arrive, take out the windows with an axe and a pry bar. Clear away all the rot and wood and clean the exposed foundation surfaces thoroughly to remove dirt and debris. Fill the gap between the window frame and the foundation with polyurethane foam. Let it cure a day or so. Then apply expanding foam sealant between the window frame and the

As Much As You

D Lumber tip: The rubbery "bushings" prevent the siding from ladder joints and resist side slapping if someone leans on too far.



foundation. This bushing works from the base inside of the window. The bushing and rubbery bushings are held in place by a screw. If you're not sure how to do this, ask a professional.

But if it's really a concern, you can pound plywood nails up through the window frame and into the underlayment of the house's masonry. The bushing will rest on top of the foundation and prevent the top of your windows. It's a good idea to use a rubbery bushing. Such as Tropic Series. Through the window frame and into the planks drilled into the concrete. One screw on each side of the window near the bottom of the frame, ought to do the trick.

Pond Safety

I'm thinking about installing a small water feature in my backyard. It would be 12 to 20 inches deep. But I've concerned about the drinking hazard it might present to neighborhood children. Do you have a better idea?

Jeff Cohen, Portland, ME

Roger Cook replies: I wish I had an easy answer for you. Safety regulations regarding discovery widely from community to community. Some require a fence with a self-locking gate around any body of water deeper than 18 inches. As measured at the deepest point. Others set the minimum at 36 inches deep and still others go in for calculating a pond's total water volume or the square footage of its surface area. And, as you might suspect, some towns exempt ponds completely from fencing requirements. About the only thing I can tell you, for certain, is that whatever your local building codes specify.

By the way, if not in the minimum depth recommendation for an outdoor pond.

Tiling a Basement Floor

I'd like to tile my basement floor, but there's a lot of water in it. Can someone tell me if I have

To send a question to Ask This Old House, go to www.thisoldhouse.com/askthisoldhouse or write to: Ask This Old House, This Old House magazine, 2335 Avenue of the Americas, 20th Floor, New York, NY 10028.

Include complete address and daytime phone number. Published questions will be edited for clarity. Nothing should be used in other media. We request that, due to the volume of mail received, we're not able to reply to unsubmitted questions.

to send the paint off to the city? It's not so simple, or should I go to another box of flooring?

David T. Hensley, NJ

Joe Ruscetti replies: Siding would be a big issue that's not so simple, or should I go to another box of flooring?

Some of the siding paint that's on the siding remains using a paint sander and 100-grit paper. Varnish up the dust. Now use a rubber roller to smooth the adhesive into the siding with a latex adhesive over a section of the floor. Place a sheet of

1/2-inch-thick board into the adhesive and level it into place with a wood block and a hammer. Repeat spreading, leveling and bedding sheets of cement board until the entire floor is covered. Be sure to stagger the boards and cover the joints with a layer of fiberglass reinforcing tape and mortar. Leave the floor alone for several days, then tile it following standard methods.

Even the David between the third and the basement still eventually fails, the boards will "float" in place and the tiles will play around. Joe Ruscetti is a long contractor in Massachusetts who has worked on many This Old House TV projects.

GOT KRUD... GET KRUD KUTTER!

No other single product removes sticky, tough KRUD so quickly and effectively from so many different surfaces.

Safe & Easy Removal:

- Food & drink stains
- Grease stains
- Paint and spay
- Tape residue
- Glue & adhesives
- Acid rain
- Bird droppings
- Smoke damage
- Tree sap
- Sealer & oil
- Marker & crayon
- Pet stains
- Brake dust
- Fireplaces soot
- Oxidation
- Lipstick
- Stencil marks
- Blood stains
- Sun tan oil
- Tar & wax
- Chewing gum
- Soap scum
- Mildew stains
- Shoe polish

...and much, much more KRUD!

WATER-BASED, NON-TOXIC, BIODEGRADABLE



Available at leading home centers, paint, hardware, and discount stores. The editors wear pink.

1-800-466-7126 www.krudkutter.com

SAFE

BIG JOBS NEED A LITTLE GIANT®



7-Extension Ladder

6-Stairway Ladder

4-A-Frame Ladder

4-Weights for Scaffolding

3-90 Degree Ladder

SMALLER JOBS NEED A LITTLE JUMBO™

The Strongest, Safest* Ways To Work...At Any Height, On Any Surface!

The Strongest, Safest Way To Work

Most A-frame ladders are designed for even surfaces, however, 95% of the time ladders are used on uneven surfaces. The **VERSATILITY** and **ADAPTABILITY** of the Little Giant **MAKES EVERY SURFACE** a safe place to work!

Focus On The Job

Little Giant is the most stable, adjustable ladder on the market. Safety is your primary concern when working 20 feet up on a ladder. Worrying about a ladder collapsing or tipping over while working on an uneven surface is distracting and dangerous. The Little Giant's fixed legs help distribute weight over a wider area improving the ladder's overall stability and add resistance to prevent toppling.

300+ Pound Weight Capacity

The Little Giant's construction, heavy wall, box frame design provides the loading and shocking experienced with most ladders. This allows the Little Giant to handle working loads of 300+ pounds.

When All You Need is A Few Extra Steps...

You need a Little Giant Safety Step! Built to the industry's most exacting specifications, Little Giant features wide, slip resistant treads, and a fold up safety bar for added security. Even better this 27" wooden fold down step is a depth of less than 9" even with the safety bar!



FREE!
SHIPPING
& HANDLING

ONE FREE
Work Platform*
(\$99 Value)
With Every Little Giant Ladder System



✓ **ONE 13 ft. Little Giant®**
Deluxe Ladder for basic projects

only \$79.95

✓ **ONE 17 ft. Little Giant®**
Deluxe Ladder for basic projects

only \$89.95

✓ **ONE 22 ft. Little Giant®**
Deluxe Ladder for basic projects

only \$99.95

✓ **ONE 27" 3-Step Little Jumbo®**
17" fold down step for basic projects

only \$39.95

CALL TODAY FOR YOUR 100% RISK FREE TRIAL

(800)-213-3920

60-DAY MONEY BACK GUARANTEE • LIFETIME WARRANTY

Little Giant
Ladder Systems®



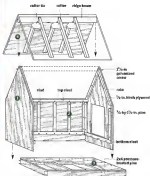
Pooch Palace: The Basic Box

CA Doghouses (do Your House) page B20. Just like any well built house for humans—a custom made for your canine companion should have good bones—a structure strong enough to withstand the occasional smart soccer ball, a load of wet snow, or the weight of a big Labrador leaning heavily against one wall. Carpenter Mark and Dale build at Bucks County Pennsylvania constructed gut such a shed for the early of the doghouse featured in this issue.

A project of this dimension could be like a full blown building job. On the frame, 1/2 inch pine stock stands in for heavy 2x4s. A steel miller substitutes for a nail gun. A platform plywood and pressure treated 2x4s corner at the foundation. And the small size of the basic components allows the assembly to follow a different course that's simpler and faster than regular framing.

Here are the basic steps the jobbers followed:

- 1. While** Lay the sheets of 1/2 inch plywood on top of each other so you can cut out two identical 16x24 foot pieces. Stand up all four walls, overlap the corners, attach them together with screws.
- 2. Framing** Cut 1/2 by 2x6 end joists to length for studs and eaves, then glue and nail them to the walls, eaves and the platform base.
- 3. Platform** Screw together a framework of pressure treated 2x4s. (Make



sure to make the outside corners to hold the end grain.) Check for square by measuring diagonally to opposite corners, when the measurements are equal the platform is square. Then nail on the 1/2 inch plywood floor. The platform should be 16 inch smaller than the exterior length and width of the doghouse shell. That way the shell will wrap around the platform. The bottom studs rest on the platform and hold the structure inches off the ground. Once the wall is in place, fasten the walls to the platform with 1/2 inch galvanized screws.

