

SPRING 1998

# This Old House

# The Milton Project

## Renovating a Classic Colonial

**A complete start-to-finish guide to the TV show's remarkable dream house**



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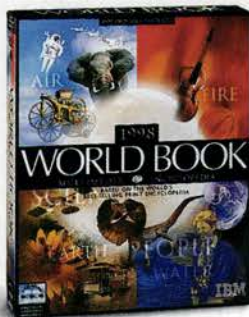




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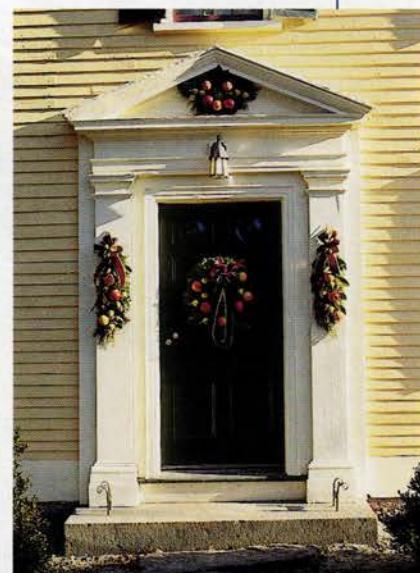
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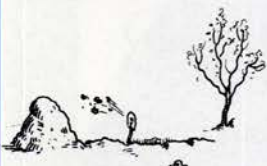
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Throughout the Milton project, Tom Silva chronicled the house's progress, post by beam. Excerpts from his sawdust-caked journal accompany 31 whimsical sketches that form an old-fashioned flip-book. Simply hold the magazine by the spine and riffle quickly from front to back—it's a *This Old House* cartoon. ILLUSTRATIONS BY DAVID SCHER



Q.





# A.

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## CONTRIBUTORS, SPRING 1998

When he first saw the Milton dream house, **BRAD LEMLEY** felt overwhelmed—but not by envy. “It was a rabbit warren with twisty little passages,” he says. “It was the biggest project house I’ve been assigned to, and it needed the most work.” He soon found, however, that each visit revealed an intriguing development: a wine cellar installed, workshop tools delivered, a fountain activated. After visiting the Milton project at least 20 times to research 10 stories in five issues, Lemley acquired an emotional attachment to the dream house and a desire to live in it. “My favorite memory is the wrap-up party, driving toward the finished house, seeing it surrounded by golden light,” says Lemley, a staff writer for *This Old House* and a former editor of the *Tightwad Gazette*. “I’d like my wife to see it. But if she wants to buy it, I’m in trouble.” Lemley, who lives in Topsham, Maine, contributed to *Life*, *Parade* and the *Washington Post* before joining *This Old House* and committing to numerous three-hour drives to project sites around Boston. He particularly enjoys working with the TOH core crew of Norm Abram, Tom Silva, Steve Thomas and Richard Trethewey. “This is a part of the workforce that’s largely been ignored by the media,” Lemley says. “There are lots of stories about movie stars, stockbrokers and lawyers. Carpenters and electricians haven’t been interviewed that often—they’re not jaded, and they have such an enthusiasm for what they do.”



Like Brad Lemley, photographers **JOE and AMY KELLER** have been with the Milton project from the beginning. Through their photographs, the Kellers documented all the major undertakings at the house: the pouring of a concrete foundation, the removal of a wide-plank pine floor, the razing of an ell. After more than eight months and 30 visits to the job site, the Kellers decided that they, too, wouldn’t mind living on the 2.9-acre property. Joe Keller entertained thoughts of setting up their photography studio in the barn; Amy Keller coveted the screened porch. They also took pleasure in the humbler aspects of the project. “Our favorite part was lunch

with the crew,” she says. “They built a long picnic table in the barn, and it would be full of guys with lots of ribbing and joking going on.” In between the laughter, the Kellers grabbed advice about the 1929 gambrel-roofed cottage they had recently purchased in Kingston, Massachusetts. “We talked to Tom and Norm about what kind of roof we should get,” says Joe Keller. “We’re buying the same gutters and possibly the same kind of radiant heat they have at the Milton house.” The couple, who have been married for four years, operate their photography business under the name Keller & Keller. Their work has appeared in *Esquire*, *Boston* and *Natural Health* magazines.



