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AN ARTFUL APPROACH

PHOTO: MARK LOHMAN

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Cover Photograph by
JOHN GRUEN
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PHOTOS: (CLOCKWISE FROM TOP) SARAH CHASSE; COLLEEN McQUAID (3)



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Reader mail JULY/AUGUST 2019



How to reach us

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→ Include your full name, address, and phone number. Published letters are edited for clarity and length.

THE JOY OF HANDS-ON WORK, *whether around the house or on the job site, was a recurring theme in responses to our March/April 2019 issue. In particular, the cover story about our apprentices and the related editor's letter elicited memories and hopes for the future.*

On skills and values

It is very encouraging that *This Old House* is promoting the development of skilled tradespeople, a career choice all but extinct in a culture that values technology and “college for all”—at least until the roof starts leaking or the furnace breaks down (“Stepping Up,” March/April 2019). It has become nearly impossible to find skilled plumbers, electricians, masons, and carpenters in my rural area of upstate New York. Even more challenging is finding such professionals who respect the building materials, skills, and creations of the past. I hope that somewhere along the way, young people will also learn the irreplaceable value of fine old-growth wood doors, trim, moldings, and floors; the superior quality and skill inherent in wet-plaster walls; and the beauty of wavy window glass, period hardware, and antique plumbing fixtures—and the overriding aesthetic, historical, and environmental value of leaving them in place.

—BARBARA VALICENTI, GREENVILLE, NY

A satisfying path

I’ve been a carpenter in a small community in Iowa for pretty much my whole life. I followed my father in his business, and I’m blessed to have a son now following me with probably more passion for the trade than I have. I’ve led our local community college’s building trades advisory board for some time. But it’s hard to show the trades as a great life skill; schools just don’t promote them. It’s good to see *TOH* getting involved. —RICH BRUMM, VIA E-MAIL

I am so glad that you are encouraging young ones to go into the trades. When I started high school I took college prep classes, but things changed, and by the time I graduated, college wasn’t an option for me. I took a job as an electrical apprentice, fell in love with it, and worked for the power company until I retired. In retrospect, I would not have been happy were I not around a construction site, getting my hands dirty. —ANTHONY DINKEL, VIA E-MAIL

The DIY route

I just read the editor’s letter in your March/April 2019 issue. Back when I was in ninth grade, students could go to tech school classes. I told my counselor I wanted to take tool and die classes. She laughed at me and said, “Why would a girl want to get her hands dirty!” I was offered “female-oriented” classes instead. I passed on those, and now I do any home improvement I feel I can!

—CINDI GARRINGER, MOUNT VERNON, MO

Correction

→ The image of the Mantis tiller/cultivator shown in the *This Old House* Top 20 (May/June 2019, p. 31) is incorrect. It shows an older, gas-powered model of this machine. We regret the error.

READER PROJECT OF THE MONTH

Rustic headboard

—STACY AND ALEC BOYLE, VIA E-MAIL

We want to share this photo of our son, Holden, with his new headboard that he and his dad built. It turned out great—almost as good as Kevin and Tommy’s (Build It, March/April 2019). Thanks for all the great ideas your magazine always has for DIYers like us!



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Tile an outdoor tabletop

Liven up an outdoor space by brightening a plain tabletop with multihued glass mosaic tile. Homeowner Kate Riley, who blogs at centsationalstyle.com, built the simple table here using a base of 2×4s and a 1× top, but you could easily add tile to an existing table. One bonus of building from scratch: Kate avoided cutting tile by sizing her 18-inch-wide tabletop to fit one and a half 12-inch-square, mesh-backed sheets. A tile tabletop is a fairly easy DIY—and even better, it's a snap to maintain. *For an overview of how this project came together, turn the page.*



PHOTO: COURTESY OF KATE RILEY/WWW.CENTSATIONALSTYLE.COM

Tiled tabletop how-to

Prep the surface Since this homeowner lives in Southern California, moisture isn't a worry: She simply sanded her wood surface, then primed and painted it, using a mildew-resistant exterior paint. If you live in a less arid climate, you may want to tile atop a cement backing board secured to the wood with rustproof screws.



Lay the tile Working in small sections, use the flat edge of a trowel to create an even layer of thinset. Then, holding the trowel at a slight angle, use the notched end to comb it (if your tile's clear, go back over it with the smooth edge to avoid visible stripes). To cover the tabletop's sides, Kate cut small strips of tile and used low-tack tape to hold them in place while the thinset cured.

Spread the grout Use a float to spread a premixed, polymer grout like Fusion Pro Single-Component Grout; it lets you skip sealing, plus, unlike a cement-based grout, it won't scratch the glass. Holding the float at an angle, push grout side to side and up and down to fill all the voids, including corners and edges. When you're done, gently wipe away excess grout with a sponge, and let it dry for at least 24 hours. Clean the surface to remove any lingering cloudiness; then your table is all set!

Wood floors are lightening up

When it comes to updating the look of wood floors, homeowners are embracing **ash blondes, driftwood grays, and transparent, whitewashed tones.**

These popular pale hues have a practical side, too: They're better than dark wood finishes at hiding dirt and crumbs. If you aren't in the market for new flooring, you can get the look by refinishing—and any species of solid-wood flooring is a candidate. Sanding off the old finish is the starting point; then you've got two choices. The easy route—and one you could do yourself—is to apply a **pigmented penetrating oil** like Rubio Monocoat (rubiomonocoat.com). This kind of oil needs only one coat, is walk-on dry in 24 to 36 hours, and dries to a matte finish. Durability depends on usage, but expect to go a year or more before adding a new coat to maintain the finish. The more involved option—generally best done by a pro—is a **multicoat system** with water-based pigmented stain or sealer, followed by two or three coats of water-based finish. It's more labor-intensive, and, while the coats are fast-drying, it'll be a few days before you can walk on your floors. The upside? Longer-lasting protection. To ensure finish compatibility, just be sure your floor refinisher sticks with a single manufacturer. Bona (us.bona.com) and DuraSeal (duraseal.com) are two that offer myriad options.



Starting from scratch? Engineered wood flooring with a driftwood finish (lumberliquidators.com) is a popular choice.



Crush-worthy ice tray

Perfect your julep or simply upgrade your lemonade with the satisfyingly uniform and abundant crushed ice you can get in one go from this multilayer ice-maker. Three shallow molds stack atop a covered silicone storage tray; fill 'em up and freeze for about 4 hours, then give each mold a twist to release a torrent of tiny ice cubes. And did we mention it's dishwasher safe? *Crushed Ice Mold, \$15; rabbitwine.com*



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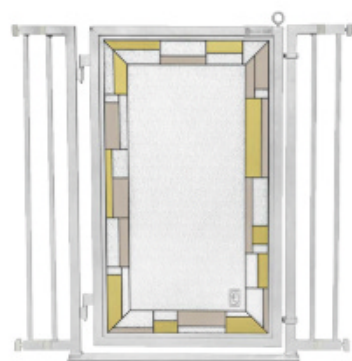
Stylish gates to safeguard your dog

You love your dog, but sometimes it shouldn't have the run of the house. Fortunately, there are gate options that are as handsome as they are sturdy; many can be left in place all the time without creating an eyesore or obstacle. The tension-mount models below offer locking doors, so that it's easy for humans to pass through but canines are contained. Or try a set of folding panels, like the one at right—dare we call it fetching?



WELL PRICED

This pet- (and child-) proof gate offers a lot for a small price tag: It fits an opening from 28" to 48" wide, it's easy to open with one hand, and it shuts automatically. *Summer Infant 36" Gate*, \$65; homedepot.com



CUSTOMIZABLE

Swap out the patterned door panel on this 36"-high gate for a new look; extras are \$39 each. This child-safe option comes in different widths and finishes, too. *32"–34" Bauhaus Fusion Border Gate*, \$199; fusiongates.com



EXTRA STRONG

Got a bruiser that'll chew, scratch, or try to push down a gate? While this one has stylish flourishes, the 32"-high heavy-duty wrought-iron-and-steel gate can stand up to a strong dog. *28"–34" Metal Spindle Gate*, \$169; orvis.com

FREESTANDING

Have a wide passageway that won't hold a tension-mount gate? This 36"-high fold-up barrier with stabilizing feet offers flexible (but not child-safe) coverage. Plus, it opens to almost 7 feet wide. *Primetime Petz Palm Springs Designer Gate*, \$150; wayfair.com



Time to upgrade your toilet?

If you're still double-flushing or dealing with frequent clogs, your low-flow fixture might be due for replacement. Here's why.

Any pre-Y2K toilet that's not clearing in one flush is a likely candidate for retirement, says Pete DeMarco of the Alliance for Water Efficiency. Those early low-flows from the '90s employed narrow trapways (the passage from bowl to drain) in order to empty the bowl and still meet the national 1.6-gallons-per-flush (gpf) mandate instituted in 1994.

While the toilets used less water, the trapways were choke points, sparking consumer complaints. It wasn't until about 2003, DeMarco says, that most makers had fully reengineered their fixtures—and widened the trapways—to achieve both efficient and effective flushing.

The march to maximize water savings hasn't stopped. Thanks to the EPA's WaterSense program, begun in 2006, you can buy toilets that use a mere 1.28 gpf (or less). These are now required in some states, including California and Georgia. For independent data on how well any toilet works, visit map-testing.com. The site posts reports on today's top-performing toilets, which can handle 600 grams or more of simulated waste in one go, as well as older models.

The next frontier, according to DeMarco, is to improve the bowl-cleaning ability of each flush. "It's harder to quantify, but we are seeing better performance on that front."

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Refresh your entry

Swapping in a new doormat is one simple way to extend a warmer welcome. Mats made with durable, sustainable coir—derived from coconut husks—are great at removing dirt and debris from shoes; these designs have the bonus of matching classic American house styles.

PRAIRIE Stylized poppies marry lively color and vintage appeal. 17"×28", \$40; wayfair.com

QUEEN ANNE Rubber outlines evoke leaded glass. 24"×36", \$58; birchlane.com

COLONIAL A Williamsburg quilt inspired this pattern. Entryways 22"×35" mat, \$80; hayneedle.com

MID-CENTURY The blue tumbling blocks have a modern look. 18"×30", \$48; allmodern.com

ARTS & CRAFTS The iris motif is based on a 1906 design by Dard Hunter. 19"×29", \$50; mackintoshdesign.com

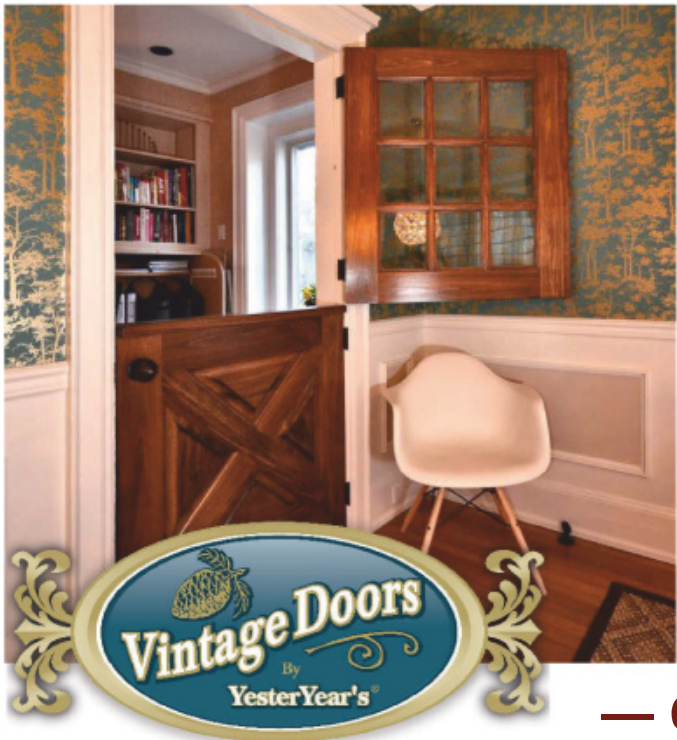
Protect a deck with pot feet

Avoid trapping moisture—and staining wood slats—under planted containers by raising them up on decorative feet. You'll not only save yourself from having to scrub mildew off your decking, you'll improve the health of your plant by boosting air circulation. *Similar to shown: MPG Planters Relic Pot Planter Feet, \$25 for 3; wayfair.com*



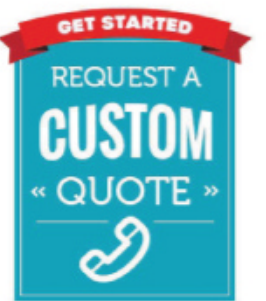
Get a sliding screen back on track

It's one of life's little annoyances: that balky screened patio door that catches and sticks. Good news: The fix is a cinch. First, locate the adjustment screws along the bottom of the outside face of the door frame (shown) or on the door's inside edge. **Turn each screw counterclockwise** to raise the wheels—and lower the door—so that you can lift the door up and out of the track. With the door set aside, **vacuum up any debris** and wipe the track clean. Spot a bend? Use pliers to straighten it. **Inspect the wheels** and make sure they spin freely (cracked or flattened wheels need replacing). Spritz axles with lubricant. Fit the door back in place and almost close it, then adjust the screws to even up the gap between jamb and door, lifting the frame 1/8 inch above the track—and you're ready to roll.



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Sophisticated sanctuary

A remodeled master bath takes inspiration from classic luxury-hotel style

BY NINA MALKIN • PHOTOGRAPHS BY ANDREA RUGG



➔ **A FOOLISH CONSISTENCY IS**, well, let's just say unnecessary when it comes to the look and feel of your home. Just ask Rick and Amy Steinhauser, who appreciate how their lodge-style home suits its lakeside setting in Plymouth, MN, but, as frequent travelers, also longed for a master bath with the fine finishes and luxury amenities they have enjoyed during hotel stays. Original to the 2003 house, the existing bath “was brown, woodsy, and dark,” says Rick of the 184-square-foot space. “We wanted a complete departure, something truly spa-like.”

So it was out with the rustic earth tones and in with a traditional black-and-white scheme by Minneapolis-based Edit Design Build Studio. The firm swapped a clunky corner tub for an undermount soaker finished with Carrara marble, and continued marble-look tile up the walls with contrasting black chair-rail and pencil-trim accents. The dim cave of a shower gave way to a frameless-glass-enclosed, no-threshold steam model. “We plan to live in the house until we're carried out, so the walk-in will be more accommodating as we age,” says Amy. Ceiling-high custom cabinetry, generous mirrored vanities with built-in lighting, and the marble-look checkerboard floor are as practical as they are polished. But the Steinhausers didn't stop there. “We refreshed our bedroom with paint and carpet to reflect the new bath,” says Rick. “Now we have the dramatic, elegant space we always wanted, and it all works together.”