4. Roof Glue and screw the ridge beam between the peaks of the gable ends. Glue and screw the rafters to the beam and to the top chords on the walls. Tie adjoining rafters to each other just below the ridge beam with strips of plywood. Finally install the roof or 1/2 inch plywood on the edges overlap at the peak. "I could stand on this roof and it wouldn't sag," Mark says.

After the shell is complete, take your time adding the trim, the windows and the siding and siding. The jobbers took their time, they didn't want to do the same as most homeowners only in miniature. "I could get 32 years out of this house, no problem!" Dale says. —THOMAS BAKER

ACE
The helpful place.



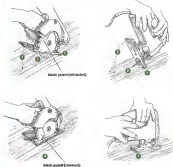
- The Best Washable Flat Paint You Can Buy
- The Only Paint With Scotchgard® Protector
- Keeps Its Original Appearance After Cleaning
- Available In Over 1000 Colors

For retail locations
call 800-LOVEHOME (645-5282)
or visit www.acehardware.com

Skill Building

Plunge-Cutting Techniques

[Pictured by Andrew F. Pfeiffer for "Perfect Piece" (page 52)] Whether you're seeking a quick cutout in a countertop, removing damaged flooring, or creating a new opening for a skylight, knowing how to plunge cut comes in handy. The key you don't have to drill a pilot hole or start from the edge of the material. Both circular saws and jigsaws can make plunge cuts. Jigsaws are best for thin stock, $\frac{1}{4}$ -inch or less; circular saws are good for thicker materials, such as the framing for a subfloor or roof. The basic technique is the same for both tools. Use a scrap board and hold the saw steady with two hands. To get the hang of things, try a few practice cuts on scrap material. —MAK FERGUSON



CIRCULAR SAW

Adjust the blade to cut as close to the handsaw's teeth as the thickness of the stock. Hold the saw by the handle with both hands and rest the front edge of the baseplate on the wood (1). As you move away from any corners or ends that you don't want to cut out, the saw will "nose" backward and the blade is completely leveled (2). Lift the tool up so the blade is about 2 inches above the stock (3). Push the blade down with the thumb of your leading hand. Now turn on the saw and gradually lower the spinning blade slightly (4) until it just makes firm pressure on the front of the baseplate (5). After the entire baseplate is resting against the wood, release the blade guard and push the saw forward (6).

JIGSAW

Turn off the saw's orbital setting, if it has one, and tip the saw forward on its baseplate (1). Hold the blade above the work surface, inline with your cut line (2). Turn on the saw. Then, slowly push the baseplate down (3). Apply light pressure and be patient—the blade will scrape at first but will gradually dig through the wood as its teeth get to work. When the blade cuts through and the baseplate has passed the wood, then it's okay to push the tool forward (4).

Replacing Screens

[House Call (page 42)] If your screens have turned into saggy, droopy, battered cylinders, it's time to replace them with new ones or, if you prefer, fiberglass or metal (aluminum or brass). Whatever type of screening you use, the trick to replacing it is to install the new piece so it's stretched to but not fit as a tight as a corner.



- 1. Cut the screening over-size.** Three or four extra inches of length and width past the inside of the frame gives you something to pull on.
- 2. Stretch the frame.** Slip a piece of $\frac{1}{4}$ -inch scrap wood under one end of the screen frame, then gently clamp both sides down to your work surface. This makes the frame lay perfectly flat. After the new screen is in place and the clamps are removed, the frame springs back and pulls the screen tight. (Caution: Too much of a bend can break a metal frame.) Larger wooden frames may need scrap under both ends in order to get enough bow.
- 3. Keep the screening strands in line with the frame's edges.** When the new screen is pulled into place and will not shift, it's time to install the screen. The key to this rule: Always pull screening online with its strands. Pulling against it at an angle distorts the weave.

The exact replacement method depends on how the screen is mounted in its frame. Screens on wooden frames are generally held in place with staples that are covered with wooden molding strips. To make a small pry bar and needle-nosed pliers to remove the old staples and a staple gun and a hammer to replace them. Newer metal screens rely on staples, a round strip of rope (that fits tightly only in a groove in the frame), two metal tension rollers (shown above) to push the screen and spline into the groove — T.S.

Kikkoman
the
flavor
with
KIKKOMAN TERIYAKI



Show how you Kikk Up The Flavor by entering to become the 2005 Kikkoman Teriyaki Ultimate GrillMaster. Prizes and details at ultimategrillman.com.

©2004 Kikkoman International Inc. Contact your local retailer for complete rules, prize details and entry form. Visit www.kikkoman.com or write to "Kikkoman Contest" at 1880 Century Drive, San Francisco, CA 94133. While they last. Winner notified.



1

2

Stripping Wallpaper

When You Want Something Done Right, Do It Yourself—page 103. Anderson finishers who have learned the art of wallpaper can build up inside rich houses like on top of stairs, making all attempts to remove it. That was the situation Carl Mattson and Rob Smith faced in their 2501 Atlanta bungalow. Layers and layers of lumpy wallpaper—some covered in paint—on walls, windows, and ceilings, and even on the ceilings of closets.

Wallpaper-stripping chemicals couldn't budge the accretion of paper, paint, and glue (and created a stinky mess in the process), so they tried a **wallpaper steamer** (1), a \$50 gadget that turned out to be their savior. The two-port device has a 1-gallon water heater that steams the floor and an 8-by-31-inch steam plate that connects to the boiler via an 11-foot hose. To use the steamer, hold the lightweight plastic plate against the wall until the paper becomes dark and wet and begins to bubble—anywhere from 35 seconds to a minute, depending on how many layers the steamer is penetrating. Cutting holes in the paper first with a **scoring tool** (2) makes removal go faster. Then simply scrape off the paper right down to bare plaster with a **chisel-edge scraper** (3). With practice, you can be stripping the wallpaper with one hand as you scrape the second piece off with the other. The boiler goes 75 minutes between fill-ups.

While steam did the bulk of the work in the Mattson Smith bungalow, chemical strippers still come in handy next to water from areas where the steam plate can't reach, and on the bits that remain after steaming. —T.H.

PHOTO: GETTY IMAGES/DAVID J. PHILLIPS

PHOTO: JEFFREY M. HARRIS

Stenciling a Floor

"Dusting Up a Classic" (page 104) Inspired by the stenciled floors they'd seen in historic houses, Marshall and Beadie Book wanted to have a period design around the kitchen table area in their newly restored 19th-century farmhouse. And they were determined to do it themselves.

Although there are many sources for period stencils and stencil patterns online and on the Web, Beadie found the pattern he wanted on some old stenciled floorboards. Then using his training as an engineer, he took a black and white photo and converted it into a full-sized stencil outline using AutoCAD architectural design software. (Using tracing paper is the other option.) In all, he made three stencils—one for the corner and two for the sides—by cutting them out of a clear sheet of vinyl with an electric razor knife. The actual task of stenciling fell to Marshall, after the oak floor had been sanded, stained, and varnished twice.



Creating the design took one six-hour stretch. "Once I started, I couldn't stop," Beadie says. When the paint dried, a couple of days later, the Books pulled off the tape and sealed their handiwork under a final coat of varnish. Now, after a year and a half on deck, the stenciled area blends perfectly with the rest of the floor. —KATE REAY

The Basics

Outline the border. Low-tack painter's tape helps keep the work aligned.

Tap down the stencil. The stencil must remain stationary.

Paint point through the stencil openings. Hold a dry brush—one barely dampened with oil-based staining paint—vertically, tapping it lightly so that only the tips of the bristles touch the surface.

Align the next stencil with the preceding one. Use the stencil registration marks to line them up.

Keep them clean. Every two to three "taps," wipe the stencil clean so they won't smear.

Blend the seams. A soft-bristle tongue brush matted of square holes makes them disappear.

trust.

America's #1 Brand of
Construction Adhesives

The LIQUID NAILS® brand has earned the trust of professionals and do-it-yourselfers for its unrivaled strength and durability—even under the most extreme conditions.