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# the dream

*After 18 years and 36 projects, This Old House undertakes the ultimate renovation*

## since 1979, the crew of

*This Old House* has merrily sawed, hammered, wired and plumbed dozens of forlorn houses into residential resplendence. But no renovation pleased director Russ Morash, master carpenter Norm Abram and contractor Tom Silva quite as much as the one chronicled in this special issue: the transformation of the pre-Revolutionary house at 1144 Brush Hill Road in Milton, Massachusetts. From the start, they called it a dream house.

This was their own project, something *This Old House* had not experienced since it was but a kid. The show began in 1979 as a renovate-on-spec operation, but it ran smack into a recession its second season and lost money on a massive condominium conversion. In the 17 seasons since then, the team always worked with a house's owners, a format that gave viewers an instructive peek at the always delicate owner-contractor minuet.

This time, though, Boston public television station WGBH, which produces *This Old House*, agreed to buy a house outright, have the show's crew renovate it and sell it on the open market. That freed them to choose virtually any property for sale in greater Boston and revamp it with special features. "We've wanted to do a media room for years, but none of the home owners have wanted one," said Russ when the project was announced. "This will give us the chance."

In March 1997, a real-estate agent showed producer Bruce Irving a white clapboarded 3,200-square-foot farmhouse, with a barn and nearly three acres of land,

Flip the pages of the magazine, starting with this illustration, to see the dream house emerge!



### Week 1

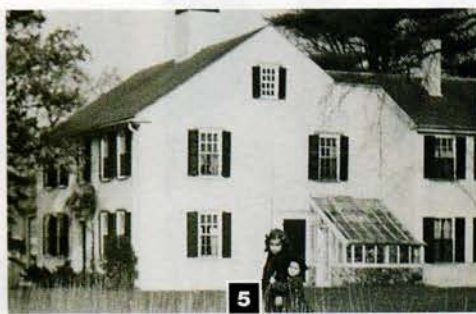
**INSPECT THE HOUSE** and barn. Look (and feel and sniff) everywhere for rot, water and bugs, for unvented spaces and for gaps that let in air. Check that the roof's ridge is straight and the exterior walls are plumb. Poke around the attic for leaks and insulation. Search the basement for dampness and foundation problems. Assess all the mechanical and electrical systems. Discuss changes to the layout of the house with architect Rick Bechtel.



BY BRAD LEMLEY PHOTOGRAPHS BY SIMON WATSON



**The pleasing marriage** of a Colonial more than 270 years old with a kitchen and service wing fit for the 21st century is evident in a model made by Carmine DeBalasi, a colleague of the architect in charge of the renovation.



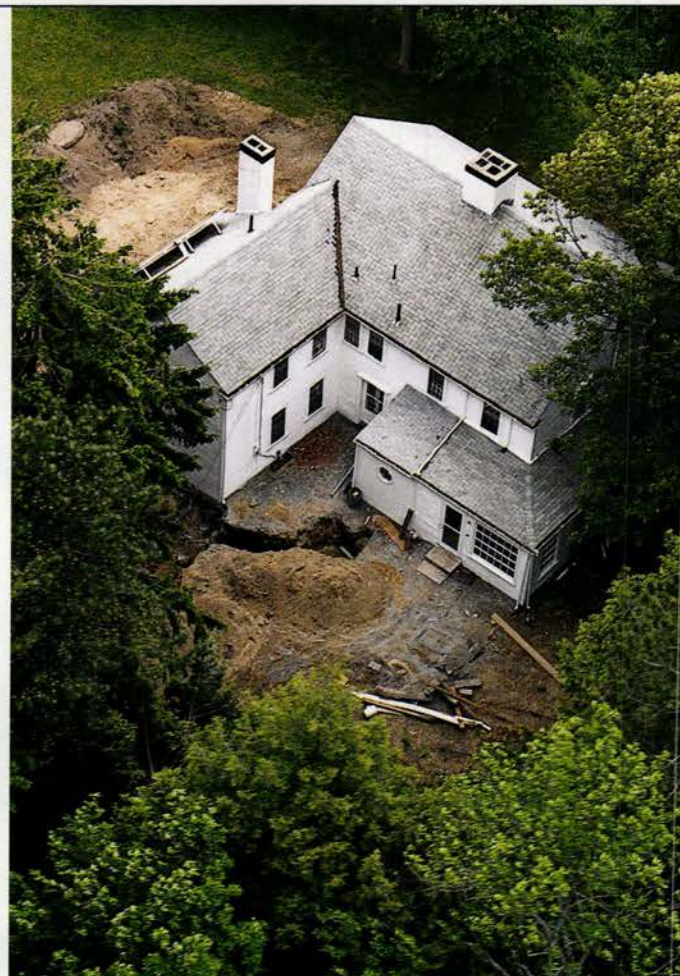
**The house evolved** as successive residents left their marks.