BEFORE

BEFORE Dated finishes included a corner tub that ate up space, and textured floor tile with hard-to-clean pits and divots.

AFTER Custom cabinetry with built-in mirrors and lighting, Carrara countertops, and marble-look wall and floor tile give the space a luxe feel. “We think it has the old-world glamour of a European hotel,” says Rick Steinhauser. *Tile: Atlas Concorde. Sinks and showerhead: Kohler. Faucets: Rohl*



The frameless glass shower enclosure visually disappears, making the bath seem even larger. The built-in bench and handshower add convenience now, and will make aging in place easier down the road.

The oversize niche—37 inches wide, 12 inches high, and 4 inches deep—keeps toiletries handy. Backing it in mosaic tile adds an extra design detail that ties in with the shower floor.



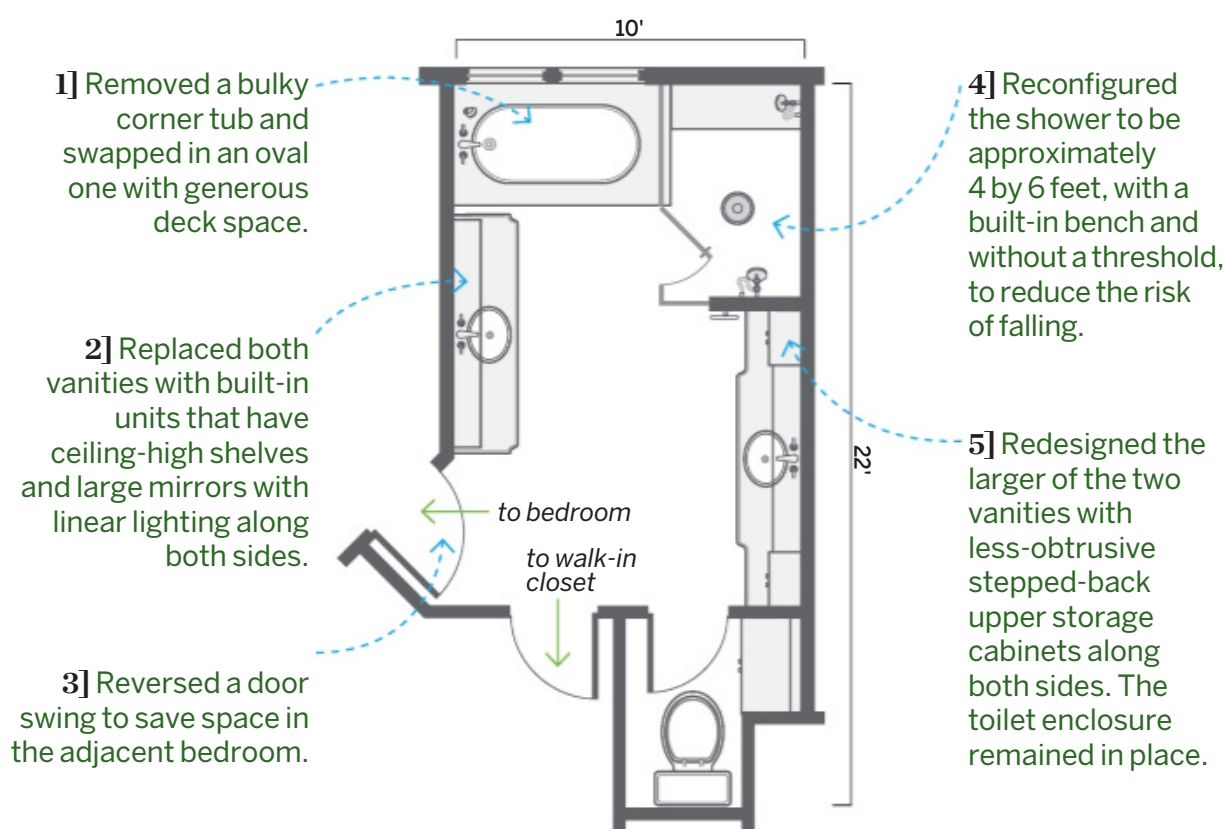
A no-threshold shower stall equals “No tripping hazard!” as Rick says. The transition to smaller floor tiles means more grout, improving drainage—and traction underfoot.



Homeowners Rick and Amy Steinhauser in the living room of their lodge-style house.

after

The layout stayed the same in the 184-square-foot space, with a slimmer tub and a larger shower



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Office nook for \$552

An unused living room corner gets put to work as an open office area with strategic storage and a soothing color palette BY KATELIN HILL



BEFORE

BEFORE Immediately visible upon entering the house, the storage unit functioned well but didn't enhance the room's looks.

AFTER The homeowner is so happy with the new office nook, it has inspired her to make a revamp of the rest of the living room her next project.

→ **A HARDWORKING SPACE** doesn't have to be hidden away behind closed doors—as long as it's thoughtfully designed. Take this “corner office” created by Tee Miller in the living room of her Mercer County, NJ, home.

To integrate the space with the rest of the room, Tee started by clearing out the clutter on the existing shelving unit, which was full of function but too dark and clunky for her current style. She followed up by giving the storage piece a couple of fresh coats of no-primer-needed chalky matte white paint. She bought a small writing desk to tuck in between the bookshelf and the window, and an upholstered chair that could double as extra living room seating for guests. New organizers put office supplies and paperwork within arm's reach, while pops of pink and green, fabric touches, and a fluffy rug keep the workspace from looking sterile.

Now Tee, who blogs at beauteefulliving.com, can write, work on small projects, and pay bills without shutting herself off from her family. “I'm thrilled that this area helps keep me organized while it still blends seamlessly with our living room,” she says. ■

THE PROJECT TALLY

Painted the existing bookshelf with 2 quarts of linen-white chalky matte paint, sealed with a clear matte top coat the homeowner already had**\$34**

Organized office supplies and paperwork with new storage boxes, baskets, shelf dividers, and magazine holders**\$108**

Purchased a new desk and chair**\$294**

Created a mini gallery wall with a DIY bulletin board and framed artwork**\$30**

Filled the shelves and desktop with new and old accessories, including plants and an LED lamp**\$86**

Added warmth and texture with a rug and a throw borrowed from other rooms in the house**\$0**

TOTAL \$552

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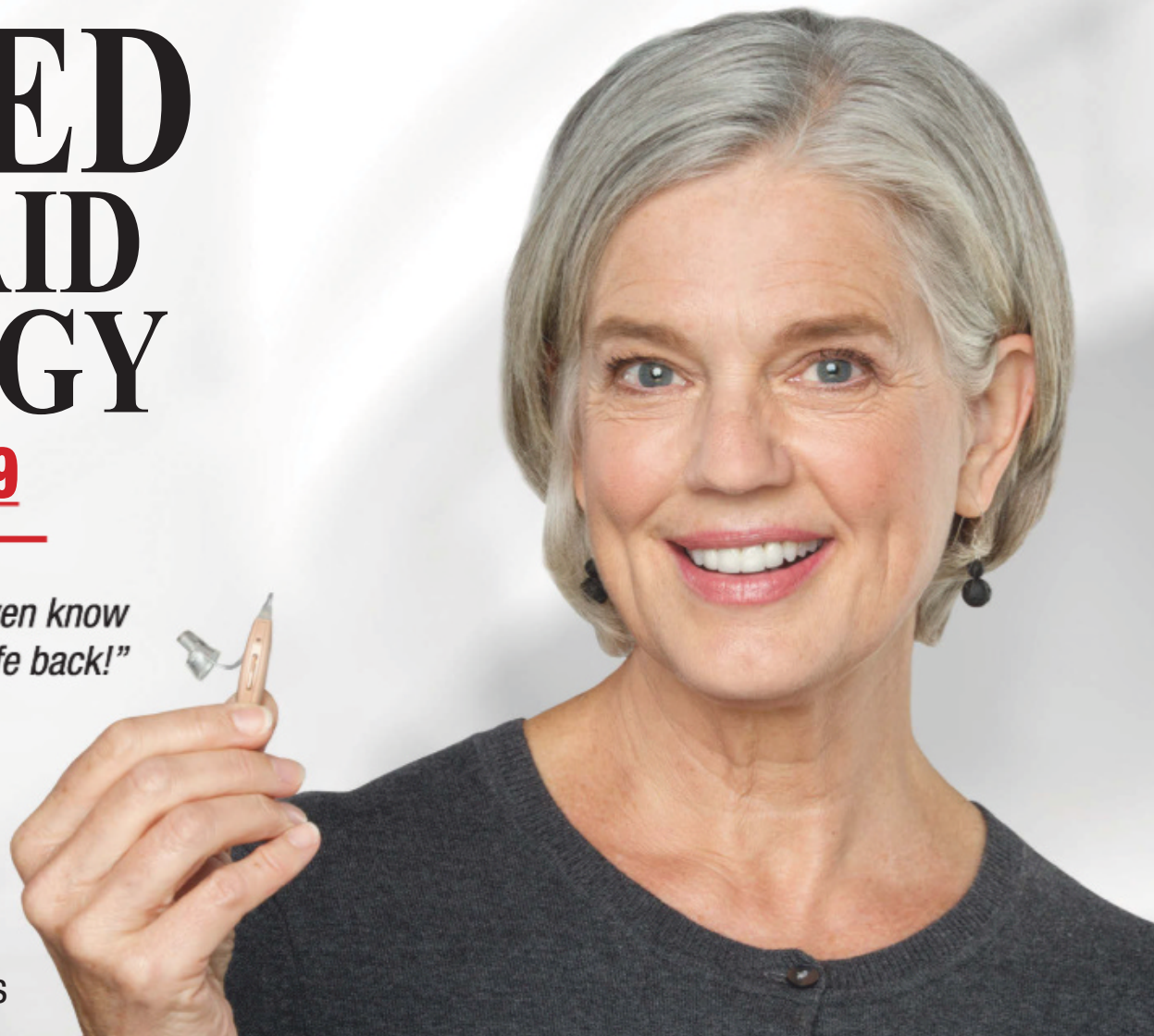
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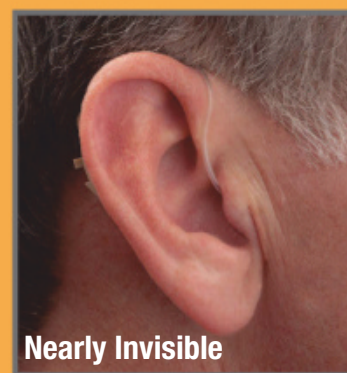
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From no character to classic

A boxy brick house from 1950 gets a timeless redesign

BY KATHRYN O'SHEA-EVANS • ILLUSTRATION BY DRAWGATE INC.



The rebuilt garage and new porch repeat the hipped style of the main roofline for a unified look.



→ “WE’RE AT A LOSS as to how to update our house’s boxy exterior,” says Emily Provost, who shares this 1950 brick home in La Grange Park, IL, with her husband, Eric, and their two daughters. “Plus, it only has one bathroom—a recipe for disaster!” With future plans for an addition, they’re looking to smarten up the facade right now.

“This style of house is very flat,” says Chicago architect Cinda K. Lester. “It’s just a big square.” Her proposal: Add a wide front porch as a buffer from the street, and a more functional garage connected to the back of the house to better weather the city’s churlish winters. On the house’s second story, a trio of casement windows usher in light and air.

The homeowners’ take on the new look? “We love it!” says Emily. “We didn’t even think about adding a front porch, but we’re already picturing summer evenings relaxing out there.”

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finishing touches

Warm, vintage-style add-ons enhance the house’s timeless look



mailbox

Solid brass with art-glass insets gives this letter holder a handsome Craftsman look. Pasadena Vertical Mailbox with Decorative Glass, \$275; houseofantiquehardware.com



porch light

Triangles of antiqued mercury glass add sparkle to this multifaceted iron-and-brass flush-mount fixture. Moravian Star Ceiling Mount, \$229; ballarddesigns.com



window

This tri-muntin casement is made of an easy-care composite that’s twice as strong as vinyl. 29" by 53½" 100 Series Casement Window, from \$500; andersenwindows.com



entry set

The sturdy angular profile of this brass handleset suits the home’s architectural style. Wilshire Exterior Tube Latch Door Set with Dorwich Knob, \$279; rejuvenation.com

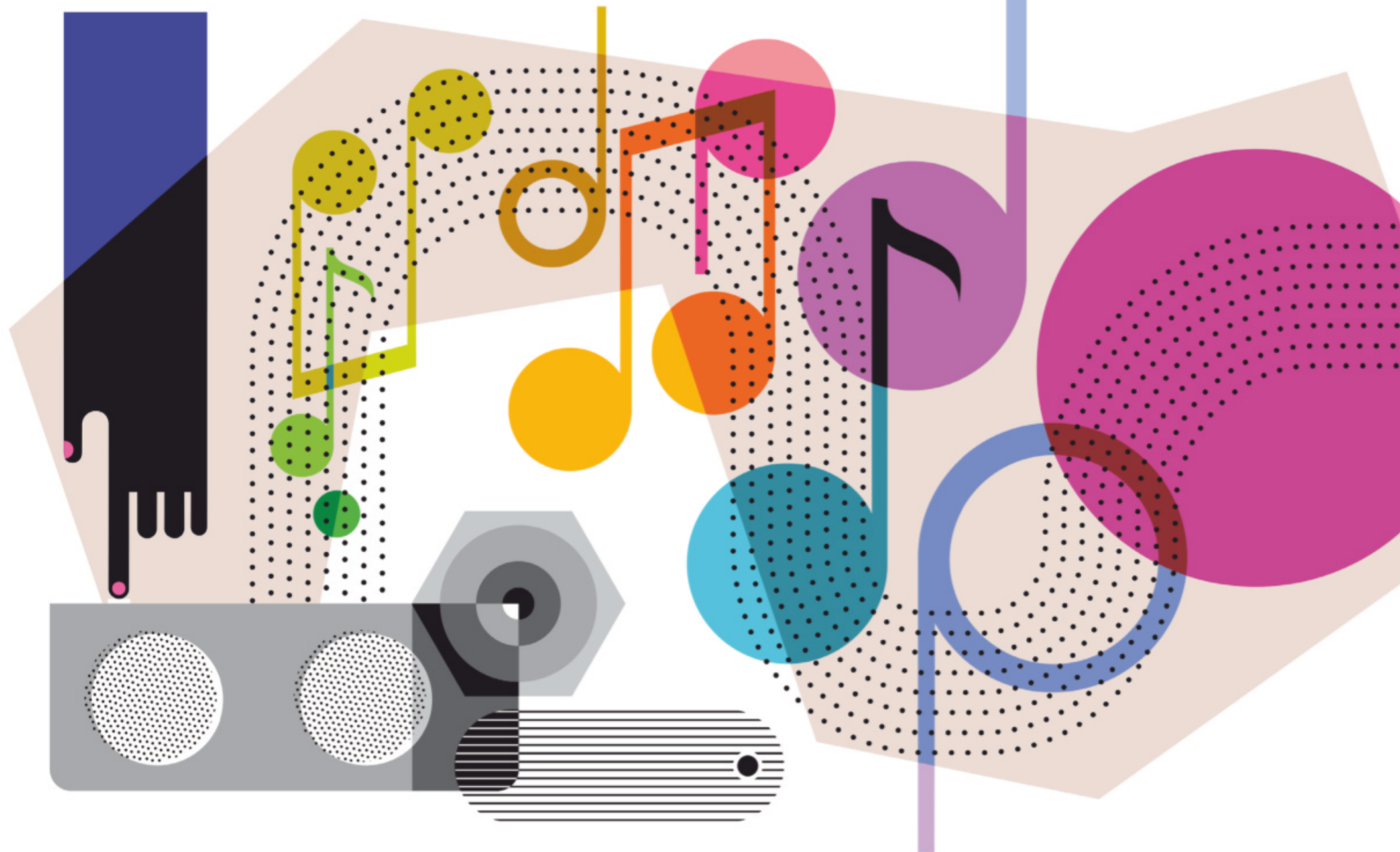
Thank You!