LIQUID
NAILS
brand

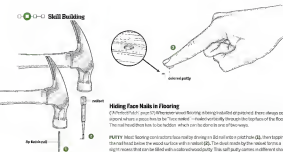
Right for Every Project™

constructions adhesives

"Great Stuff made my home a lot more comfortable. And I can say with all certainty that I'm 70% confident it can do it for yours."



Skill Building

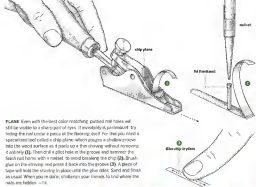


Hiding Face Nails in Flooring

(A Perfect Finish, page 57) Whenever wood flooring is being installed on joists, there always comes a point when a process has to be "face nailed" — nailed vertically through the top face of the flooring. The nail head then has to be hidden, which can be done in one of two ways.

PUTTY Most flooring contractors face nail by driving in a nail into a pilot hole (1), then tapping the nail head below the wood surface with a mallet (2). The dent made by the mallet forms a slight recess that can be filled with a color-matched putty. This soft putty comes in different shades, then can be tinted to match the flooring. But it shouldn't be used until after the first coat of floor finish is applied, otherwise the putty will sink into the wood. Once the first or dry film (3) of putty is applied, the wood color should seem a bit lighter (3), and the nail head is hidden. Gently wipe away the excess. Two more coats of finish will protect the putty from wear.

ILLUSTRATION BY ALAN HARRIS



PLANE Even with the best color matching, putted nail holes will still be visible to a sharp pair of eyes. It's avoidable, it's just easier. By hiding the nail under a piece of the flooring itself. For this you need a specialized tool called a chip plane, which gouges a shallow groove into the wood surface as it pushes up a thin shaving without removing it entirely (1). Then drill a pilot hole in the groove and remove the chip nail hole with a mallet, to avoid breaking the chip (2). Brush glue on the shaving and press it back into the groove (3). A piece of tape will hold the shaving in place until the glue dries. Sand and finish as usual. When you're done, challenge your friends to find where the nails are hidden. —T.S.

Why did I ask my doctor about Cialis?

Because it's not just about me, is it.

36-hour Cialis. When the moment is right, will you be there? Not the best time, but you will be glad you talked to your doctor about Cialis (tadalafil). Cialis lets you and your partner choose when the moment is right. Cialis is the only erectile dysfunction tablet clinically proven to not only work fast, but also work up to 36 hours. Leaving up to 36 hours means you can take your time, not rush and be ready when the moment is right.

Ask your doctor if prescription Cialis is right for you. See important safety information below and Patient Information on following page.

* Individual results may vary. Not studied for multiple attempts per dose.

Cialis is not for everyone. If you take nitrates, often used for chest pain (also known as angina), or alpha-blockers (other than Flomax 0.1 mg once daily), prescribed for prostate problems or high blood pressure, do not take Cialis. Such combinations could cause a sudden, unsafe drop in blood pressure. Don't drink alcohol in excess (to a level of intoxication) with Cialis. This combination may increase your chances of getting dizzy or lowering your blood pressure. Cialis does not protect a man or his partner from sexually transmitted diseases, including HIV.

The most common side effects with Cialis were headache and upset stomach. Backache and muscle ache were also reported,

sometimes with delayed onset. Most men weren't bothered by the side effects enough to stop taking Cialis. Although a rare occurrence, men who experience an erection for more than 4 hours (priapism) should seek immediate medical attention. Discuss your medical conditions and medications with your doctor to ensure Cialis is right for you and that you are healthy enough for sexual activity. In clinical trials, Cialis was shown to improve, up to 36 hours after dosing, the ability of men with ED to have a single successful intercourse attempt.

Cialis is a registered trademark of Janssen-Cilag. Cialis (tadalafil) is a registered trademark of Janssen-Cilag. Flomax (tamsulosin) is a registered trademark of Janssen-Cilag. © 2010 Janssen-Cilag. All rights reserved.



www.cialisusa.com
1-877-4-CIALIS

Cialis
Pfizer Inc.



CATCH GAMES FROM THE OWNER'S BOX, CONVENIENTLY LOCATED NEXT TO THE FRIDGE.

With a Sport Court® backyard game court, you can watch your kids play everything from hoops to hockey on a safe multi-court surface, all while making a ham sandwich. See our gallery of custom built courts at sportsport.com or call 888-690-6070.



SPORT COURT



Norm's Notebook



Keeping Paint Fresh

The best way to keep old paint fresh and keep it in a can with a tight-fitting lid. And the best way to ensure that the lid fits tightly is to keep the screws through all five top of the can plate. That's not doing it, because it collects paint every time you open.

Here's a trick I use. When I feel a can is just a little bit too tight, I use a screwdriver to dig back into the can in a few places. And before pulling the lid back, I run my brush around the trough to clean it of any excess paint. Sometimes I even use a clean rag.

One other benefit to having a clean trough. There's no paint splatter so I pound the lid down with a rubber mallet.

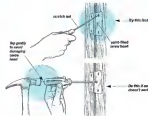
NORM'S TIP

"I always have two metal handgrips in my toolbox. The first one holds many of my bits. The other one contains handgrips. No one's perfect."

Removing Sticky Screws

Sometimes it's just as tough to remove screws that are embedded in wood as it is to loosen screws that are nailed into metal. Phillips head screws that have been painted over can be particularly difficult.

The easiest solution is to dig paint out of the screw head using a scratch awl. Then the screw driver can get the maximum leverage on the screw slot. But if that doesn't work, try this approach: Hold a screwdriver with its tip in the slot and gently tap the handle with a hammer or mallet to force the tip deeper into the screw slot. Then, without removing the screwdriver, try backing out the screw. Gentle persuasion is all you need; a hard pounding could damage the slot or the surrounding surfaces.



New Life for Old Plastic

Here's a great use for those old credit cards you find in hotel room keys or those scan cards you often get at home shows. Disposable cards are perfect for sanding small amounts of epoxy or wood filler. Sometimes I find their rounded corners are just the thing for shaping a cork board. And I've even used one to scrape wax off the windshield of a rental car.

These useful little tools don't take up much space in your toolbox, don't have to be cleaned, and can be easily shaped as needed. If using a credit card, just be sure to cut off the numbers to protect your privacy.

handrails

Mississippi homeowner Leventt Flint needed handrails in his stairways, but was puzzled by how to put them in, so he emailed *Ask The Old House*, and Tom Silva showed up to lend an expert hand.



irrigation

Outside of Los Angeles, Roger Coon and specialist Bob Gelbreath help homeowner Sherry Seale restore water to her slice of the high desert.

sinks

Minnesota homeowner Anne McCandless tried to fix her nasty bathroom sink stopper with a piece of a stick. Richard Trethaway provided a more professional solution.



closets

California couple, Brandon and Marianne Gauthier's sliding closet doors were stuck. They emailed *Ask The Old House*, and before long, Tom Silva put them back on track.



what's your problem?

Tune in and watch *The New This Old House Hour*, Thursday nights at 8:00 p.m. ET to see if we have the answer you're looking for.