**1.** In the late 1860s, the Colonial looked almost as the original owner, John Crehore, had left it. **2.** A muddle of additions then sprouted onto the back. **3.** Around 1900, John Brown replaced a vine-covered porch with a greenhouse. **4.** The turnaround drive, similar to the one built by *This Old House*, was gone by the time Henry and Margaret Beecher bought the property in the 1930s. **5.** Before Henry Beecher left to serve as a doctor in World War II, he shrank the greenhouse, which had enclosed a window in the formal front room. While he was gone, his daughters, Holly and Mary (the younger), were inseparable.





KELLER & KELLER



1



## Week 2-3

**GET DEMOLITION**  
permits from Milton  
building department.



Salvage cupola and arch-top door and windows. With Herb Brockert's backhoe, demolish the existing ell on the barn. Erect forms and pour footings for the new ell, which will house Norm's workshop. Cut open the floor in main barn, and repair the rotting sills.

in the prosperous bedroom community of Milton. "The house had a stunning amount of potential," says *TOH* host Steve Thomas, recalling the blustery afternoon in April when he first saw it. "I felt like a car nut does, coming upon a classic Mercedes Gullwing in rough condition. You understand that it needs lots of work, but that doesn't diminish the fact that it's a classic."

With a symmetrical nine-window facade, staunch timber frame and no-nonsense fieldstone foundation, the original house of the 1720s epitomized the New England Colonial. Yet the newer portions were true to the form as well.

Industrious Yankees always expanded their houses; through the years, occupants had tacked no fewer than

six additions onto this one, including a greenhouse, enclosed mudroom, laundry room and home office. Some of those would have to go, but a 40-by-60-foot barn built late in the 19th century offered wonderful possibilities. Soaring some 30 feet high at the peak, it could serve not only as a garage but also as a venue for space-hungry avocations: anything from boatbuilding to gymnastics. Tom's inspection revealed rotted joists, rusted pipes and other typical old-house woes, but none was insurmountable.

Virginia Devine, a physical therapist who with her husband had moved to the property in 1958 and raised four children there, sold it to WGBH for \$415,000. She cried after closing the deal, explaining that the barn



6



7



## the making of a dream house

**1.** No one could complain about a lack of expertise on this project. Huddled are builder Charlie Silva and *TOH* contractor Tom Silva, master carpenter Norm Abram and plumbing and heating contractor Richard Trethewey.

**2.** In early June, an aerial photograph of the back of the house shows the old living room on the left and the old kitchen and utility room on the right. *TOH* moved the kitchen to the left side and put a media room in its place.

**3.** With the old sunroom gone, the side of the house already looks less cluttered.



2



3

in particular was filled with memories of birthday parties and her kids' Batman escapades. The only thing that made the parting bearable, she said, was that the *TOH* organization would shepherd the job.