PHOTOS: ANTHONY TIEULI

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Play it again, Alexa

Streaming services have taken the music industry by storm. If you're just wading in, here's how to choose the perfect setup for your home **BY NATHANIEL WICE • ILLUSTRATION BY KIRSTEN ULVE**

➔ **IF YOU LOVE MUSIC** in your life, you owe it to yourself to try one of the streaming services if you haven't already. Sales of vinyl managed to grow last year and could soon exceed CD sales, but it's a retro exception that proves the rule: The convenience of streaming any song from anywhere with an Internet connection—"Alexa, play Motown hits"—has largely killed sales worldwide of records, CDs, and even music downloads. Last year, three-quarters of the music industry's income in the United States came from Apple Music, Spotify, and other streaming services like Amazon Music, YouTube Music, and Pandora.

Even the \$50 Echo Dot from Amazon, plugged in to your stereo's line-

in and connected to your home Wi-Fi, will enable you to tell your enhanced hi-fi system, "Alexa, play WQXR radio" to pick up the New York City classical station from the Internet, or ask, "Alexa, what's the latest news from NPR?" (Consider the \$49 Google Home Mini instead of the Echo Dot if you are already using Google media services like YouTube Music, or are accustomed to "Ok, Google" voice commands.) Sign up for one of the free trials of a streaming service, and experience the Internet-delivered convenience that has virtually destroyed music sales. Yes, there's nothing like the ritual of anticipation when the turntable needle drops into the groove, but wait until you can listen to anything you want at voice command,

Choosing the Gear

› **Echo Dot from Amazon** A \$50 "hockey puck" with Alexa voice controls and line-out to connect to better speakers. Amazon \$150 Echo Plus has more-sensitive mics and better sound. amazon.com

› **HomePod from Apple** Exceptional sound quality at its \$299 price. Siri voice controls with tight Apple Music integration. apple.com/homepod

› **Google Home Max** Google's \$399, higher-end smart speaker with "Ok, Google" voice controls. store.google.com/product/google_home_max

› **Sonos One** The flagship Sonos smart speaker with Alexa voice controls and superior sound, priced at \$199. sonos.com

along with high-quality original audio shows and playlists, plus podcasts and Internet radio.

Sonos can teach your stereo even more digital-music tricks. The Santa Barbara-based trendsetter upended the home speaker industry over the last decade not with better sound in the den, though the company's \$199 Sonos One and \$499 Play:5 speakers are a good value. The real innovation was cleverly networked multiroom systems that play any song anywhere in the home. In recent years, Sonos has positioned itself as a kind of Switzerland of smart speakers that work well with the gamut of smartphones and streaming services. Add a \$349 Sonos Connect to your stereo, and it will be able to stream not only from the Internet but also wirelessly to Sonos speakers around the house.

If you're starting fresh and forgoing the receiver and amplifier of a traditional setup, we still recommend Sonos speakers as the benchmark for price, features, and sound quality, starting with the Sonos One smart speaker, which includes Alexa voice controls. The Sonos One is plenty strong for background music (if not a dance party) and can be paired more powerfully as stereo speakers if you are willing to devote two units to a single room.

Worthy Sonos rivals include Apple's \$299 HomePod and the \$399 Google Home Max, especially if you already like the media and voice-assistant services of those companies, or are possibly creeped out by Amazon's mixed record on safeguarding privacy. Amazon also offers a \$150 Echo Plus that is no match, soundwise, for the Sonos One.

If you're an Apple fan and already at least a little accustomed to Siri, we think a stand-alone HomePod is the best treble and bass for the buck, especially when paired with an Apple Music monthly subscription. A single HomePod is the size of a small bookshelf speaker but contains a circular array of powerful, software-controlled mini speakers and microphones; these read surroundings to

create a "soundstage" that ricochets music off walls to fill a good-size room with surprisingly rich sound.

All these Amazon, Apple, and Google devices can be paired into stereo setups and distributed in different rooms, but the Sonos controls are our favorite. They consistently have the feel of a purpose-built product that's in daily use by the people who are designing and selling it.

The main Sonos interface these days is a phone app and Alexa voice controls, but Sonos also sells third-party touch screens and wall switches. The big Sonos idea is that you will pair Sonos speakers for stereo and even a TV's surround sound, and then mix and match to add rooms, so the same concerto can play in kitchen and yard. And if you just can't let go of vinyl, Sonos even sells a turntable. ■

CHOOSING THE SERVICE

Standard pricing for these streaming services is \$9.99/month unless otherwise noted, with student, family (up to six people), and annual discounts usually available. Services work across most devices, including Apple and Android, for listening at home, in the car, or on the go with your smartphone.



Apple Music First-rate library, including exclusive content. No free tier, but Apple offers three-month free trials. Works especially well with Siri voice control and Apple CarPlay. apple.com/apple-music



Spotify Premium First-rate library, including exclusive content and great curated playlists. Upgrade from Spotify Free for unlimited song skipping, no ads, and offline listening. spotify.com



Amazon Music Unlimited Amazon offers 30-day free trials of its slightly cheaper \$7.99/month pricing. No free tier, but access to a smaller library of songs is included with a separate Amazon Prime subscription. Works well with Alexa voice control. amazon.com/musicunlimited



YouTube Music Premium Google's music-streaming service is the previously announced successor to Google Play Music. Works especially well with "Ok, Google" voice control. music.youtube.com/music_premium



Pandora Premium Upgrade from free Pandora for unlimited song skipping, no ads, and offline listening. Recently acquired by Sirius XM. pandora.com



IDAGIO Based in Berlin, this streaming service dedicated to classical music arrived in the U.S. in late 2018, and boasts specialized searches for classical performances by orchestra, soloist, conductor, and more. idagio.com



Tidal HiFi Tidal differentiates itself with higher-quality streaming at \$19.99/month. There is a 30-day free trial to let you see if you can tell the difference. No free tier. tidal.com

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- Founders Jeff Raider & Andy Katz-Mayfield

Different strokes

An outdoor room's beadboard walls become extra eye-catching when painted with random-width stripes BY KATHRYN O'SHEA-EVANS



➔ **ALONGSIDE A LUSH TECHNICOLOR GARDEN**, an alfresco hangout spot can look a little lackluster. Not so this open-sided extension on a house in Suffern, NY, where beadboard walls are striped up and down with unexpected color.

“The house is very traditional, and the contemporariness of the stripes adds some freshness,” says designer Thomas Jayne, author of the recently published *Classical Principles of Modern Design*. Jayne matched the colors to hues used inside the home for a seamless transition between indoors and out, and tasked Manhattan-based painter Chuck Hettinger with brightening the beadboard in Roman stripes—irregular in width, with colors randomly repeating. “It’s much more lyrical when the stripes are different sizes; it might be a little penal otherwise,” Jayne says. “It’s a simple thing to do, and adds a lot of style.”

To pull off the project, Hettinger painted all 60 linear feet of beadboard by hand without taping, over an existing white base coat. “The stripes were done in one coat, with the paint put on artfully, so it’s sometimes brushstroke-y or sheer,” says Hettinger, who improvised the repeat as he worked. His number-one tip for creating this particular scheme on your own? Have a painting party, so it goes quickly—and the process is as much fun as the finished product. ■

The walls of this outdoor space provide a colorful counterpoint to the garden, even when its flowers' bloom time has passed.

Paint: Benjamin Moore's Chantilly Lace, Bronze Tone, Calypso Blue, Eye of the Tiger, Lehigh Green, Pale Oats, Saybrook Sage, Soft Cranberry, and Van Courtland Blue

This Old House blueprint

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TOP 20

★ BEST NEW ★
HOME PRODUCTS

BUILDING MATERIALS

Inspired inventions

Presenting the finest in new materials and mechanical systems for construction and remodeling projects

BY THOMAS BAKER

→ **WHETHER YOU'RE** building new or fixing old, you want the final results to look great, make your life more comfortable, and keep maintenance to a minimum. These are the criteria we applied when vetting the candidates in this category; then we added an extra twist: Each of them also had to show that it's truly innovative, either in its design, how it's made, or the way it incorporates leading-edge technology. Here are the ingenious products that made it through our selection process.



1. PERENNIAL ROOF TILE

Daltile

Porcelain, known for its great durability and resistance to fading and moisture, is now going on roofs. The 9mm- and 12mm-thick tiles, which resemble slate, clay, or wood-shingle roofing, can be used anywhere in the country, have a lifetime warranty, and should last for at least 75 years. *From \$3 per square foot; daltile.com*

2. PHYN PLUS SMART WATER ASSISTANT + SHUTOFF

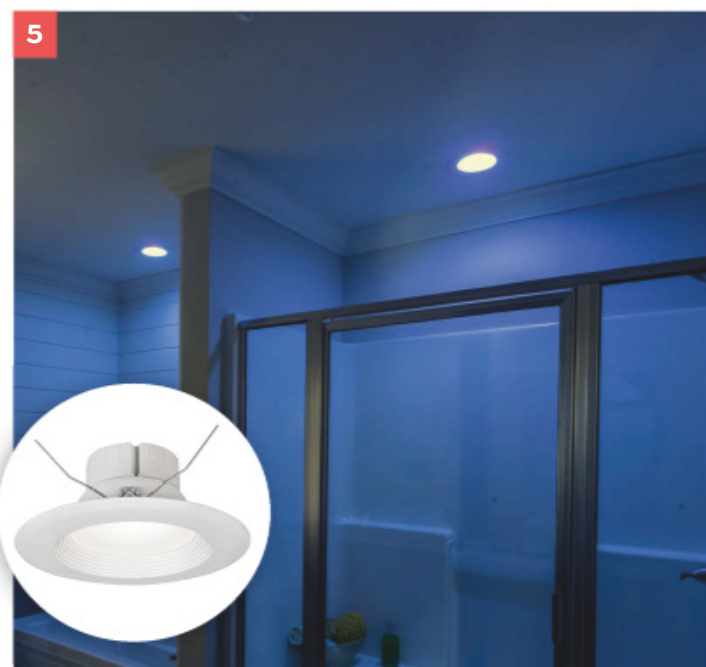
Phyn

Unlike less sophisticated whole-house shutoff valves, this one utilizes an ultrasonic sensor that detects and identifies leaks and freezing pipes, then notifies your smartphone where they're occurring. The app also reports water pressure and usage, both current and historical. In

the event of a catastrophic leak, Phyn stops the flow in just 60 seconds. \$850; phyn.com

3. CORKOLEUM WE Cork

From the bark that plugs wine bottles comes this cushiony, waterproof flooring that's only 1/8 inch thick. Glued down, then coated with wood-floor finish, it's warranted to last 20 years, with proper care. *From \$6.50 per square foot; wecork.com*



4. OPTIM-R VACUUM INSULATED PANEL

Kingspan Insulation

This foil-wrapped insulation achieves an astounding R-32 per inch—about 10 times the R-value of fiberglass batts—because it encases a vacuum, just like a Thermos bottle.