(Check local listings or visit www.asktheoldhouse.com)

American Standard
The Bathroom Fix Experts®

GMC
Garage & Motor Control

Home Depot

SCHLAGE

PHOTO

ARCHIVE THE HOUSE



"Copper Cameback"
TB Head Stand Mixer, Model KM55295
Custom Melillo Series (KitchenAid) St Joseph, MI: 800.844.6390
kitchenaid.com

Copper opener faucet
Medco Waterworks 800.998.2284
waterworks.com

English-style tiles and counter tops
Figo Design Inc., Brewster, NY
800.636.8348 figodesign.com/figo.com

Hardware (CLOCKWISE) Modern
Craftsmen bar pull; Modern Craftsmen
6 inch pull; Modern Craftsmen knob

Craftsmen knob and California Craftsmen
pull all from Atlas Hardware, Glendale,
CA: 800.799.8376; atlashardware.com

Range (not pictured)
Le Corbusier at Parson Murray Inc.,
Brooklyn, CA: 415.468.9520
parsonmurray.com/lecorbusier.com

"Back to the Rail"
Erykka USA, Dallas, TX: 800.225.9626
erykka.net

"The Lake to Sea"
Our friends—Margaret A. Martin for her
photographs appearing in this story and
See This Old House on the magazine's back
page. Brian Harris at the Washington Historical
Society (Harris House Museum and John L.
Kempner Research), Irving, Washington, DC,
www.kempnerresearch.com

Origins of loose stamps
L. Robinson & Co., Gillingham, Kent, England;
00-44-163-4951282; public-clips.co.uk

Chompo Products, Wadsworth, OH 330.336.
8657; stampco.com

KITCHEN DESIGN

Blood Plate
pg. 31-33
Architect: William J. Martin AIA, RCM
Architect, Westwood, NJ
201.666.9576; wjmartinarchitect.com

Kitchen designer Alan Aarow, CMRD, CR
Lynch Inc., Ridgewood, NJ: 201.445.2550

Contractor/Builder Jim Burke
Burke Built Construction Inc., Washington
Township, NJ: 201.664.2122
burkebuilt.com



Geometries Granger DGS, Parkton, PA
215.453.7561; grangerdgs.com

Range Wolf Range Co., Long Beach, CA
800.365.9433; wolfrange.com

Refrigerator Sub-Zero Proctor Co.,
Madison, WI: 800.332.7600; subzero.com

Dishwasher Made in... Princeton, NJ
609.419.9808; madeinprinceton.com

Stone countertops Stone Surfaces Inc.,
East Rutherford, NJ: 201.935.9803

Kitchen area rug Woodard & Weave
"Camden Street" Woodard & Weave Inc.
Antiques Corporation, New York, NY
800.332.7647; woodardweave.com

Dining area rug Woodard & Weave
"Brussels" Woodard & Weave Inc.
800.332.7647; woodardweave.com

LETTERS

Coal Grind
pg. 26-37
Grills: Large Extra Tall G.S. Grill Dome
Memorex, CA: 800.905.4880
grilldome.com

Wok D4 Cooker, Model HVC500155
Wok Range Corp., Greenwood, MS
662.455.1293; wokrange.com

Walter 255 French One Touch Gold

Directory



Water Stephen Products Co.,
SDFP345-9200; stephen.com

Arctic Berbecoff, Parkton, PA
215.257.6593; gourmetgrills.net

Black Dog Barbecue Comalco
New Braunfels, TX: 800.841.8400

**Kingford K6800 Masterbuilt Outdoor
Products** Columbus, GA
800.489.2581; masterbuilt.com

Lump charcoal Western Hardware Lump
Charcoal, WA Wood Inc., Pleasanton, TX
830.569.2500; woodinc.com

For more information on charcoal grilling:
The Hearth, Pace & Barbecue
Associates, Arlington, VA
703.522.0066; tpba.org

The California Barbecue Association
Anaheim, CA: cbbqa.com

Special thanks to—
Kansas City Barbecue Society, Kansas City,
MO; Carolyn Wells, executive director, 800.
963.5227; kcbb.com

SIDEWALK

Best of Clay
pg. 47-48

Expert/Builder Suzanne Perreault, Perreault
Rays Gallery, Lambertville, NJ
609.397.8304; suzperreault.com

New take Moroccan Pottery and Tile Works



Museum Doylestown PA
215 345 6722 Pwaweb Pottery Detroit MI
313 832 0954 pwaweb.com
Mature Tileworks, Ann Arbor MI
734 213 0017

TOOLS/TEST

Powered by Jigsaw?
pp 53-59

Hitsch model #C120V Hirsch USA
Atlanta GA 800 448 2244
Machpower tools.com



Black & Decker model #J270CK S.S. Jig
Scrolling and Orbitol Black & Decker
Hampstead MD 888 676 0276



Unfinished To Finished
In Half The Time

Now wood finishing is easier, it's fast, easier, so easy with Minwax Polyshield. That's because Polyshield combines stain and polyurethane in one. So you can stain and seal in one step. No more sanding, no more staining, no more sealing. No more sanding, no more staining, no more sealing. No more sanding, no more staining, no more sealing.

Long lasting protection and a warm, lustrous Polyshield finish in a variety of colors. And you can seal your wood without having to sand, stain or seal. No more sanding, no more staining, no more sealing. No more sanding, no more staining, no more sealing.

Stain & Polyurethane in One

MINWAX

Makes And Keeps Wood Beautiful



BlackandDecker.com
Machete model #67E135 Plus
700-watt Electronic Orbitol Machete USA
West Chester PA 610 436 5900
mch.com
DeWalt model #DC330K Heavy Duty XRP
18-volt Cordless Drillbit Hempstead MD
800 433 6258 dewalt.com
Machete model #63M6FRT, Flip Inside
Jigsaw with LED Light Machete USA Inc.
La Mesa CA 761 523 8566
machete.com

Bosch Model #62104 24-volt Cordless
Robert Bosch Tool Corp. Mt. Prospect IL
877 267 2409 boschtools.com
Skil model #43900 Skil Robert Bosch Tool
Corp. 800 349 4358 Skil.com
Craftsman model #27245 Laser Trac
Orbital Sander Hoffman Estates IL
800 349 4358 craftsman.com

SPRINKLER
A Perfect Puddle
pp 57-60

Floor Installer Patrick Hunt Hunt
Hardwood Floors Lexington MA
781 502 3596



GREEN HOUSE
Serve Cold Cuts
pp 65-66

Clear choice for—
Energy Star Washington D.C.
888 762 7637 energy.gov



American Council for Energy Efficient
Technology Washington D.C.
202 429 8833 aceee.org

TECHNOLOGY

Wi-Fi Means Your Walls
pp 71-74

Wireless router models shown: Netgear Inc. Santa Clara CA 408 909 6000
netgear.com & Link Fourstar-Wallace CA



800 326 1658 dlink.com
Apple Macintosh Apple Store
800 692 7752 store.apple.com
Belkin Corp. Campbell CA
877 523 5546 belkin.com
Linksys Irvine CA 800 546 5260
linksys.com

SPRINKLER'S BANNER
Scouting Drip Irrigation
pp 79-84

Garden designer Rick Dean Carb Appeal
Landscaping Los Angeles CA
323 829 2858 ackdesigners.com
Revised macro irrigation system
Blue Stage Corp The Toro Co. Bloomington
IN 800 967 8676 toro.com
Machete model #63M6FRT, Flip Inside
Jigsaw with LED Light Machete USA Inc.
La Mesa CA 761 523 8566
machete.com



A LEYFORSER LOCK YOUR HOUSE
pp 85-87

Designer/Builder: Delmar Mark Justice
East State Company Piquette PA
215 580 2087
Weathering subcontractor:
Durham Woodworking Oliveville PA
610 847 3333 Contact: Pennsylvania The
American Society for the Prevention of Cruelty
to Animals New York NY



212 576 7700 aspca.org
Animal rescue/The Humane Society

The quietest
revolution
in history



The air conditioning revolution here is efficiency over Panasonic makes the world's quietest variable speed, inverter-driven compressor technology that lets our Whisper series fan spin over higher level of performance.

New variable speed control delivers 100% output and motion control innovations result in high energy efficiency and performance while offering maximum inverter-driven compressor control. These air profiles enable to control heat and light with the only Panasonic fan you'll hear at our national customers.

For more please call 800 262 7661 or visit panasonic.com/cooling



panasonic.com/cooling



Panasonic ideas for life

Wilmington, DE 302 452-5100 hau.com
DayHouse temperfab.com U Haul
 International Inc. 800 468-4261, hau.com
Our special thanks to—
 Homeowner Williams and Barbara Jean
 Hannah, Tamara and Peggy Wright, Dot Swafford,
 and Rusty Suttles,
 Dog momm Theroyette, Theresa Mullins, Richard
 and Helen Hill, Steven Gullotta and Dale Joffe
 Janssen/Head director of media
 and public relations U Haul International

Geoff Arthur Haggerty, Haggerty One
 Trining, 800 795 6990, haggertydog.com
 Fred Robert, author of *Decorators*
 Abbotsville Press.