From \$20 per square foot; kingspaninsulation.us

5. ELLUMI GERM-KILLING RECESSED SHOWER LIGHT

Evolution/Vital Vio

The LEDs in this wet-rated fixture emit a visible, non-UV light that's deadly to bacteria,

mold, fungi, and spores up to 10 feet away. Use its normal white light when showering, then switch to germ-fighting mode, which bathes the area in a violet hue. The longer you leave the light on, the more microbes it eradicates. \$70; ellumilighting.com

6. RE-CAP CONCRETE RESURFACER

Quikrete

Historically, the products used to smooth rough, spalled concrete have had a tendency to peel off. But this polymer-modified mix won't; it forms a chemical bond with its substrate that's so tenacious it's stronger than the concrete itself. \$25 for a 40-pound bag; quikrete.com

7. THERMOSLATE SOLAR SYSTEM

CupaGroup

This 18-square-foot rooftop collector, covered with natural Spanish slate, uses the sun's heat to create free hot water, and blends in seamlessly with the rest of a slate roof. \$2,300 for the panel, \$5 per square foot for the slate; cupapizarra.com

8. OLD BRICK HOUSE BRICK

Pine Hall Brick

Before being fired in the kiln, these bricks go through a simulated tumbling process that gives them the rough texture and irregular shape of handmade ones from 300 years ago. The collection comes in four blends, including Kennon House (shown). \$2.60 per square foot; pinehallbrick.com

9. MIRAGE PORCELAIN VENEERS

Oldcastle/Echelon Masonry

These ledge-look veneers are molded strips of porcelain, not your usual natural stone or colored concrete. Choose from 12 color ranges, then use them indoors or out—they're impervious to moisture and fading. From \$8 per square foot; echelonmasonry.com



10. OPTIMH2O WHOLE HOUSE WATER FILTER

Aquasana

With the rising concern about PFOAs and PFOSs in water supplies, here is the first whole-house filter that removes 98 percent of those persistent toxins, as well as 99 percent of lead and cysts. Its solid carbon-block core can purify 100,000 gallons before it needs replacing. \$1,799; aquasana.com

11. COMFORTSEAL INTERIOR WINDOW

Larson

These aluminum-framed windows form such a tight seal against an existing window's jambs and stool, they can cut air infiltration by 75 percent, and outdoor noise by half. With low-e glass, they're Energy Star rated. About \$150 for a 22-by-55-inch window; larsondoors.com

12. LOAD CENTER WITH WI-FI CONNECTIVITY

Leviton

Finally, an electrical panel for the 21st century. It has LED-lit circuit breakers that show you what's working, what's tripped, and whether the trip was a ground fault or an arc fault. It will send trip alerts to your smart device, and let you track power usage—and cost—for your whole house or individual circuits. Did you forget to turn off the oven? Use your phone to trip its circuit remotely. From \$2,500; leviton.com/loadcenter

13. ARTISAN BEADED LAP SIDING

James Hardie

Doubling the thickness of standard fiber-cement lap siding to $\frac{5}{8}$ inch allows this bold Colonial-style bead to be milled into its butt edge. It's a nice aesthetic upgrade that still retains the rot-, fire-, and moisture-resistant properties that fiber cement is known for. About \$2.60 per linear foot; aspyredesign.com



14. PEEL-TEK 150 LIQUID MASKING

Peel-Tek

Brushed onto any surface, this latex coating forms a rubbery barrier that blocks paint bleed far better than regular masking tape, especially on rough or porous surfaces. \$30 for a quart; peel-tek.com

15. CONCRETE FLEX

Muratto

Yes, it's real concrete, but only $\frac{3}{32}$ inch thick. Polymers and reinforcing fibers make it as flexible as a yoga mat. At just 8 ounces per square foot, you can glue it to columns, cabinetry, or walls, inside or out. From \$9 per square foot; sustainablematerials.com



PHOTOS: (NOS. 14, 15, 16) DENISE SFRAGA



16



17



18

18. PERFORMANCE SERIES TINTABLE WOOD STAIN

Minwax

No longer are you limited to the usual “cherry” and “walnut.” With this oil-based finish, any of 48 colors can be mixed for you in the store. Or you can get a custom tint to match an existing hue. Choose either the faster-drying, higher-VOC formula or the slower-drying, low-VOC version. \$20 for a quart; sherwin-williams.com

19. PLATINUM PATCH ADVANCED EXTERIOR FILLER

DAP

This one-part, paintable filler performs like a two-part polyester resin, but spares you the messy mixing and the stinky odor. It adheres to any siding or trim, including PVC; won’t crack, crumble, or discolor; is rainproof after 24 hours, waterproof after seven days, and resists mildew and algae. \$7 for a 16-ounce tub; platinumpatch.dap.com



19

16. ORGANIC REACTIVE FLOORING

Lifecore Flooring/Samling

The rich patinas of these engineered oak and maple planks aren’t created with stains, but by a carefully controlled chemical reaction between no-VOC agents such as ammonia or iron acetate and the wood tannins in the top veneer. The flooring then gets nine coats of a tough, UV-cured factory finish loaded with abrasion-resistant aluminum oxide. From \$11 per square foot; lifecoreflooring.com

20. MLZ SERIES CEILING CASSETTE

Mitsubishi Electric/Trane

For those who find the bulbous, wall-hung units on ductless heat-pump systems too obtrusive, now there’s a slim new cassette that slips between joists and sits nearly flush with the ceiling. Like the wall units, you control it with a handheld remote. About \$1,500 each (\$3,100 with heat pump); trane.com/residential



20

17. MADRIA SLAB

Belgard

These handsome dry-cast concrete slabs for patios are colored with nonfading iron oxides, then sealed to resist wear and stains. Plan on reapplying the sealer every 10 years or so. From \$8 per square foot; belgard.com

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ask This Old House

62

tips, tricks, and
answers to
your home-
improvement
questions



PHOTOGRAPH BY TED MORRISON

Q Over the years, I've acquired all sorts of pruners and loppers, both the bypass and anvil types. When should I use each kind?

—BOB ROTH, DENNIS, MA

A Bypass pruners, and bypass loppers like the one at left, have a curved blade that sweeps past a lower jaw. Use them to make clean cuts in live branches, which is 90 percent of most pruning. The anvil types have a straight blade that strikes a metal plate. Their cuts tend to crush, so use them only on dead wood. Hand pruners are meant for twigs and branches no more than ½ inch across. Most loppers can handle branches up to 2 inches thick, thanks to the leverage of their long handles. This 30-inch Centurion lopper (centurionbrands.com) has telescoping handles and a geared jaw. Together, they multiply leverage twofold.

—ROGER COOK,
TOH LANDSCAPE CONTRACTOR

Our team of veteran experts



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General Contractor



NORM ABRAM
Master Carpenter



RICHARD TRETHEWEY
Plumbing and Heating Expert



ROGER COOK
Landscape Contractor



KEVIN O'CONNOR
Host

PHOTOS: (5 PORTRAITS) CARL TREMBLAY; (RIGHT) COLLEEN McQUAID



I want to put in a natural-stone pathway so that I won't have to walk through the mud in the spring and summer. What's the right way to do this to prevent the stones from sinking into the mud?

—TERIANN WAKEMAN, FLAGSTAFF, AZ

MARK McCULLOUGH REPLIES:

There are a couple of different ways to make a pathway, depending on the look you want. Informal pathways typically have stones placed 3 to 6 inches apart, with gravel or a groundcover filling the spaces between them. They're often used in side yards or backyards to blend in with landscaping. Formal pathways, which have closely spaced stones set in a cement mortar mix, are usually found in front, leading up to an entry door.

The stones for informal pathways don't need to be very thick—1 or 2 inches is enough—but they should be big enough to

provide a good place to plant your foot. Stones with 8-by-14-inch faces will suffice, but bigger ones will make walking easier and look better, too. For formal pathways, like the one I'm laying above, I like to use stones about 3 to 5 inches thick—the bigger the better, because they're likely to get lots of use.

To keep them from sinking, dig 6 to 8 inches below grade and prepare a solid base; the depth depends on the thickness of the stone. But before you excavate, call 811 and have the location of any buried utilities marked out.

For an informal pathway, lay out the stones in a pattern that

When laying formal pathways, TOH mason Mark McCullough uses big stones and places them in a wet mix of stone dust and cement.

**DIY
SMARTS**



TOH home technology expert Ross Trethewey finishes installing a new Nest Hello video doorbell. It connects to your phone, allowing you to see, record, and talk to anyone who approaches the door no matter where you are. It also rings when you push the button.

Q Home security for the 21st century

Recently, thieves broke into my parents' home and stole my mother's jewelry. What modern protections can they install to feel safe in their home? —GABRIEL CORTES, CORONA, CA

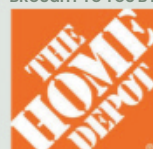
ROSS TRETHEWEY REPLIES: I'm sorry to hear that your parents had a break-in and that your mom's jewelry is gone. These events are tragic and violating—I know from experience—and are big motivators for people to put a security system in a home.

Your parents have basically two options: a traditional wired system, which requires paying a technician to install it and a monthly monitoring fee, or a newer no-fee, Wi-Fi-enabled system that a DIYer can install. I recently equipped a house with one of these new systems: a Nest security package (nest.com) that included a hub, motion and contact sensors, a doorbell camera, and an indoor security camera. The installation took just 2 hours. The equipment came to about \$1,000, but you can pick up a basic no-camera package for \$400.

Setting up the hub that communicates with each device is as simple as registering it on your phone and plugging it in to a wall receptacle. The hub sits near the front door, where it can be disarmed with a key-fob swipe or a smartphone. (There's also a 10-digit keypad, for other visitors.) Contact and motion sensors on each entry door alert your phone if someone opens a door when the system is armed. Want to let the dog out? Just disarm the sensor; you don't have to shut off the whole system.

With a Wi-Fi system, your phone is the monitoring service, with the police on speed dial. However, in the event of a power outage, your phone won't be reachable even though the system remains operational. To stay connected, choose either a cellular backup service or a third-party provider that keeps an eye on things 24/7, like a traditional security system. Both options have a monthly subscription fee.

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ONLINE**

Find more information about this topic—and others—at thisoldhouse.com/DIY-smarts

satisfies you, and mark the ground around them. Now move each stone, excavate its spot, and add a few inches of paver base—a mix of quick-draining crushed stone and stone dust. Tamp it, then top it with a 2- or 3-inch-thick bed of wet stone dust. Wiggle the stone firmly into the stone dust and give it a few whacks with a rubber mallet to ensure there aren't any voids underneath. Then check that the stone is level. People who want groundcover between the stones—Irish moss is a popular choice—will fill the gaps with soil, but in your dry climate, a native gravel might be better.

With a formal pathway, which should be at least 3 feet wide, you'll need to mark out and excavate the entire area. Run a plate compactor over the subsoil, and cover it with a couple of inches of paver base. Run the compactor over that layer, then add more base and compact it, too.

Now that the base is prepped, put three 5-gallon pails of stone dust in a wheelbarrow and mix in water to make a thick slurry. Blend in a shovelful of portland cement so the mix will harden.

Shovel out enough of the mix to set the first few stones, then wiggle and whack them into the mix, making sure each one is level with its neighbors. These stones should sit tight against one another to minimize the joint widths; don't hesitate to chip their edges with a masonry hammer or cut them with a diamond-blade grinder.

When you're satisfied with a stone's placement and are ready to move to the next one, give its face a quick scrub with clean water. That will prevent the mortar from leaving whitish cement stains when it dries.

Wait at least overnight before walking on this pathway. In the

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PPG
Charcoal Coast

Olympic
Aspen Tan

meantime, line it with flexible, nail-in-place landscape edging, like the one made by ProFlex (homedepot.com), and backfill against it with native soil. Edging helps support the walkway edges and maintains a crisp boundary with the rest of your yard.

Q More overhead clearance in the garage

My two-car garage would make a nice home gym. But the 2×8 ceiling joists—there is no finished drywall ceiling—are only 8 feet above the garage floor, which isn't enough clearance for my overhead exercises. Can I add collar ties between the rafters, and then take out the joists?

—MAX FISCHER, MILLER PLACE, NY

What is it?

A
Scratch-coat tool

B
Wire clamp for soldering

C
Brad holder

D
Fin comb

FOR THE ANSWER, SEE PAGE 40



TOM SILVA REPLIES: You may be able to gain some extra headroom by reframing your garage roof, but first let me clear up some roof-framing terminology. Collar ties are horizontal pieces of lumber that connect rafters on either side of a gable roof, up near the peak. Properly installed, they do make a

roof stronger and help a ridge line resist sagging. But without the joists, collar ties by themselves can't provide enough support. For that, you'll need rafter ties, horizontal 2×s that connect to the rafters' lower ends. Your joists perform the same function that rafter ties would. The position of the rafter ties

PHOTO: DENISE SFRAGA

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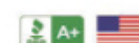
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and collar ties in the roof's structure is critical. To understand where they should go, imagine a sloped roof in cross section; it forms an isosceles triangle with the roof peak at the top, the sloped rafters on the sides, and the ceiling joists on the bottom. Collar ties need to be fitted within the upper third of that cross section. Rafter ties have to go within the lower third.

I can't say how much height you'll gain if you replace your ceiling joists; that depends on the pitch of your roof and the width of your garage. But a quick to-scale sketch on graph paper will show you how much extra height the new framing offers.

If you do proceed with this project, check first with your local building department. You may

need to submit a stamped drawing from a structural engineer.

Leave the joists in place as you add the rafter ties, one for each pair of rafters. Cut the ends to match the roof slope, then push them tight to the underside of the roof framing. Fasten each end to a rafter with six 3-inch structural screws. A joist can be taken out once its corresponding rafter tie is in place. Save the old joists to make collar ties, if you want.

Ties longer than 16 feet may sag. To prevent that, nail vertical 2x4s to the ties near the center of their span, and to the rafters directly above.

This project isn't done yet. Taking away joists weakens a roof's connection to the walls, and you don't want a bad windstorm to lift your roof off the garage. One

way to strengthen that connection is to nail metal hurricane clips to the wall's top plate and to each rafter. Use only the nails specified by the clip's manufacturer, and plant a nail in every clip hole.

Q No-show ways to get rid of radon

I recently purchased a lovely 1872 brick home with a slate roof—and very high radon levels. After doing some research, I'm concerned that I might need multiple vent pipes in the basement slab. Is there a way to camouflage the fans and exhaust pipes so they don't detract from the architectural details of the house?

—VALERIE SCHMIDT, BEDFORD, PA

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ask This Old **House** ▶

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KEVIN O'CONNOR REPLIES: I applaud you for not ignoring your radon problem—this radioactive gas is implicated in 20,000 cases of lung cancer in the United States each year—and also for trying to preserve the appearance of your old house. I asked radon-mitigation expert Doug Kladder, director of the Center for Environmental Research and Technology, Inc. (certi.us), for his thoughts. Here's what he had to say.

“I also cringe when I see a radon-mitigation system, with its 4-inch PVC pipe and bulbous fan housing, hanging off the side of a beautiful old Victorian. That may be the cheap-and-easy way to get rid of radon, but it's certainly not the only way. Now that you've done your research, bring in a certified radon-mitigation specialist who can assess your situation and devise a solution that addresses your aesthetic concerns.

“For instance, he or she should be able to run the pipe, which carries away the radon in the soil under the basement or crawl space, up through the inside of a house. Plumbing chases and closets are often good bets for that. The installer also should be able to suggest ways to terminate the pipe near the top of the house that aren't too conspicuous.

“As for your concerns about multiple

pipes, let your specialist conduct a vacuum test and find out how many you actually need. The test involves drilling a 1½-inch hole in the basement slab, near a foundation wall, and ⅜-inch test holes at other points around the slab's perimeter. A wet/dry vac, with its hose stuck in the big hole, is used to depressurize the underside of the slab. If the vapors from a smoke stick held at each test hole show air being sucked down, you only need one pipe. But if the under-slab soil or structural blockages prevent free air movement, another pipe or two will be needed.

“The good news is that you won't need more than one pipe running up through the house; the other pipe or pipes can be connected with the first pipe in the basement. And one fan should still be able to pull radon from multiple locations.”

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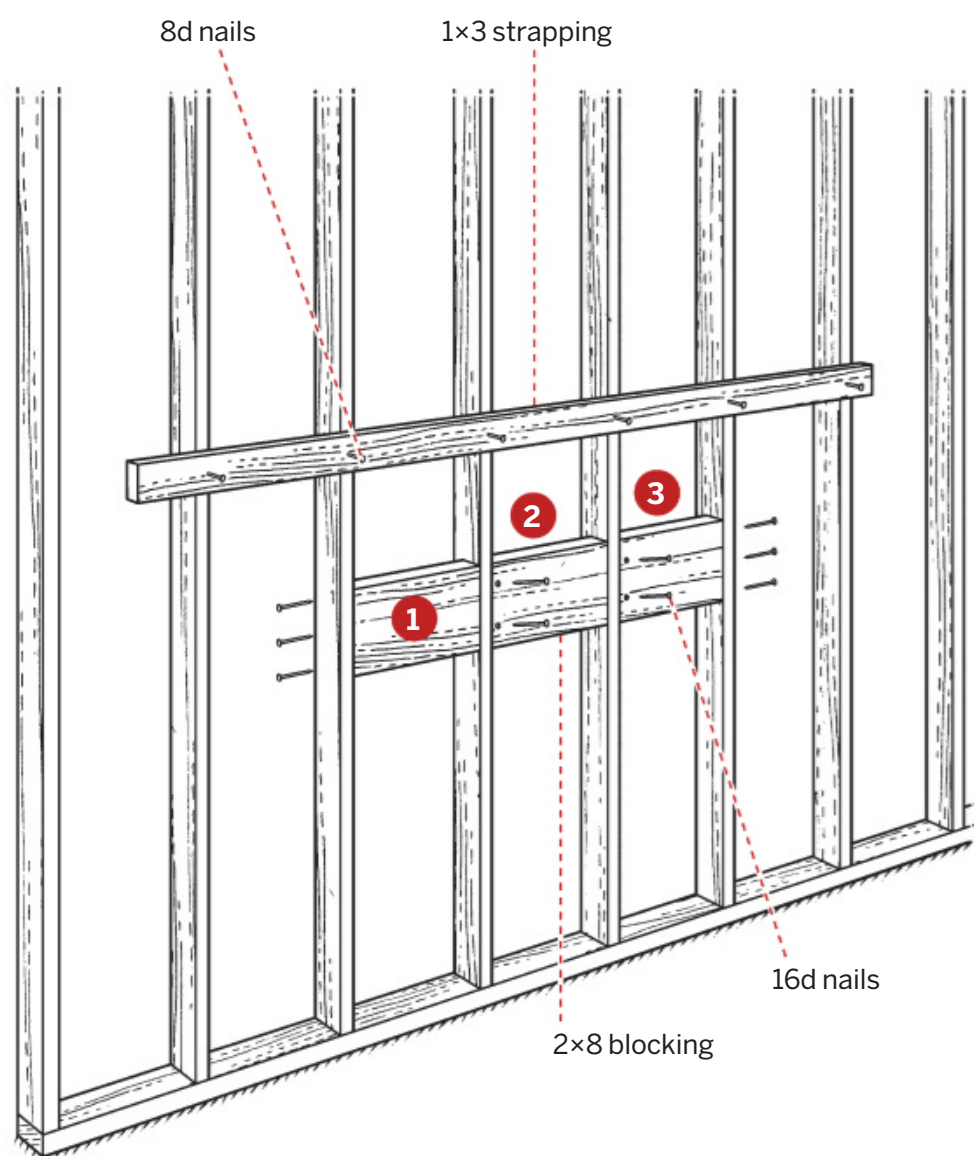
Include a complete address and daytime phone number. Published questions will be edited for clarity and length and may be used in other media. We regret that, because of the volume of mail received, we're unable to reply to unpublished questions.



Norm's tricks of the trade

We will be gutting our master bath and installing all-new fixtures, including a pedestal sink. What should I think about when reframing the walls? —ELIZABETH TOR, DAVIS, CA

A This is a perfect opportunity to add 2×8 blocking between the studs wherever you plan to put towel bars, grab bars, and pedestal sinks. Blocking gives screws something solid to bite into, and gives you more area to work with than a stud edge. When installing the blocking with a hammer, stiffen the studs with 1×3 strapping and 8d nails, as shown below, so they don't bounce with every swing. Drive the nails only partway; they'll be easier to remove when you're done. But if you install the blocking with a nail gun, strapping isn't needed. ■



1. First blocking piece: Drive three nails through the studs and into each end of the piece.

2. Second blocking piece: Drive three nails through the stud and into the right side of the piece. Then drive two toenails into the left side to the piece.

3. Third blocking piece: Drive three nails through the stud and into the right side of the piece. Then drive two toenails into the left side to the piece.

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FROM THE TOH TV BROOKLINE PROJECT

Modernizing a Mid-century: Why Windows Matter



Architect **Don Powers** reviews the mid-century modern home we renovated this past season on This Old House—and shares his thoughts on the importance of choosing the right windows for retaining authentic charm while increasing efficiency and comfort.

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MARVIN 


In keeping with the mid-century modern style, horizontal groupings of windows provide plenty of light and scenic views.

How does the Brookline project live up to its mid-century modern heritage?

DP: The renovation of the Brookline project house has all of the classic hallmarks of mid-century modern style: an emphasis on horizontal proportion, roofs with flat or low slopes and deep overhangs, asymmetrical compositions, living spaces with multiple level changes, and expansive windows—often joined into horizontal groupings—with no traditional muntins breaking up the clean sheets of glass. Dynamic views and a connection to the outdoors are an essential part of the mid-century modern aesthetic.

Did the home's location in Pill Hill, one of Brookline's historic districts, influence the selection of windows used?

DP: The Historic Preservation Commission required that the original windows be replaced with wood windows to match, but they did allow aluminum-clad windows on the additions. The fact that these two different types of windows were available, with nearly identical profiles and efficiency, is a benefit of working with Marvin.

What difference will these new windows make in terms of efficiency?

DP: The original single-pane wood windows would have been terribly inefficient and vulnerable to decay. The new aluminum-clad, argon-filled **Marvin Ultimate Casement Narrow Frame*** windows achieve many times the efficiency of the originals, and will make living in a home with all that glass more comfortable and affordable.

What's your impression of the finished project?

DP: The house feels dynamic and fresh—I particularly like the way the architect used a more expressive palette of materials, window shapes, and roof forms on the additions, as a counterpoint to the more restrained, box-like original house. And the Marvin replacement and custom windows are seamlessly integrated, for a completely unified look that embraces and enhances the mid-century modern aesthetic.

For more about the Brookline project house, turn to page 60. And to learn more about Marvin windows, visit **MARVIN.COM**

*previously known as Marvin Contemporary Casement



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THIS PAGE: A clapboard wall and beadboard ceiling suggest that the dining room was once a porch. Rustic posts and beams define—and support—the opening to the kitchen.

TOP RIGHT: The house's original front facade remains largely intact; the current owners added the metal roof.



BETTER THAN EVER

A **109-year-old house** grows into its own, gaining living space and creature comforts while honoring its heritage

By **David Masello** • Photographs by **John Gruen**

Produced by **Nicole Esposito-Polly** • Styling by **Anna Molvik**

RENOVATING AN OLD HOUSE is not unlike rejuvenating a mature garden: Both require careful pruning, the vision to direct new growth in the right direction, and a commitment to preserving the beauty and historical integrity of the overall structure.

The similarities are not lost on Michael Beck, executive director of the Berkshire Botanical Garden, and his husband, Beau Buffier, an antitrust lawyer who is also an enthusiastic gardener. When the couple decided to renovate and add on to their circa-1810 house in the tiny hamlet of Richmond, in western Massachusetts, they quickly saw parallels: “Working with an eighty-five-year-old botanical garden means being sensitive to history but also understanding how to bring something



that old forward in time,” says Michael, who also supervised the restoration of the botanical garden’s oldest building, which dates to the 18th century.

Right after moving in, the pair set about addressing immediate needs, replacing the sagging asphalt roof with standing-seam metal, and opening up the kitchen by removing a wall, then adding a spacious prep island in the center. “We love to cook, but we’re messy,” says Michael of the improved workspace.

Recognizing that a cozy first-floor study would likely become a regular go-to spot in the house, they decided to create one that would be especially welcoming for themselves and guests. Key to the dramatic transformation of what had been an unused sitting room was installing wall-to-wall bookshelves and cabinets, including a bar, fashioned from old floorboards and ceiling joists with no finish on them, just the natural patina of time. “We chose wood based on its character,” says interior designer Matt



OPPOSITE, TOP: Among the first rooms to be renovated was the kitchen. Demolishing a wall allowed for a huge island and nearly twice as much storage and prep area. Many of the rough-hewn posts and beams are structural.

OPPOSITE, BOTTOM: The main entry is now located alongside the new dining room. The owners' two standard schnauzers, Doogan and Saffie, greet visitors on bluestone steps leading up from the new driveway. Espaliered fruit trees form a lacy fence above dry-stacked walls of bluestone that have chunks of marble found on the property woven in.
Paint (siding): Benjamin Moore's Rockport Gray

RIGHT: Exposed beams in the living room bear witness to its location in the oldest part of the house, now warmed by a modern woodstove. The windows are original.



Floor plans

A new front entry leads to a mudroom and walk-through coat closet. A sitting room became the study, and a porch was rebuilt as a dining room open to the kitchen and its sitting area. A two-story back addition holds a pantry, laundry, powder room, and screened porch on the first floor, with a master bath, closets, and a dressing room on the second. The upstairs portion of the existing house remains largely the same. The renovated house now holds four bedrooms, two and a half baths, and 3,797 square feet of space.





Larkin, a friend and neighbor who designed the built-ins with his wife, designer Lainie Grant, and who collaborated on other projects during the remodel.

At that time, the Manhattan-dwelling homeowners used the house only on weekends. But once Michael went to work at the botanical garden in nearby Stockbridge, he moved to the house full time, while Beau continues to come up on weekends.

After 10 years, the couple had compiled a wish list of additional changes they wanted to make: converting a porch into a dedicated dining room; creat-

ing a three-season screened porch; demolishing a 1970s-era garage; raising the roof in the master bedroom; and adding a master bath.

They made those wishes a reality a year later working with local contractor Lou Boxer. Despite the roster of significant changes, Boxer says the renovation added just 1,100 square feet of living space. "The largest change to the existing rectangle was bumping out an exterior wall on the west side, eight feet by twenty-two feet, for the new dining room." A two-story addition went up where the former garage had

ABOVE: The study, just inside the original front entry, is lined with cabinetry made from reclaimed 19th-century pine joists and boards. The shelves hold books and bar supplies; the lower cabinets store more books, board games, and puzzles. The floors are original. The reupholstered chairs date to 1860.



ABOVE LEFT: Michael Beck sits on a custom sofa in the Moroccan-themed screened porch, where glass panels are swapped in for the cooler months. A bluestone floor and a beadboard ceiling reinforce the space's identity as a breezy outdoor room, though it serves nearly year-round.

ABOVE RIGHT: Original wide pine floorboards—with gaps from decades of seasonal movement—give a guest bedroom a warm patina of age. An antique rug under the bed boosts both warmth and quiet.



been. “Overall, the project was not so big a deal architecturally,” he adds. “It was more like building a piece of furniture, with every part needing to be taken into consideration” as the old structure was married to the new. Few pieces of furniture, however, require the owners to move out for eight months—from October to the following May.

While Michael and Beau wanted their home to be updated, they wanted the changes to remain in keeping with the prevailing early-19th-century look of the house. Centuries ago, the living room, in the oldest section, had served as a millinery store for women traveling along what was then a turnpike between Albany, New York, and Hartford, Connecticut. A large notch in the ceiling marks where the entry to an upstairs storage area for hat-making supplies had been. The wood-lined study was the store office.

The couple teamed up with architect James Dixon, a friend who is an expert at restoring old houses in the region, and his colleague, project architect Matt

Herzberg. “When adding a new part to a home, we’re often asked to create the illusion of a house like this having been built up over time,” says Dixon. In the new dining room, narrower pine boards were laid perpendicular to those in the adjacent sitting area, off the kitchen. “We deliberately kept the floors from matching,” says Dixon, “as a way to see the ‘memory’ of an old room that is actually new.”

“Melding the floors where we made changes was the biggest interior challenge,” adds Boxer. “You pull out a partition wall in one room, and you start to get concerned that it’s all going to look like a hodgepodge. One way to take care of that problem is to use a stain that unifies the spaces.” The dining room sits in the new front of the house, away from a busy road that runs along the back. In a further nod to the illusion that new spaces are old, Larkin brought an expanse of the clapboard siding into the dining room—as if that portion had once been part of the exterior of the house, a notion



reinforced by painting the wall the same gray that is used elsewhere on the exterior.

“The dining room is our favorite new room, since we entertain a lot,” says Beau. “With the flooring and the expanse of clapboard siding inside, it reads as a porch now enclosed—we love that effect.”

Another change, creating a three-season room at the back of the house, where the garage had been, has resulted in a new twice-a-year ritual for the homeowners. “Since the mosquitoes up here can eat you alive, we were intent on having a screened-in porch,” says Michael. “But when it gets cold, we didn’t want to have to give up using the space, so we put in glass panels for the off-season.”

Indeed, for most of the colder months, the room is cozy enough, thanks in part to a new fireplace. Michael uses it as a kind of greenhouse, lining up pots on the bluestone floor, nurturing bay and fig trees, along with fragrant rosemary bushes. The room offers views of the surrounding gardens, where raised beds yield bounties of fresh vegetables,

OPPOSITE, TOP LEFT and BOTTOM: The master bath is defined by a central partition wall with a wide floating vanity on one side and a large double shower on the other. Low awning windows and a built-in bench take advantage of the shower ceiling's slope. Dramatically veined marble lines the passageways and serves as the vanity top, bench seat, and shower window casings. Sinks, faucets, and shower fittings: Kohler. Sconces: Restoration Hardware. Tile: Bellavita Tile

OPPOSITE, TOP RIGHT: Vaulting the master bedroom ceiling and lining it with white-painted planks brightened the once dark space. Windows were replaced and relocated to enable better flow and furniture placement. The floors are original. Paint (walls): Benjamin Moore's Bleeker Beige

RIGHT: The patio outside the dining room offers additional gathering space. "When it's warm out, it becomes our main seating area," says Michael Beck. Greenery growing between the irregular bluestone pavers and perennials along the perimeter help soften the hardscape.



and espaliered fruit trees form a living fence.