DESIGNWORK

Designers Jane Corleik Design &
 Restoration, Savannah, GA 912 934 8402;
jane.corleik.com



Residential designers John Guggis, John
 Guggis Environmental Design, Richmond
 Hill, GA 902 707-3906

Painting contractors Parker Chapman
 Chapman Painting Contractors Inc.,
 Savannah, GA 912 927 2345
Carpenter Bruce McNeil, Old Masters,
 Savannah, GA 912 355-3223

Awakeness windows and kitchen sink
 Available through Harris Depot
 800 658 8799, homedepot.com

Painted outdoor chairs and opulent table
 Classic Tybee Furniture, Tybee Island, GA
 912 544 5552

Flowers and plants Holly Jenkins and
 Susan Gomez, Cardinale Gardening,
 Savannah, GA 912 441 4824 or
 648 655 1238

Roofing Ace Roofing and Remodeling
 Outfit, GA 912 954 3620

Plumbing installation Billy Daniel, Quality
 Control Plumbing, Tybee Island, GA
 912 708 0430

Electrical installation John Russell
 Russell Electric, Savannah, GA
 912 960 1307

HVAC installation Paul West, Best Heat &
 Air, 912 927-1588

Glass tile Down Side Tile available through
 Modern Tile and Stone, Savannah, GA,
 912 234 3274

Tile installation Miller Ceramics,
 Savannah, GA 912 343-7818 or
 912 627 2728

Special thanks to—
 Tybee Island Historical Society
 912 769 6000, tybeelighthouse.org

CREAT ADAPTATIONS

Cooking Up a Climate
 pp 124-125
Architect Fred Roe, Residential
 Consultants, State College, PA
 814 236 9997

Master carpenter David Henry Wright Jr.,
 Crookston Millworks, Bellefonte, PA
 814 260 5110

Cabinetry Design Group 42, Hemlock
 Based Squarestyle Wood Made First
 Custom Cabinetry, Kinsman, PA
 817 626 7500, wood.made.com

Kiva finishing Pierre Finkelstein/Institute
 of Decorative Painting, New York, NY
 212 369 2058, pinkstein.com

Wooded lighting Halo, Cooper Lighting,
 Houston, TX 713 288 8400
cooperlighting.com



4-zone controller Lukon Griffin Eye, Lukon
 Electronics Co., Coleridge, PA
 855 585 7661, lukon.com

Paint The Sherman Williams Co.,
 Cleveland, OH 216 885 2000
shermanwilliams.com

Backsplash Webster, Florida Tile
 Lakeland, FL 883 653 8856, floridatile.com

Range/vent hood dishwasher
 sink/separator Viking Range Corp.
 Greenvale, NY 914 455 1200,
vikingrange.com

Sink/Isacat Franke Group, Auburg,
 Switzerland, franke.com

Standing wave steel roof Federal Metal
 Wall and Roof Systems, Lancaster, PA
 800 477 2261, federal.com

WHEEL AND TIRE WILL SMTH

pp 120-121
Pool contractors
 Andy Emery and Bob Effner, Emeraldwood
 Pools Inc., Cheltenham, MA 800 896 6996



environmental ebos.com

Cabana company
 Summerwood Outdoors, Summerwood
 Products, Toronto, Ont., summerwood.com
 866 539 4034

Electronic chlorinating systems
 Goldline Controls, Hayward Pool Products
 Inc., North Kingstown, RI 800 343 0526
goldlinecontrols.com

TRANSFORMATION: If You Want Something Done Right, Do It Yourself

pp 126-128
Project designer and builder

The strong, silent types
 always go unnoticed.



That's Mr. Silas, our director who's been working since
 about the window. Another one of the many ingenious
 products you'll find at mitsubishielectric.com/us.



THE EASIEST WAY TO MAKE OLD SURFACES LOOK NEW.





AMERICA'S
PREMIUM
GARAGE
FLOOR
COATING
BEST SELLING



How do you spot an EPOXYShield garage? By the show-stopping-quality look. The durable, easy-to-clean, stain-resistant surface. Oh, and the place neighbors make your garage the envy of the neighborhood.

ENTER TO WIN A
\$10,000
GARAGE MAKEOVER
GO TO EPOXYSHIELD.COM OR
CALL 800-451-4511 FOR CONTEST DETAILS

RUST-OLEUM
stepping rust in the first!

AVAILABLE AT



©2011 Rust-Oleum Corporation

Directory



Carl McElroy and Rob French Atlanta GA
404 624-4260

Exterior painter: Superior Painting &
Remodeling Atlanta GA
404 622-6302

Finish on porch floor and ceiling: Minnie
Wood Finish Golden Oak 2500 and Minnie
Helenwood Upper Linthouse Minnie Co. Upper
Sedell River NJ 800 523-9299 minnie.com

Dark kitchen subway tile: Minnie
PolyShedder Bombay Mahogany
380,480 minnie.com Minnie Wood Finish
Dark Walnut 2756 Jamesville Co

Green kitchen cabinets: Minnie
Water Based Wood Stain Green/Vegetal
Minnie Co

Kitchen hardware: Chrome satin nickel
colored knobs Restoration Hardware
restorationhardware.com

Kitchen appliances: Range by Jenn Air
jennair.com is featured by Kennam
kennam.com dishwasher by Maytag
maytag.com

For more information on Grant Park:
Jeff McCall, president of Grant Park
Neighborhood Association Historical
Committee Atlanta GA 404-622-4444
grantpark.org

WORKSHOP: Ask This Old House
pg. 136-139

"What's It?" Grippeler Ladder Steps, The
Grippeler Co., Houston TX 713-664-0001



maple.com

Decorative cabinet hardware: Wainwright
Buffalo Grove IL 800 879-8289
www.wainwright.com

Cement installers: Taperm ITW Builders
Reno NV 800 254-5350 itwbuilders.com
Cement backs: Durock Durock cement
boards USG Chicago IL
800 824-4568 usg.com

Thermal mortar: Duxford Cement
Products South Fallow IN 904-888-1111
duxford.com

WORKSHOP: Seal Sealing
pg. 137-145

"Back Palace: The Inside Story"
Crafted by East State Carpentry Petersburg
VA 258 583-2057

"The No-Lighter Flare BBQ Fire"
Special thanks to: James Purnette, author
Webster's Bar-B-Qing: Sunset Books



No-lighter-BBQ starter: Cherry starter
model 857056 Webster's Bar-B-Q Products
Co. 800 448-1071 webster.com
Cherry-BBQ electric charcoal starter model
4254610 Columbus GA
706 571-7000 cherrybbq.com

"Sensational Floor" Pierre Pichelin
best site of Descriptive Painting
New York NY 212-682-8258
pichelin.com

"Hiding Face Nails in Flooring" Norton
available online at Lee Valley Tools Ltd.
Ogdensburg NY 800 870-6858
leevalley.com

"Stripping Wallpaper": Wagner Power
Steam Wallpaper Remover Model 8726
Wagner Spray Tech Corporation Plymouth
MI 800-328-6251 wagnerpower.com

Enzymatic wallpaper stripper
DIF Concentrate Liquid Zissler Co. Inc.
Somerset NJ 908 889-8892 zissler.com

THE VICTORY GARDEN

LIVE OUTDOORS

Tune in Saturdays at 12:30pm

with local hosts

plus our victory garden

Partly Sponsored by The Home Company, Ace Hardware Corporation, and Subaru



Check Out Vintage Projects from Previous Seasons

What's on TV Now

Don't miss these vintage projects on HGTV, DIY Network, and local broadcast stations. Go to www.thisoldhouse.com for local stations and times and for additional information about the projects featured here.

HGTV

WATERLOO

The show moved off its 20th anniversary with the renovation of a sprawling 1800 Queen Anne-style Victorian in Waterloo, Massachusetts.