Upstairs, the master bedroom's low ceiling came out, and white-painted planks that follow the roof pitch add a reflective element that makes the room feel brighter and airier. New window locations in the space afford better light and traffic flow. An expansive en suite bath went in adjacent to the bedroom, above the new screened porch. "We didn't need a bathroom that large," says Michael, "but there was this embarrassment of additional space."

Michael and Beau relied on Boxer, plus friends Larkin, Grant, and Dixon, to honor the house's past

while making it more livable for today. Did hiring friends pose problems? On the contrary, says Michael: "Having people help you who really know you makes it easier—they can figure out what you need before you even know what you want."

With the major work inside now done, Michael and Beau continue to add to and edit the plantings outdoors. "As with any old house, you're always finding new projects," Michael admits. "But given our love of being out in the yard—with our dogs and with friends—the more that grows and flourishes here, the more this house feels like our creation." ■





AN ARTFUL APPROACH

The whimsical handiwork of a couple of artistic green thumbs enlivens their shady acre of Wisconsin woodland

By **Deborah Baldwin** • Photographs by **Mark Lohman** • Produced by **Sunday Hendrickson**

OPPOSITE: An entry arch puts Doug and Barbara Henderson's love of art, salvaged materials, and shade plants on display, combining vintage corbels and pilasters with some of Barbara's fused-glass masks.

ABOVE: Woven into the landscape are, from left: a fused-glass birdbath on a metal base; a fused-glass "garden spirit"; a bench, pedestal, and planter brightened with mosaics; and a fountain covered with bits of dishes Doug grew up with.

THEIR FIRST TASK WAS TO CLEAR SOME SPACE. Out went rocks, weeds, more rocks, matted undergrowth, spindly saplings, and choking vines. Finally it was time for the novice gardeners to create art, using earth as a canvas and painting with plants.

Or in this case, plants plus birdbaths, bowling balls, septic-tank parts, urns, fused-glass artwork, stone pavers, pottery, birdhouses, benches, stone walls, glass mosaics, vintage signs, chimney flues, and the occasional mirror, window frame, and fireplace screen.

"I really like junk," says Barbara Henderson, laughing as she recalls the gradual accumulation of—let's call it found art that now decorates the gardens she cultivates with her husband, Doug, just north of Sturgeon Bay, Wisconsin.

A fiber and textile artist before she started arranging leafy hostas, flowery annuals, and begonias in her favorite shade of red, Barbara views the gardens they have created as tapestries incorporating man-made and natural materials alike. "I was thinking about weaving colors and textures throughout, so the garden is cohesive," she says of the process.

A palette of greens and reds unifies the former jumble. If you could hover overhead like one of the bald eagles that frequent the place, you would see colorful objects threaded through



foliage like beads on a string, only bigger.

What you do see at this time of year—lush, layered foliage grouped in “rooms” from one end of the narrow lot to the other—didn’t exactly happen overnight. When the couple purchased the place in 1973 as a summer retreat, it was eight miles from the nearest grocery store in a scrabbly, wooded area just west of a limestone cliff known as the Niagara Escarpment (“one of the seven natural wonders...of Wisconsin,” in the words of a travel guide).

The one-acre plot held a 1,100-square-foot house—an old hunting cabin added on to ad infinitum—which sat about 400 feet from the road and at the bottom of a slope. Much of the property is bedrock, and “we had a lot of cedar roots close to the surface, drinking up all the water; it was almost impossible to garden,” Barbara recalls.

So the couple ordered up truckloads of soil. “Ten or twelve cubic yards of soil per load, but we never counted,” Barbara says. “The first gardens were down right next to the house, and then we kept moving up the hill. We didn’t intend to, but it was so much fun, we kept going.”

In several of the gardens, they planted old concrete septic-tank tops as backdrops. “We found them, never used, sitting in a cement yard where they are manufactured, in Sturgeon Bay,” Doug says.

ABOVE: At the top of the slope, the former garage-cum-guesthouse now holds an art studio with reclaimed windows, and lattice panels edged with fused-glass flowers. A flurry of hostas surrounds an old wishing well topped by an upside-down birdbath and a vintage bowling ball; a working well is hidden underneath. The pavers are old house bricks; the stones were pulled from the property.

RIGHT: Bowling balls—drilled through and mounted on a pipe—accent a bench finished with broken-dish mosaic pieces and a concrete angel.



RIGHT: Ostrich ferns, sweet woodruff, and 'Gold Standard' and 'Blue Angel' hostas complement a painted-lattice garden divider. Barbara finished the birdbath with mosaic pieces made from her parents' dishes.

BELOW: Barbara and Doug Henderson turned a damaged boat dock into a hilltop lookout embellished with bowling balls planted on painted chimney flues. The rusty metal sculpture is from a shuttered mini-golf course.



More soil, more plants, more laboring uphill, “but fun work,” Barbara insists. Not without some heavy lifting, of course. “When Barbara asked if we could plant a bush,” says Doug, “I was always happy when I could dig one large rock out and that space would be big enough for the plant.”

The two were so dedicated to improving the land, they decided to do without a piece of infrastructure that for many would be a must: They removed a small section of driveway on the hillside that would guide their car, and their groceries, right up close to the house. They opted instead to put in gray-stained platform steps that cling to the incline, as if rising organically from the fresh topsoil.

“The stairs went in in ’96,” Barbara says, or four years after the couple moved to this spot permanently. She pieces together a timeline that involved raising three kids and spells in Blairstown, New Jersey, and Madison, Wisconsin, then pauses to recall a life-changing experience the year before the stair project. “For my 50th-birthday present to myself, I took a job in a nursery—I’d always wanted to do that,” she says. The nursery owners, Tammy and Richard Briggs, became her mentors. And the rest, as they say, is horticulture.

It was Richard Briggs who helped Doug put in those stairs over one long weekend: 22 platform





ABOVE: Reclaimed porch columns frame a pergola painted to match the gray stain on the stairs and studio; it's finished with a thrift-store chandelier and sconces. The flowers on the table are fused glass.

LEFT: 'Illumination Scarlet' begonias and chartreuse sweet-potato vine burst out of an urn sitting on a pedestal made from painted septic-tank collars rimmed with beads and fused-glass flowers and encircled by mosaic stepping-stones. The gate in the distance was formerly a fireplace screen.

steps, some of which are 10-plus feet deep, made of treated-pine 2x4s atop a foundation of treated 8x8s. Barbara boiled down her plant wants to ones that could survive in hardiness zone 5A and in a spot without much sun. Perhaps inevitably, she developed a weakness for hostas, explaining: "There are so many and they have really interesting textures, shapes, and sizes. And they do grow well in shade."

Doug adds, "We're in Door County, the thumb that sticks out into Lake Michigan," a skinny appendage about seven miles wide and 45 miles long, facing Green Bay with touristy, arty Sturgeon Bay on the west side. "We're surrounded by water, a temperature-moderating influence year-round," he says. Forgoing an irrigation system, the couple hooked up hoses and sprinklers. Keeping the garden fit, they maintain unconvincingly, is no big deal, "maybe an hour or two a day."

"No plan!" Barbara replies lightly when asked if she'd had one in mind. "But we said, goodness, we have all this space along the steps...." The couple became minorly obsessed with garden structures and sculpture. Barbara, who had developed an eye during a stint at an antiques store and who had already

RIGHT: In an area facing the studio, fused-glass “garden spirits” sport friendly birds.

BELOW: Platform steps climb from the house to the studio on a slope that rises 16 feet. The lampposts came from England by way of a nearby teardown. The homeowners added low-maintenance evergreens like bird’s-nest spruce and arborvitae. Containers of ‘Devil Wing’ begonias and ‘Margarita’ sweet-potato vines echo other plantings on the property. Yellow foxglove blooms along the steps.



started working with glass mosaics, scoured thrift stores and curbsides for items with repurposability. She added an ornamental gazing ball she found at the town dump, and patiently plastered benches, pedestals, and planters with glass pebbles and pottery pieces made by chopping up bright-yellow Fiestaware and chipped, crazed dishes from the couple’s childhood homes.

Spotting a remodel-in-progress as she was out driving one day, Barbara knocked on the door in time to drag away four columns leaning against what remained of the front porch. All they needed was “re-gluing,” then a platform, framing, a little paint, and rafters twined with trumpet vine...and, ta-da, a handsome pergola was born. Soon old business signs, even bowling balls (80 at last count) weren’t safe from the space-fillers’ schemes.

“It’s preserving history in a way,” Barbara says of their vintage-collectibles habit, and Doug chimes in, “It keeps memories alive.” Barbara sums up simply: “I like the way it looks.”

Early on, they had traveled to Chicago for the garden show and taken courses in Door County to become Wisconsin Master Gardeners. Then, as Doug, a former museum director, teacher, and fundraiser at a private school, was moving toward retirement, he found he was drawn to making art. “It was already a big part of what Barbara did,” he says. “Now I wanted to do it as well.”



In an area thick with artists, there was much to choose from. Doug decided on fused glass, which entails heating pieces of glass in a kiln to 1,465°F for 18 to 20 hours until they fuse, then kiln-firing them a second time, to mold the glass into a shape. Barbara had already experimented with the art form, following the lead of an artistic daughter.

When the restless couple ran out of projects, they trained their sights on a lowly garden shed. “Barbara wanted to remodel it, and I didn’t,” Doug says affably. “First she said we would go sit out there and have a glass of wine, and that’d never happen. Then she said she needed a place to put her grandfather’s wicker furniture, so I said, ‘I guess we’ll do it!’”

The couple had previously converted the garage-cum-guesthouse at the top of the slope into a studio. (Zoning rules prohibited adding on to the house as it is close to the water.) To cultivate their new artistic passion, they took more classes, traveling to Portland,

ABOVE LEFT: Barbara and Doug spruced up (and wired) the garden shed, adding reclaimed windows and French doors, vintage sconces, a sign borrowed from one of Door County’s famed cherry orchards, and wicker chairs Barbara inherited from her grandfather.

ABOVE RIGHT: Welded flotsam went into this sculpture-cum-fountain with a concrete pool at its base. The couple purchased the piece at auction after it had done time in a community art show. And yes, they added those bowling ball “finials” on either side.

Oregon; Warrenville, Illinois; and Las Vegas for their favorite teachers and to attend fused-glass shows, and they filled the studio with glass-making supplies and kilns, which today number seven. Barbara’s early mosaics now share space outdoors with fused-glass wall art and fanciful “garden spirits” whose mask-like faces poke through the gardens like elves. The couple also display their artwork at two local galleries, the Woodwalk and The Gift Itself.

From the street, it’s hard to see much of the gardens, but that’s fine with this bus-tour-averse pair, who prefer to enjoy the fruits of their labor in solitude. It’s a fairly idyllic setting for two people who share a love of art and nature.

What’s more, between climbing those stairs and the weeding and watering, “it’s good exercise,” Barbara notes. “We have friends who bicycle miles and miles a day, and friends who golf and golf and golf. This is what we do.” ■

An elevated view of the garden behind the house takes in blue spruce, weeping spruce, and pagoda dogwoods.



The Brookline Mid-century Modern House

Geometry Lessons

A simple gray box built in the 1950s transforms into a stunning, spacious home for a young family, thanks to a pair of six-sided additions and plenty of clean-lined finishes inside

By **Jill Connors** Photographs by **Anthony Tieuli**
Produced by **Nicole Esposito-Polly** Styling by **Caroline Woodward**



ABOVE: Located in the north addition, the living area has many hallmarks of the modern aesthetic the homeowners love: high ceilings, concrete-look tile floors, a wall-mounted floating metal fireplace, and expansive windows with no casings. The open layout is defined by split levels; here, three oak steps—with simple steel-cable-and-oak railings—lead down to the kitchen-dining area.

LEFT: Dr. Neha Kwatra (left), Dr. Sunil Ghelani, and their 3-year-old daughter, Nisa, enjoy the light-filled living area in the renovated house.



From their first walk-through of the small, boxy 1950s house in Brookline, Massachusetts, Dr. Sunil Ghelani and Dr. Neha Kwatra envisioned it transformed. Once filming wrapped on the renovated mid-century modern house—a subject of *This Old House*’s 40th-anniversary television season—and party guests filled the warmly lit and comfortably furnished rooms, the split-level, open interior, with its soaring ceilings, cool-gray floors, and expansive windows, didn’t disappoint. “It’s what we had imagined our dream house would be,” says Neha.

Achieving each of those signature design elements presented special challenges, however. The open floor plan meant nowhere to run ductwork; the porcelain-tile floors were a compromise, as the concrete the homeowners wanted would have meant additional work to beef up the floor structure; the 14-foot ceilings required maneuvering 25-foot-long steel I-beams and engineered lumber beams into place; and the large windows and folding glass doors entailed their own complex installation.

THESE PAGES

WINDOWS: **Marvin**
 FURNITURE AND RUG: **Circle Furniture**
 GAS FIREPLACE: **Focus, from European Home**
 MOTORIZED WINDOW SHADES: **J Geiger**
 FLOOR TILE: **Porcelanosa**
 PAINT: **Benjamin Moore’s Baby’s Breath (walls), Chantilly Lace (trim and doors), and White (ceilings)**



ABOVE: Illuminated at night, the angular shed-roofed house is a stunning display of mid-century modern style. In the foreground, the north addition features a garage on the lower level, capped by a living area with walls of glass.

TOP RIGHT: The kitchen's sleek look is defined by walls of glossy white panels—including pantry storage in the partition between kitchen and living area—and matte dark-gray countertops and base cabinets for contrast. Locating the cooktop, vent hood, and sink along the wall of windows was an aesthetic choice requiring the complex installation of ductwork and drains.

THIS PAGE

WINDOWS: **Marvin**
PAVERS AND STEPPING-STONES: **UNILOCK**
SHEATHING: **ZIP System**
INSULATION: **Rockwool**
SOFFIT TRIM: **AZEK**
GARAGE DOOR: **Garaga**
ENTRY DOOR: **ProVia**
SECURITY SYSTEM: **SimpliSafe**

“The original house was really only four walls and a shed roof,” says *This Old House* general contractor Tom Silva of the simple structure that the *TOH* team encountered. “There wasn’t much worth saving.” Once into the project, hidden problems emerged: The original foundation had no footings; the main sewer line was compromised by tree roots; and a number of materials used in closets and bedrooms contained asbestos—to name a few.