CHARLESTOWN

This Old House worked on the expansion and renovation of an 1805 Second Empire townhouse on Rucker Hill Street in the historic Boston neighborhood of Charlestown.

WIDE PAIR BEACH

This Old House team heads to sunny Florida, where they transform a Mediterranean Revival-style bungalow into a tropical tropical compound.

DIY NETWORK

SELMONT

The restoration of a 1967 single-story Victorian is featured in this project. It also included the removal of asbestos siding and the overhaul of the kitchen.

HAWAIIAN BUNGALOW

The expansion and expansion of a 1930s vintage-designed Queenside bungalow is the featured project.

LOCAL BROADCAST STATIONS

LEXINGTON

Restored architect Graham Gurnett designed a second floor addition and a front porch for this radical reimagining of a typical 1950s home instead of referencing the past. Gurnett invented the present, and the result was a house designed with excellence.

This Old House CLASSICS



ON TELEVISION

Find your local stations and air times for all of our shows simply by entering your ZIP code at www.thisoldhouse.com/tvprograms/tvchedule



Find
HOME RENOVATION SERIES

The hit design and collecting series continues to celebrate the world of beautiful objects in its second season on PBS. The Koro brothers, along with the newest cast member, interior designer Alexa Hampton, show you how to combine the old with the new, reveal the basic principles and practices of interior design, and explore the creative process itself. Inspired home design begins when passion and knowledge meet. Send in your treasures to www.find-tv.com and the Koro brothers might just knock on your door. Be sure to tune in each week on PBS (check your local listings or visit www.find-tv.com).

Produced by
Koro Brothers

Produced by
Koro Brothers

Produced by
Koro Brothers

This Old House

In only ten remarkable months, the transformation of our 25th anniversary project house in Catefield, MA is complete. Master carpenter Norm Abrams, general contractor Tom Silva, plumbing and heating expert Richard Trethewey, landscape contractor Roger Cook, senior design consultant New Hampton and host Kevin O'Connor have once again applied their years of experience to create a home that blends tradition and technology. On PBS, you've seen the progress with each unfolding episode of the show. In the magazine, you've read articles that go into greater detail on such topics as converting a barn into living space. And now, beginning April 16 and running through May 28, the This Old House designer show house will be open to the public featuring 22 extraordinary spaces that emphasize a sense of high style for everyday living. Tickets are available at askthisoldhouse.com or ticketmaster.com.

Sponsored by
AOL-cityguide
aolcityguide.com

Produced by
This Old House

Produced by
This Old House

Produced by
This Old House

Produced by
This Old House

Produced by
This Old House



Ask This Old House

Ask This Old House returns for its third season on PBS with thousands of home-repair solutions. The guys will fix the road-blocking on-deck saturation, from West Coast stucco ranches to classic New England Capeos, solving some home maintenance problems. Tune in for new episodes of Ask This Old House in prime time exclusively on PBS, Thursdays in the second half of The New Old House Hour at 8 p.m. ET (visit www.thisoldhouse.com or check local listings). If you've got a problem for our experts, send an email to askthisoldhouse@thisoldhouse.com or mail a letter to Ask This Old House, This Old House Magazine, 3185 Avenue of the Americas, 27th Floor, New York, NY 10008.

Produced by
Ask This Old House

Produced by
Ask This Old House

Produced by
Ask This Old House

Produced by
Ask This Old House

Produced by
Ask This Old House

INSIDE House

Go behind the scenes and learn what it was really like back in the early years of This Old House. Host Kevin O'Connor shares some classic moments, and master carpenter Norm Abrams, general contractor Tom Silva, heating and plumbing expert Richard Trethewey, and landscape contractor Roger Cook divulge tricks of the trade and reveal which materials and techniques have stood the test of time. Catch inside This Old House exclusively on A&E. (Check local listings or visit www.aetv.com.)



OFFICIAL
SPONSOR OF
ANTHONY BOND
RENOVATION

DISCOVER
CHANNEL

GMC
HOME IMPROVEMENT

THE
HOMES

THE
HOMES

THE
HOMES

THE
HOMES

THE
HOMES



- Durable and quality construction
- Easy-to-assemble kit
- Mounts on your deck or patio
- Works perfect for shade & wind breaks
- Semi-hobby-level, delivered to your door

FOR CATALOG, SIZES & PRICES

• www.sunporch.com

Phone: 800-719-0767

1-800-221-2694

Business: 800-719-0767

Home: 800-719-0767



Imaginative Specialty products provide the most 60" dual beds on 1405 Federal base, one of more than 25 vintage style beds available from Sunrise. All our beds are crafted of cast iron for the ultimate in beauty, durability and best attention. To see our entire line of Period Bedframes, visit our website or call for a full color catalog. Sunrise products may be purchased through their showroom nationwide.

SUNRISE SPECIALTY

Toll: 800-444-1280 • www.sunrise-specialty.com

**Handcrafted.
Period.**

Hand selected woods
Hand fitted joinery
Hand painted finishes
Handcrafted custom
cabinetry The perfect fit
for your period home.

**CROWNPOINT
CABINETRY**

Period styling
Basic craftsmanship for the finest quality

800-999-1999 • www.crownpoint.com



Wide Plank Floors

Call for our free brochure
1-800-555-5615

www.ahhglash.com

Carlisle
The Best in
Hardwood Flooring

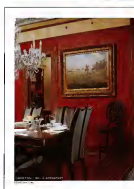
Handcrafted. Hand to you.

EXTERIOR • INTERIOR • HARDWARE

When the admiring throngs
BECOME TOO MUCH,
our shutters close for privacy.

Historically accurate, custom handcrafted cedar shutters from Timberlane®. With our hand-blended period finishes, they'll make your house shine. Call us for a free catalog.

800-450-2222 • TIMBERLANE.COM



**UNICO
FITS™
YOUR STYLE**

A custom made handcrafted PROVENANCE HISTORY SYSTEM SHOULD meet the challenge of a PROVENANCE AND COLOR COORDINATED SYSTEM. THE PROVENANCE AND COLOR COORDINATED SYSTEM is your EXACTLY what you need. That is why you call UNICO. We make the quality of our PROVENANCE AND COLOR COORDINATED SYSTEM. AND PROVENANCE AND COLOR COORDINATED AND COORDINATED SYSTEM. AND PROVENANCE AND COLOR COORDINATED AND COORDINATED SYSTEM. AND PROVENANCE AND COLOR COORDINATED AND COORDINATED SYSTEM.

By the way, have you ever seen our OUTLETS in the PICTURE LEFT wall, 800-827-0800. Your name is UNICO.

The Unico System

With The Unico System, it's Customizing





With these solid plastic ZipWall® dust barrier you put up by one person in less than 10 minutes. No tape, no ladders, no stained ceilings!

ZIPWALL
SP



For information or to order, call 1-800-719-0767, or visit www.zipwall.com. ZIP Wall® is a registered trademark of ZIP Wall®.



With the patented Screen Tight® FastScreening System, screening a porch has never been faster or easier. No more sticky with, lettering, staples, painting, messy stains, or difficult events.

For a FREE SAMPLE of the Screen Tight® system, call 1-800-719-7275.

Or visit www.screenright.com

INCINOLET®

PROBLEM SOLVED!

Need a toilet conveniently located? Home, cabin, boat or dock — INCINOLET is your best solution!

SIMPLE to install, maintain. Only electricity needed: 100 or 240-volt.

ULTRA CLEAR noise reduced to audible rust, so little as a cupful weekly. Dump in garbage.

TOP QUALITY stainless steel, platinum or chrome quality construction for a lifetime of satisfaction.

www.incinolet.com
Call 1-800-527-5551 for info, prices and personal attention.