“It was all about location for us,” says Sunil, recalling why they took the plunge and bought the 1,400-square-foot house in a historic district, knowing an extensive renovation lay ahead of them. The house is within walking distance of their jobs at Boston Children’s Hospital, and a top-rated Brookline public school for their daughter, 3-year-old Nisa, is just a few blocks away.

From *This Old House* master carpenter Norm Abram’s perspective, the project was a chance to work on a style of house the show has tackled only once before. “It’s been more than ten years since we did a modern house, and the style is getting more popular with homeowners everywhere,” says Norm. “There were additional challenges here, though, because the original house wasn’t built to today’s standards.”

The key to turning the small gray box into the more functional, 3,200-square-foot house that Sunil and Neha wanted was two additions designed by architect Linda Hamlin—a two-story north addition with a garage on the lower level, topped by a living area and loft, and a two-story south addition with a master suite and an expanded bedroom for





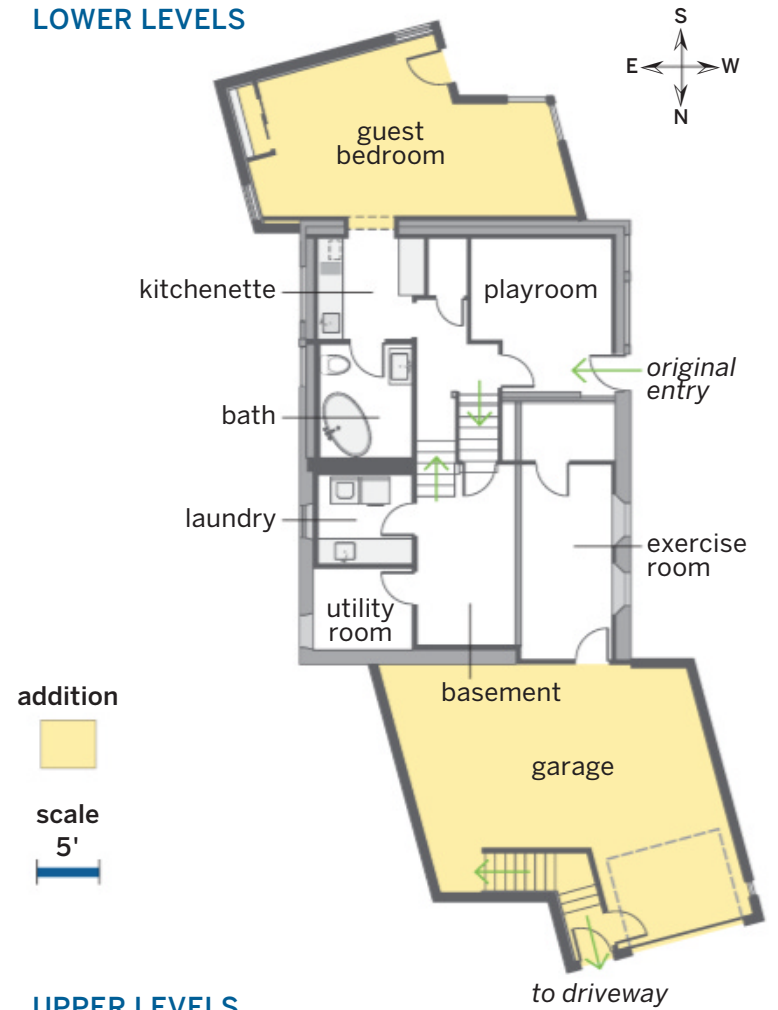
LEFT: Tucked up high in the north addition, a loft offers intriguing views of the living area and kitchen. The modern steel-cable railing allows unimpeded sight lines; the oak handrail echoes the pale wood floors, which are warmed by radiant heat.

THIS PAGE
 KITCHEN CABINETS: **LEICHT**
 COUNTERTOPS: **Neolith**
 SINK AND FAUCET: **Kohler**
 COOKTOP AND VENT HOOD: **Wolf**
 REFRIGERATOR AND FREEZER: **Sub-Zero**
 BARSTOOLS AND LOFT FURNITURE, RUG, AND LAMP: **Circle Furniture**
 MOTORIZED WINDOW SHADES: **J Geiger**

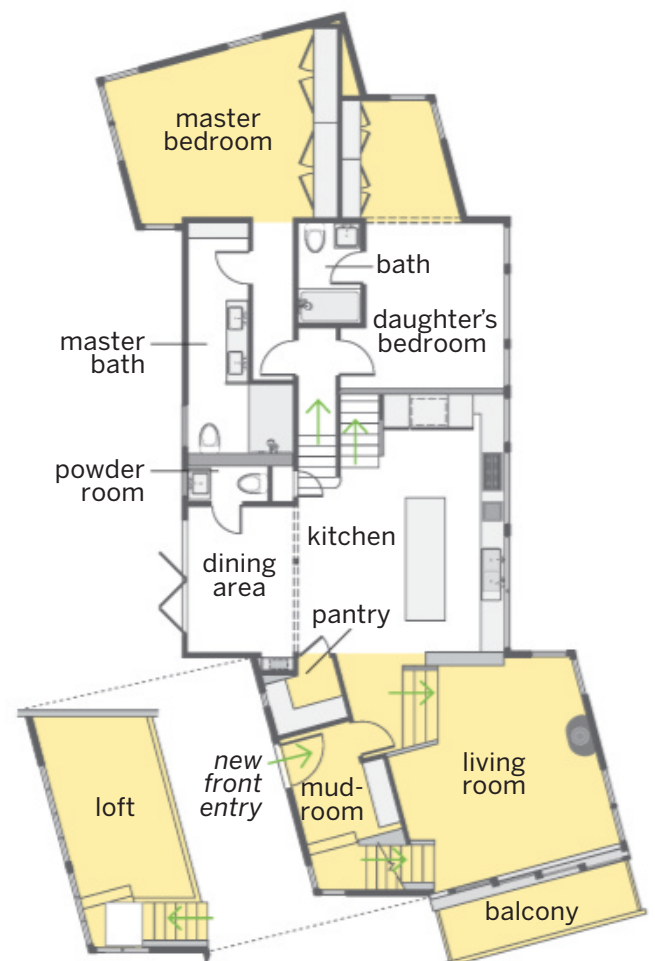
FLOOR PLANS

The original 1,400-square-foot box was expanded to 3,200 square feet with two-story additions at either end. The angular six-sided additions are in keeping with mid-century modern's geometric character and make good use of the sloping corner lot. The resulting eight split levels hold three bedrooms, three and a half baths, a loft over the living area, an attached garage, plus finished basement spaces.

LOWER LEVELS



UPPER LEVELS



FLOOR PLANS: IAN WOPPOLE

their daughter on the upper floor and a guest suite underneath. Both additions are six-sided, intentionally designed to enhance the house's geometry. "The original house was a square box on four levels," says Hamlin. "The angles of the additions make the house more sculptural than a conventional house." Inside, the new floor plan is defined by eight split levels, and to maximize the space, the plan called for finishing the basement.

One of the most distinctive aspects of the design is the open layout of the kitchen-dining area, living room, and loft. To join the kitchen to the newly built living area, an exterior wall had to come down, and two laminated-veneer-lumber beams were sistered to the existing beam to carry the load of the widened expanse. Up three steps in the north addition, the living room ceiling was framed 2 feet taller, rising to a lofty 14 feet. "We took an already open layout and made it even more open, with plenty of space for the family," says *TOH* host Kevin O'Connor.

Although the plan delivered the design and function Sunil and Neha wanted, it also created one of the biggest obstacles: With an open layout (having fewer interior walls), high ceilings (no attic), and a livable basement (finished ceilings), there was nowhere to run the ductwork. "This was the most challenging project we've done in forty years," says *TOH* plumbing and heating expert Richard Trethewey, who chose a mini-duct AC system so ductwork could be fished through the floors in corners, and radiant floor heat with an aluminum track and tubing that could fit between the subfloors and finished floors.

To address the no-foundation-footings surprise, discovered when the crew was digging out the basement to gain ceiling height, *This Old House* mason Mark McCullough installed a concrete buttress in the basement. Early on, when the house was gutted and at its lightest—without plaster walls, roofing, or flooring—he dug a channel along and under the existing foundation, laid down a grid of rebar, and backfilled it with concrete.

Another unanticipated challenge was the sewer line, which was found—by a camera scope—to be cracked and blocked by tree roots. In the process of making that repair, however, more problems emerged due to a combination of the house's compromised plumbing and the city's antiquated pipes. "We ended up having to dig across the street to replace



ABOVE: The dining area, adjacent to the kitchen, continues the clean-lined look, with large-format porcelain tile floors and unembellished doors and windows. The hinged system of French doors stacks at the left when open, creating a wide indoor-outdoor connection in warm weather.

RIGHT: A built-in coffee center and a large pantry closet add convenience and boost storage in the dining area.



THIS PAGE

DINING TABLE AND CHAIRS: **Circle Furniture**

CHANDELIER: **Sonneman**

WINDOWS AND FRENCH DOORS: **Marvin**

THERMOSTAT: **Ecobee**

AIR HANDLER: **The Unico System**

SECURITY SYSTEM: **SimpliSafe**

FLOOR TILE: **Porcelanosa**

COFFEE STATION: **Wolf**

CABINETRY: **LEICHT**

INTERIOR DOOR: **TruStile**



storm, sewer, and water lines,” says Richard.

As infrastructure issues were resolved, the couple turned to selecting finishes. Though neither has formal training, both have an eye for design and naturally gravitate to the kind of clean, modern architecture they grew up surrounded by in their native Mumbai. Both also have the ability to envision flat renderings in three dimensions, says Sunil, in part because of their work in medical imaging (he’s a pediatric cardiac imagist, she’s a pediatric radiologist).

For minimalist lighting, they chose trimless square recessed LEDs throughout and a few sculptural pendants in select areas, including the kitchen, dining space, and master bedroom. For the many stairways in the house, they specified a steel-cable rail system with an oak handrail. To provide a clean backdrop, the interior is all white. “We knew we would bring in color with furniture and artwork,” says Sunil, a hobbyist painter, who is planning to create much of the art that will hang on the walls.

“For Sunil and Neha, the kitchen is really the heart of the home,” says Mariette Barsoum of Divine Design Center, which helped steer their choices. Together they established a theme of matte gray, glossy white, and light wood tones in the kitchen, with the cooktop and sink arranged along a wall of west-facing windows. “The high ceiling and large windows are the real focal points in the kitchen,” says

AWVE: The master bedroom ceiling follows the slope of the shed roof, creating a dynamic sense of spaciousness. Closets along the interior wall allow for tall windows on the exterior walls and offer sleek clothing storage. Pale oak floors add to the airy effect.

LEFT: The master bath is a study in contrast, with dark-gray tile planks lining the floor and continuing up the far wall, set against bright white walls and a white double vanity. A large skylight floods the space with natural light.

THIS PAGE

BED, RUG, CHAIR, AND LAMP: **Circle Furniture**
 BED LINENS: **Malabar**
 BATHROOM SKYLIGHT: **VELUX**
 MASTER SHOWER DRAIN: **Quickdrain**
 BATH FAN: **Panasonic**
 SINKS, FAUCETS, AND TOILET: **Kohler**
 VANITY AND MEDICINE CABINETS: **Robern**
 VANITY TOP: **Neolith**
 FLOOR TILE: **Daltile**



ABOVE: Daughter Nisa's bedroom is finished with wood floors, built-in display shelves, and large windows so that the room will be appropriate for years to come. The room's entry door has a subtle metal band detail that is repeated on the other main interior doors in the house.

LEFT: The en suite bath features hexagonal wall tiles with a reflective metallic finish and simple, contemporary fixtures and fittings.



THIS PAGE
 WINDOWS: **Marvin**
 BED, RUG, AND SIDE TABLE: **Circle Furniture**
 INTERIOR DOOR: **TruStile**
 MOTORIZED WINDOW SHADES: **J Geiger**
 BATH FAN: **Panasonic**
 TUB, TUB AND SHOWER FITTINGS, AND ROBE HOOK: **Kohler**
 TILE: **Daltile**

Barsoum, who points out that the high-gloss white lacquer finish on the appliance wall and the low pantry cabinets has a light-reflective quality. Countertops are a glass-porcelain-quartz composite in a dark-gray matte finish chosen for its look and durability. The island, which has oak veneer lining its outward-facing knee-hole, provides seating and storage. “We didn’t want the cooktop in the island, for aesthetic reasons,” Sunil says. “We wanted the island mainly as a casual eating area for the three of us.”

The theme of gray, white, and oak repeats throughout the house, a simple palette that’s in sync with the mid-century modern aesthetic. For flooring, the couple chose large-format, 4-foot-square porcelain tiles to mimic concrete in the kitchen, dining area, and living room. Pale oak flooring warms up the stairs, as well as the bedrooms and the loft area, which is tucked above the living area. The latter addition was Sunil’s idea, a place he sees as offering multiple potential uses, from a home office to a library to an extra spot for overnight guests.

Sunil and Neha wanted each bedroom to have its own bath, and were willing to lose one of the existing four bedrooms to create roomy and private spaces. “In India, it is not uncommon to have a bath-



room with every bedroom,” Sunil says. The master suite and their daughter’s suite now occupy the second floor of the south addition; for visiting family and friends, a guest suite is situated on the lower level, complete with a private entrance and a fully equipped kitchenette.

The simplicity of the mid-century modern aesthetic comes through in every space in the house. The open plan and expanses of glass create a dazzling effect—with natural light pouring into the living room through a series of telescoping glass doors that span an opening 13 feet wide, into the dining area through a system of folding and stacking French doors, and into the upper-level baths through skylights. Even the eight split levels—defined by stairways of three to eight steps each, with cable railings—add to the house’s lightness, energy, and visual appeal.

“This is a very fun house for a young family,” says Sunil, noting that daughter Nisa already likes to sit by the large windows—which extend nearly to the floor—and enjoy the view of the park across the street. “We had been looking for a modern house in the middle of Brookline’s many old houses, and finally, that’s where we are.” 🏡



TOP: The guest suite in the south addition has its own entrance, creating a private space for visiting family and friends.

ABOVE: An adjacent, fully equipped kitchenette allows guests to serve themselves.

THIS PAGE

BED COVERINGS: **Malabar**
EXTERIOR DOOR: **ProVia**
KITCHENETTE APPLIANCES: **Wolf**
CABINETS: **LEICHT**
SINK AND FAUCET: **Kohler**
COUNTERTOP: **Neolith**
BACKSPLASH TILE: **Daltile**

SEE IT ALL!

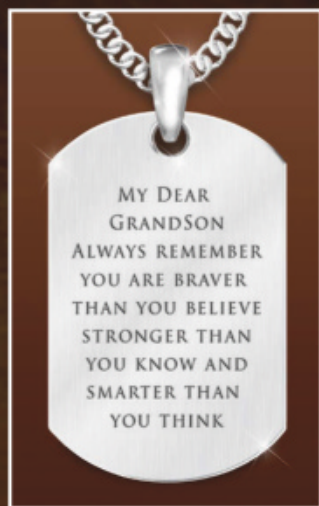
Find additional images of the finished house at thisoldhouse.com/Brookline-Mid-century-Modern

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COVER See the listing for “Better Than Ever.”

HOME SOLUTIONS (pp. 9–14) **Wood floors are lightening up** > *Thanks to* Brett Miller, vice president of education and certification, National Wood Flooring Association; nwfa.org. Katie Allen, director of marketing, Lumber Liquidators; lumberliquidators.com. Zack Clavin, strategic product manager, Bona US; us.bona.com. **Time to upgrade your toilet?** > *Thanks to* Pete DeMarco, chair of the board of directors, Alliance for Water Efficiency; allianceforwaterefficiency.org.

BEFORE + AFTER: BATH **Sophisticated sanctuary** (pp. 17–18) **Designer/builder:** Edit Design Build Studio, LLC, Minneapolis; editdesignbuild.com. **Tile installer:** Tile Fusion, Shakopee, MN; 952-367-6500. **Tile:** atlasconcorde.com. **Showerhead and sinks:** kohler.com. **Faucets:** Rohl; rohlhome.com. **Shower enclosure and mirrors:** Glass & Mirror Outlet, Hopkins, MN; glassandmirroroutlet.com. **Tub and shower fittings, shelf above tub:** Rohl; rohlhome.com. **Bathtub:** Hydro Systems; hydrosystem.com. **Vanity cabinets:** Minnesota Valley Cabinets, Savage, MN; minnesotavalleycabinets.com. **Countertops:** Paramount Granite Co., St. Michael, MN; paramountgranite.com. **Lighting:** Sonneman—A Way of Light; sonnemanawayoflight.com. **Hardware:** restorationhardware.com.

BUDGET REDO **Office nook for \$552** (p. 21) **Homeowner’s blog:** beauteefulliving.com.

PHOTOSHOP REDO **From no character to classic** (p. 23) **Architect:** Cinda K. Lester, 12/12 Architects & Planners, Downers Grove, IL; 1212architects.com.

BETTER THAN EVER (pp. 44–51) **Architects:** James Dixon, AIA, and Matthew Herzberg, AIA, Chatham, NY, and Portland, OR; jdixonarchitect.com. **General contractor:** Lou Boxer Builder, West Stockbridge, MA; louboxerbuilder.com. **Interior designers:** Matthew Larkin and Lainie Grant, Grant Larkin, Richmond, MA; grantlarkin.com. **Dining room** > **Custom light fixture:** grantlarkin.com. **Exterior** > **Paint:** Rockport Gray (siding), Whitall Brown (doors and windows); benjaminmoore.com. **Metal roof:** Firestone Building Products Standing Seam in Sheffield Charcoal Gray; firestonebpco.com. **Replacement windows:** Marvin Windows and Doors Ultimate Double-Hung and Ultimate Casement; marvin.com. **Kitchen** > **Paint:** White Dove (cabinets); benjaminmoore.com. **Range:** DCS by Fisher & Paykel; dcsappliances.com. **Range hood:** Vent-A-Hood; ventahood.com. **Refrigerator:** Sub-Zero; subzero-wolf.com. **Sink:** Shaws Original Farmhouse Sink; rohlhome.com. **Faucet:** Perrin &

Rowe; rohlhome.com. **Living room** > **Paint:** Wheat Bread (walls), behr.com; White Dove (windows), benjaminmoore.com. **Woodstove:** Wittus-Fire by Design Shaker stove; wittus.com. **Master bath** > **Custom vanity:** MHS Architectural Millwork, Marlborough, NH; 603-876-4634. **Showerhead, faucet, and sink:** kohler.com. **Tile:** 2" marble hex tile (shower floor), Zen Glossy Pearl (shower walls); bellavitatile.com. **Sconces:** restorationhardware.com. **Master bedroom** > **Paint:** Bleeker Beige (walls), White Dove (ceiling); benjaminmoore.com. **Ceiling lights:** 1920s German Light Bulb Voltage Tester Pendant; restorationhardware.com.

GEOMETRY LESSONS (pp. 60–67) **Architect:** Linda K. Hamlin, Hamlin & Co. Inc., Brookline, MA. **Kitchen and interior design:** Mariette Barsoum, Samantha DeMarco, Leslie Francis, and Sophia Wensberg, Divine Design Center, Boston; divinedesigncenter.com. **Lighting design:** Lisa Hayes, Reflex Lighting, Boston; reflexlighting.com. **Electrician:** Heath Eastman, Eaton & Eastman Electric, Kingston, NH; eatonandeastmanelectric.com. **Tile installer:** Mark Ferrante, Ferrante Tile, Woburn, MA; ferrantetile.com. **Plumbing and heating contractor:** Bilo Plumbing and Heating, Ipswich, MA; biloplumbingandheating.com. **HVAC installer:** Morris Heating & Air Conditioning, Ipswich, MA; morrisheatingandair.com. **Asbestos expert:** Ron Peik, Alpine Environmental, Chelmsford, MA; alpine-environmental.com. **Wood refinisher:** Wayne Towle Master Finishing and Restoration, Needham, MA; waynetowle.com. **Landscape architect:** Blair Hines, Verdant Landscape Architecture, Brookline, MA; verdantlandscapearchitecture.com. **Arborist:** Mike Bonner, Iron Tree Service, Wenham, MA; irontreeservice.com. **Wall sheathing:** Huber Engineered Woods ZIP System; huberwood.com. **Mineral wool insulation:** rockwool.com. **Concrete foundation insulation:** insofast.com. **Spray foam insulation:** icynene.com. **Rainscreen:** benjaminobdyke.com. **Air handler system:** The Unico System; unicosystem.com. **Interior doors:** TruStile; trustile.com. **Windows:** Marvin Windows and Doors; marvin.com. **Radiant floor panels:** Viega; viega.us. **Skylights:** VELUX; veluxusa.com. **Security system:** SimpliSafe; simplisafe.com. **Thermostats:** ecobee.com. **Living room** > **Flooring:** Porcelanosa Bottega Acero 47"×47" porcelain tile; porcelanosa-usa.com. **Fireplace:** Focus Fires Paxfocus; europeanhome.com. **Motorized window shades:** J Geiger; jgeigershading.com. **Paint:** Baby’s Breath (walls), Chantilly Lace (interior doors and trim), White (ceilings); benjaminmoore.com. **Furnishings:** Nash Loveseat, Nash Drink Table, Nash Rectangular Drink Table with oak top, Lucy Bar Cart, Fayerweather Swivel Chairs, Orlo Coffee

Table, Cecily Dawn Rug; circlefurniture.com. **Light fixtures:** Creative Systems Lighting trimless square recessed lights; csllighting.com. **Throw pillows:** Malabar; malabarfabrics.com. **Floor pillows:** homegoods.com. **Exterior** > **Driveway pavers and stepping-stones:** unilock.com. **Trim:** azek.com. **Kitchen** > **Cabinets:** LEICHT; leicht.com. **Gas and induction cooktops and wall ovens:** Wolf; subzero-wolf.com. **Refrigerator and freezer:** Sub-Zero; subzero-wolf.com. **Countertops:** neolith.com. **Sink:** kohler.com. **Flooring:** porcelanosa-usa.com. **Barstools:** Hans Counter Stools; circlefurniture.com. **Loft** > **Furnishings:** Avon Channeled Chairs, Maze Shelving Unit, Milo Laptop Table, Festival Rug; circlefurniture.com. **Dining area and pantry** > **Furnishings:** Soul Dining Table and Halle Chairs; circlefurniture.com. **Chandelier:** Sonneman—A Way of Light; sonnemanawayoflight.com. **Custom cabinetry:** leicht.com. **Flooring:** porcelanosa-usa.com. **Built-in coffee bar:** subzero-wolf.com. **Master bedroom** > **Furnishings:** Astrid Queen Bed and Nightstand, Albany Chair, Ojai Floor Lamp, and Pelt Rug; circlefurniture.com. **Bed coverings:** malabarfabrics.com. **Master bath** > **Vent fan:** Panasonic; na.panasonic.com. **Linear shower drain:** quickdrainusa.com. **Sink, faucet, and toilet:** kohler.com. **Vanity and medicine cabinets:** robern.com. **Vanity top and white wall cladding:** Iron Frost; neolith.com. **Floor and wall tile:** Portfolio Charcoal Matte; daltile.com. **Girl’s bedroom** > **Furnishings:** Eclipse Luna Bed and Luna Nightstand; circlefurniture.com. **Girl’s bath** > **Vent fan:** na.panasonic.com. **Fixtures and sink faucet:** kohler.com. **Tile:** Fabrique Blanc Linen (floor), Vogue Bay Bright White (shower and vanity walls), Oceanside Casa Hexagon Fleet Blue Blend (shower accent wall); daltile.com. **Guest bedroom** > **Bed coverings:** malabarfabrics.com. **Guest kitchenette** > **Flooring:** porcelanosa-usa.com. **Custom cabinets:** leicht.com. **Appliances:** subzero-wolf.com.

SAVE THIS OLD HOUSE (p. 76) *Thanks to* Paul C. Liepe, executive director, Friends of the Old West End, Danville, VA; oldwestendva.com. 🏠

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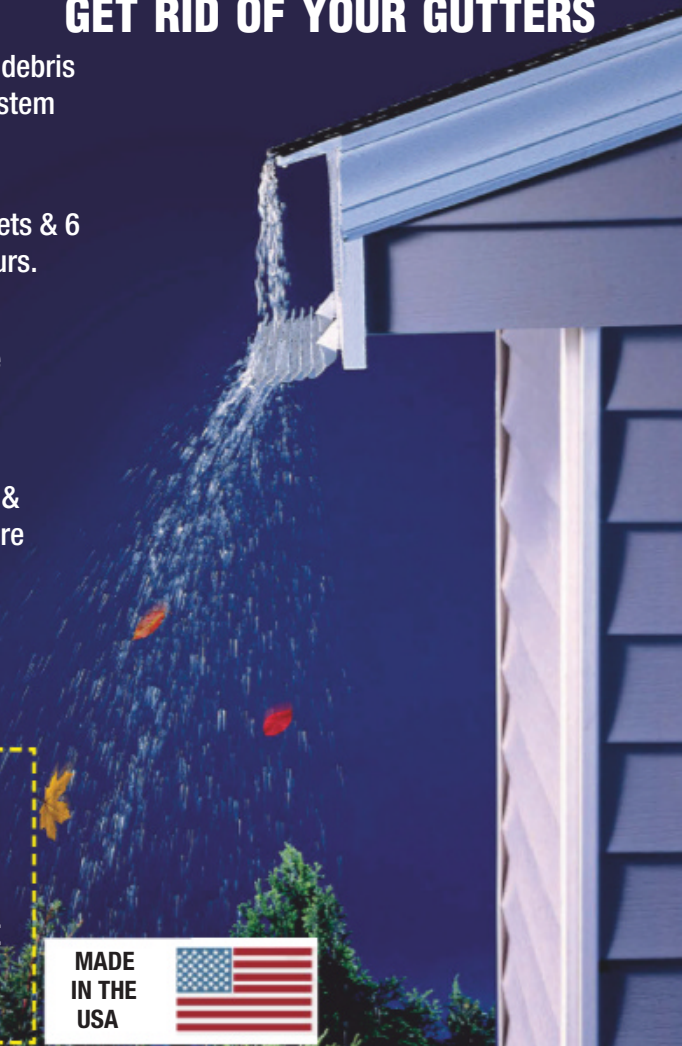
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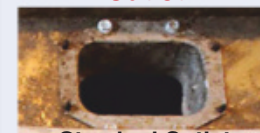
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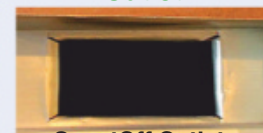
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THE HISTORY Rooms for rent at 870 Pine Street were advertised locally as early as 1922, but the house's origins can be traced to 1881, when grocer and future city councilman John W. Carter purchased the land it sits on. Sometime before 1888, he and his wife, Margaret, built this Italianate—and went on to welcome a total of nine children. The home has changed hands 14 times since then, eventually becoming a multifamily, with several additions built on to house tenants when Danville's tobacco and textile industries were still thriving.

WHY SAVE IT? The house is located in a national historic district filled with homes built between 1830 and 1910. It retains handsome architectural details that reflect its Italianate style, such as a graceful bracketed cornice, a frieze with a delicate sunflower motif, and intricate window casings. After an economic downturn, the city has been on an upswing for the past decade thanks to new rental-unit regulations and an aggressive redevelopment plan. "It's an exciting place to be right now," says Paul Liepe, executive director of the local preservation group that is looking for the house's next steward.

WHAT IT NEEDS While the structure is sound, rotted sections across the back will likely need removal. Inside, the floor plan must be returned to a single-family. The house requires all-new systems, and varying degrees of repair to the original metal roof, Dutch lap siding, windows, interior plaster, and woodwork. Exterior work visible from the street will require approval from the local preservation board. It's a tall order, but energetic new owners will find plenty of like-minded neighbors ready to cheer them on. —KATELIN HILL



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1. The 3,404-square-foot house has three stories, including a walk-out basement.
2. An upstairs bedroom features heart-pine floors and one of five fireplaces. Plans call for the four-unit building to be returned to a single-family home with three bedrooms and two and a half baths.
3. The dining room's original bay window is trimmed out with oak casings.
4. The double entry doors and transom are safeguarded by protective board coverings.



GOT A HOUSE?

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