INCINOLET PRODUCTS, Inc. 1000 Airline • Dallas, Texas 75210



Albany Woodworks
Superior Custom-Installed
Hardwood, Stained and
Laminated Woodwork

Call for a free estimate
1-800-553-1262
www.albanywoodworks.com

Tiger Claw®

Create a smooth nail-free surface

- Breaks Steel Construction
- Prevents problems commonly caused by weather.
- Creates a smooth, nail-free surface.
- Reduces noise
- Works with all types of decking materials
- Reduces fire



Visit us at www.tigerclaw.com and learn more about Tiger Claw.
Call 1-800-82-TIGER or visit www.tigerclaw.com

Families Have Saved Up To 50% On Heating Costs

And never have to buy fuel — wood, oil, gas, kerosene — ever again!

Hydro-Solar is a unique energy-by-radiation technology that can save you thousands of dollars in future heating costs by replacing oil and propane heating. It is easy to install, requires no fuel, and is completely maintenance-free. It is easy to install, requires no fuel, and is completely maintenance-free. It is easy to install, requires no fuel, and is completely maintenance-free.



Proportioned "Energy Star" fuel

- Your savings with Hydro-Solar
- Fuel savings up to 50% on heating costs
- Safe, complete peace of mind
- Easy to install, completely maintenance-free
- Unbeatable — easy to use
- No burning, no oil, no gas
- Portable (1200) or permanent (2000)
- Works from heating to triple use

Hydro-Solar units are easy to use.

Hydro-Solar is a complete, self-contained unit that can be used in any room. It is easy to install, requires no fuel, and is completely maintenance-free.

Hydro-Solar is a complete, self-contained unit that can be used in any room. It is easy to install, requires no fuel, and is completely maintenance-free.

Hydro-Solar is a complete, self-contained unit that can be used in any room. It is easy to install, requires no fuel, and is completely maintenance-free.

ORDER TODAY!

7 MODELS TO CHOOSE FROM

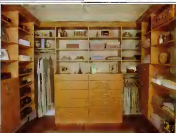
Model	Capacity	Price	Quantity
1. 1200 watts	1200 watts	\$129.95	1
2. 1500 watts	1500 watts	\$149.95	1
3. 1800 watts	1800 watts	\$169.95	1
4. 2000 watts	2000 watts	\$189.95	1
5. 2400 watts	2400 watts	\$229.95	1
6. 3000 watts	3000 watts	\$299.95	1
7. 3600 watts	3600 watts	\$349.95	1

Model	Capacity	Price	Quantity
8. 1200 watts	1200 watts	\$129.95	1
9. 1500 watts	1500 watts	\$149.95	1
10. 1800 watts	1800 watts	\$169.95	1
11. 2000 watts	2000 watts	\$189.95	1
12. 2400 watts	2400 watts	\$229.95	1
13. 3000 watts	3000 watts	\$299.95	1
14. 3600 watts	3600 watts	\$349.95	1

Name _____
Address _____
City _____ State _____ Zip _____
Phone _____
E-mail _____
Fax _____

Order today to receive your Hydro-Solar unit by mail. Call 1-800-627-9276 for more information.

1-800-627-9276
Visit us online at www.hydro-solar.com
Thank you for your order!
Printed in the USA



Easy To Design... Easy To Install... Easy To Afford...
Design your closet online! Free Shipping within the U.S.
Professional Quality Closets with a Lifetime Guarantee.

EasyClosets.com
Visit us at www.easyclosets.com
or call 1-800-813-0129 to speak to a professional closet designer



Hydro-Solar

Hydro-Solar is a complete, self-contained unit that can be used in any room. It is easy to install, requires no fuel, and is completely maintenance-free.

Hydro-Solar is a complete, self-contained unit that can be used in any room. It is easy to install, requires no fuel, and is completely maintenance-free.

Hydro-Solar is a complete, self-contained unit that can be used in any room. It is easy to install, requires no fuel, and is completely maintenance-free.

Swim at Home™



When exercise is a pleasure, fitness is easy...

Now you can exercise when ever you like, on your own schedule, at your own perfect pace. No treading, no crowded pools, no heavy chlorine. Just your own 8' x 16' totally uniquely advanced "coaster current" pool, where you relax or exercise against a smooth current that's infinitely adjustable to any speed or ability.

• Fits where conventional pools won't. Backyards, decks, garages, basements or sunrooms.

The total solution to powered pools, ultimate in health, "low-maintenance" and saving the.

Most architects and designers still can help you plan and finish your pool.

The Endless Pool™ is simple to maintain, economical in use, and easy to spend inside or out. Call us or visit our web site for more information.

FREE DVD

THE WATER CURRENT MOVIES, 100 SWIM ON EXERCISE IN PLACE



Call for your FREE DVD or Video
1-800-233-0741, Ext. 3639
www.endlesspools.com/3639



200 S. Durbin Mill Rd., Allentown, PA 18114



Spiral Stairs

Buy Factory Direct
Costs in Great Delivery

20 Years in Business
Best Value • Customer Service • World's Best
For a Free Brochure call 800-898-4282



www.bestspiralstair.com/vib

THE CROWN MAN'S
TOY- & TOOLBOX

NO MORE 1,000 Pre-engineered Buildings

Now look for building facilities only here.

QUALITY — Our unique steel roof frame design is

specifically engineered for strength & durability.

VERSATILITY — Our buildings are used for everything

from storage to business, thanks to flexible

customization you building to your specific needs.

APPEARANCE — Our buildings look more like modern

commercial — not like garages. Best on offer for

contemporary offices to choose from.

ADAPTABILITY — Our tall, rigid, pre-engineered

commercial buildings are built to be expanded.

Our design standards exceed most others & give us

well on offer for the past 10 years.

FACTORY-DIRECT PRICES

8' x 40' \$12,491 (vs \$19,750 market)

12' x 40' \$18,491 (vs \$27,950 market)

16' x 40' \$24,491 (vs \$37,950 market)

20' x 40' \$30,491 (vs \$47,950 market)

24' x 40' \$36,491 (vs \$57,950 market)

28' x 40' \$42,491 (vs \$67,950 market)

32' x 40' \$48,491 (vs \$77,950 market)

36' x 40' \$54,491 (vs \$87,950 market)

40' x 40' \$60,491 (vs \$97,950 market)

44' x 40' \$66,491 (vs \$107,950 market)

48' x 40' \$72,491 (vs \$117,950 market)

52' x 40' \$78,491 (vs \$127,950 market)

56' x 40' \$84,491 (vs \$137,950 market)

60' x 40' \$90,491 (vs \$147,950 market)

64' x 40' \$96,491 (vs \$157,950 market)

68' x 40' \$102,491 (vs \$167,950 market)

72' x 40' \$108,491 (vs \$177,950 market)

76' x 40' \$114,491 (vs \$187,950 market)

80' x 40' \$120,491 (vs \$197,950 market)

84' x 40' \$126,491 (vs \$207,950 market)

88' x 40' \$132,491 (vs \$217,950 market)

92' x 40' \$138,491 (vs \$227,950 market)

96' x 40' \$144,491 (vs \$237,950 market)

100' x 40' \$150,491 (vs \$247,950 market)

104' x 40' \$156,491 (vs \$257,950 market)

108' x 40' \$162,491 (vs \$267,950 market)

112' x 40' \$168,491 (vs \$277,950 market)

116' x 40' \$174,491 (vs \$287,950 market)

120' x 40' \$180,491 (vs \$297,950 market)

124' x 40' \$186,491 (vs \$307,950 market)

128' x 40' \$192,491 (vs \$317,950 market)

132' x 40' \$198,491 (vs \$327,950 market)

136' x 40' \$204,491 (vs \$337,950 market)

140' x 40' \$210,491 (vs \$347,950 market)

144' x 40' \$216,491 (vs \$357,950 market)

148' x 40' \$222,491 (vs \$367,950 market)

152' x 40' \$228,491 (vs \$377,950 market)

156' x 40' \$234,491 (vs \$387,950 market)

160' x 40' \$240,491 (vs \$397,950 market)

164' x 40' \$246,491 (vs \$407,950 market)

168' x 40' \$252,491 (vs \$417,950 market)

172' x 40' \$258,491 (vs \$427,950 market)

176' x 40' \$264,491 (vs \$437,950 market)

180' x 40' \$270,491 (vs \$447,950 market)

184' x 40' \$276,491 (vs \$457,950 market)

188' x 40' \$282,491 (vs \$467,950 market)

192' x 40' \$288,491 (vs \$477,950 market)

196' x 40' \$294,491 (vs \$487,950 market)

200' x 40' \$300,491 (vs \$497,950 market)

204' x 40' \$306,491 (vs \$507,950 market)

208' x 40' \$312,491 (vs \$517,950 market)

212' x 40' \$318,491 (vs \$527,950 market)

216' x 40' \$324,491 (vs \$537,950 market)

220' x 40' \$330,491 (vs \$547,950 market)

224' x 40' \$336,491 (vs \$557,950 market)

228' x 40' \$342,491 (vs \$567,950 market)

232' x 40' \$348,491 (vs \$577,950 market)

236' x 40' \$354,491 (vs \$587,950 market)

240' x 40' \$360,491 (vs \$597,950 market)

244' x 40' \$366,491 (vs \$607,950 market)

248' x 40' \$372,491 (vs \$617,950 market)

252' x 40' \$378,491 (vs \$627,950 market)

256' x 40' \$384,491 (vs \$637,950 market)

260' x 40' \$390,491 (vs \$647,950 market)

264' x 40' \$396,491 (vs \$657,950 market)

268' x 40' \$402,491 (vs \$667,950 market)

272' x 40' \$408,491 (vs \$677,950 market)

276' x 40' \$414,491 (vs \$687,950 market)

280' x 40' \$420,491 (vs \$697,950 market)

284' x 40' \$426,491 (vs \$707,950 market)

288' x 40' \$432,491 (vs \$717,950 market)

292' x 40' \$438,491 (vs \$727,950 market)

296' x 40' \$444,491 (vs \$737,950 market)

300' x 40' \$450,491 (vs \$747,950 market)

304' x 40' \$456,491 (vs \$757,950 market)

308' x 40' \$462,491 (vs \$767,950 market)

312' x 40' \$468,491 (vs \$777,950 market)

316' x 40' \$474,491 (vs \$787,950 market)

320' x 40' \$480,491 (vs \$797,950 market)

324' x 40' \$486,491 (vs \$807,950 market)

328' x 40' \$492,491 (vs \$817,950 market)

332' x 40' \$498,491 (vs \$827,950 market)

336' x 40' \$504,491 (vs \$837,950 market)

340' x 40' \$510,491 (vs \$847,950 market)

344' x 40' \$516,491 (vs \$857,950 market)

348' x 40' \$522,491 (vs \$867,950 market)

352' x 40' \$528,491 (vs \$877,950 market)

356' x 40' \$534,491 (vs \$887,950 market)

360' x 40' \$540,491 (vs \$897,950 market)

364' x 40' \$546,491 (vs \$907,950 market)

368' x 40' \$552,491 (vs \$917,950 market)

372' x 40' \$558,491 (vs \$927,950 market)

376' x 40' \$564,491 (vs \$937,950 market)

380' x 40' \$570,491 (vs \$947,950 market)

384' x 40' \$576,491 (vs \$957,950 market)

388' x 40' \$582,491 (vs \$967,950 market)

392' x 40' \$588,491 (vs \$977,950 market)

396' x 40' \$594,491 (vs \$987,950 market)

400' x 40' \$600,491 (vs \$997,950 market)

404' x 40' \$606,491 (vs \$1,007,950 market)

408' x 40' \$612,491 (vs \$1,017,950 market)

412' x 40' \$618,491 (vs \$1,027,950 market)

416' x 40' \$624,491 (vs \$1,037,950 market)

420' x 40' \$630,491 (vs \$1,047,950 market)

424' x 40' \$636,491 (vs \$1,057,950 market)

428' x 40' \$642,491 (vs \$1,067,950 market)

432' x 40' \$648,491 (vs \$1,077,950 market)

436' x 40' \$654,491 (vs \$1,087,950 market)

440' x 40' \$660,491 (vs \$1,097,950 market)

444' x 40' \$666,491 (vs \$1,107,950 market)

448' x 40' \$672,491 (vs \$1,117,950 market)

452' x 40' \$678,491 (vs \$1,127,950 market)

456' x 40' \$684,491 (vs \$1,137,950 market)

460' x 40' \$690,491 (vs \$1,147,950 market)

464' x 40' \$696,491 (vs \$1,157,950 market)

468' x 40' \$702,491 (vs \$1,167,950 market)

472' x 40' \$708,491 (vs \$1,177,950 market)

476' x 40' \$714,491 (vs \$1,187,950 market)

480' x 40' \$720,491 (vs \$1,197,950 market)

484' x 40' \$726,491 (vs \$1,207,950 market)

488' x 40' \$732,491 (vs \$1,217,950 market)

492' x 40' \$738,491 (vs \$1,227,950 market)

496' x 40' \$744,491 (vs \$1,237,950 market)

500' x 40' \$750,491 (vs \$1,247,950 market)

504' x 40' \$756,491 (vs \$1,257,950 market)

508' x 40' \$762,491 (vs \$1,267,950 market)

512' x 40' \$768,491 (vs \$1,277,950 market)

516' x 40' \$774,491 (vs \$1,287,950 market)

520' x 40' \$780,491 (vs \$1,297,950 market)

524' x 40' \$786,491 (vs \$1,307,950 market)

528' x 40' \$792,491 (vs \$1,317,950 market)

532' x 40' \$798,491 (vs \$1,327,950 market)

536' x 40' \$804,491 (vs \$1,337,950 market)

540' x 40' \$810,491 (vs \$1,347,950 market)

544' x 40' \$816,491 (vs \$1,357,950 market)

548' x 40' \$822,491 (vs \$1,367,950 market)

552' x 40' \$828,491 (vs \$1,377,950 market)

556' x 40' \$834,491 (vs \$1,387,950 market)

560' x 40' \$840,491 (vs \$1,397,950 market)

564' x 40' \$846,491 (vs \$1,407,950 market)

568' x 40' \$852,491 (vs \$1,417,950 market)

572' x 40' \$858,491 (vs \$1,427,950 market)

576' x 40' \$864,491 (vs \$1,437,950 market)

580' x 40' \$870,491 (vs \$1,447,950 market)

584' x 40' \$876,491 (vs \$1,457,950 market)

588' x 40' \$882,491 (vs \$1,467,950 market)

592' x 40' \$888,491 (vs \$1,477,950 market)

596' x 40' \$894,491 (vs \$1,487,950 market)

600' x 40' \$900,491 (vs \$1,497,950 market)

604' x 40' \$906,491 (vs \$1,507,950 market)

608' x 40' \$912,491 (vs \$1,517,950 market)

612' x 40' \$918,491 (vs \$1,527,950 market)

616' x 40' \$924,491 (vs \$1,537,950 market)

620' x 40' \$930,491 (vs \$1,547,950 market)

624' x 40' \$936,491 (vs \$1,557,950 market)

628' x 40' \$942,491 (vs \$1,567,950 market)

632' x 40' \$948,491 (vs \$1,

NEVER, EVER LET THE JOB FINISH YOU.



TUNDRA | MOVING FORWARD ►

When you've got a serious workload, you need a serious truck. With 6500 lb. of towing capacity* and an improved 282-hp i-FORCE V8 with VVT-i, the Toyota Tundra Double Cab has the muscle to get you through. So no matter how tough the job gets, your truck will never say die. toyota.com

*Refer to towing, confirm your vehicle and trailer are compatible, hooked up properly and you have any necessary additional equipment. Do not exceed any weight ratings and follow all instructions and cautions from your trailer sales manufacturer and Toyota vehicle Owner's Manual. The maximum amount you can tow depends on the total weight of any cargo, occupants and optional equipment. ©2005 Toyota Motor Sales, U.S.A., Inc.