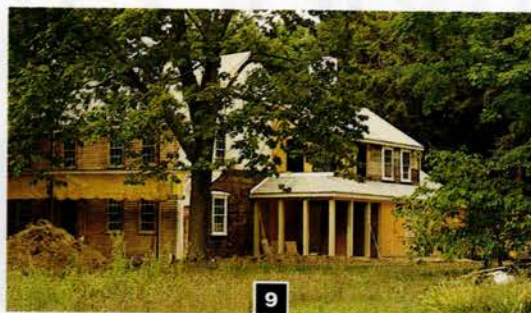
Tom, following architect Rick Bechtel's plan, directed the massive transformation over the next eight months, constructing a media room, master suite, wine cellar and new kitchen in the house and a workshop, exercise room and sauna in the barn. Somehow, the guys succeeded in transforming a utilitarian farmhouse more than 270 years old into a modern sybarite's dream cocoon—while preserving original historical niceties such as the delicate pine breastwork in the front parlor.

As with all major renovations, heartbreaks and budget-quakes punctuated the process—the initial \$300,000 renovation budget swelled to more than \$550,000. But the love affair forged with the old place in the snowy early spring remains vibrant. The guys may not weep as Virginia Devine did, but they will find July's sealed-bid auction wrenching.

"We become attached to all of the houses we work on," says Bruce, "but we always know they're not our houses—that we're basically trespassing. In this case, though, we really felt it was our place, our own club. A huge amount of thought and emotion went into it. It will be hard to say good-bye." ■



8



9

**The greenhouse**, evidently, inspired owners to tinker. **6.** In the early 1950s, Henry Beecher built a new greenhouse with arched windows so he could raise camellia trees. **7.** Carpenter ants destroyed that handiwork, so Donald and Virginia Devine, who bought the property in 1958, replaced it with a basic Plexiglas sunroom. **8.** The Devines also installed solar panels on the roof, which helped pre-warm water for their furnace and boiler. **9.** To cut the clutter, the crew from *This Old House* removed the sunroom and solar panels. They built a new screened porch, which opens into the dining room. The porch supports part of the expanded master bath on the second story.





Probing the decayed cedar shingles on the west side of the barn, Norm Abram discovers that most of the century-old pine board sheathing underneath remains relatively rot-free.



#### Week 4-5

**GUT OLD KITCHEN.** Demolish rear addition where mudroom will be built. Remove glazing from greenhouse so it can be torn down. In the barn: Rip out old wood floor, dig holes for new posts, jack up sagging beam, mix concrete and pour sill and post footings. Erect scaffolding to prepare for re-siding. Order the steel for flitch beams. Meet with engineer and architect to determine beam sizes needed for house and barn.

# what needs fixing first?

*Norm, Steve, Tom and Richard search for rotten beams, rusty pipes, frayed wiring, leaky shingles and other hidden horrors*



**“Isn’t that special?” mutters Tom Silva as he examines a piece of 12-inch aluminum flashing leaning out from the foundation of the dream house. These metal strips can be a building’s salvation, channeling water away from vulnerable seams. But Tom says this piece, intended to separate a brick patio from the house’s rear wall, was installed backward and holds rainwater against the house. “It’s like a gutter designed to keep the bottom of the wall wet and rot it quickly. That’s a new one on me,” he sighs.**

Such moments of dismal revelation are part of every house inspection. The crucial question: How many unwelcome surprises will *This Old House*’s crew of contractor Tom Silva, Steve Thomas, Norm Abram, plumbing and heating specialist Richard Trethewey and other experts encounter as they sight, poke, thump, sniff, measure, scrape and, occasionally, caress this 3,200-square-foot home, its adjacent barn and the 2.9 acres on which they sit?

That water kills wood-frame houses is a dictum both Tom and Norm have recited for decades. So for most of this tour, Tom will think like a raindrop. He’ll imagine himself smacking into the shingles, clapboards or earth around the house, then pouring, oozing, splashing, dribbling, percolating, evaporating or condensing as dictated by architecture, gravity, wind and temperature.

Tom begins this inspection as he always does, with the long view. Strolling around to the sun-washed front yard, he stands 50 feet back from the facade so he can see the whole structure, including telltale droops. “This is a post-and-beam,” he says, referring to a construction style common until the early 1800s that uses massive, widely spaced timbers to hold up a building. “Even from the outside, you can see the old beams and how the roof has sagged between them.” He scallops a finger in the air to mimic the gentle seven-foot-wide dips that run from peak to eave. “Wood sags as it gets older, just as we do.”

If the whole building were sagging or leaning, that might mean a sill, the beam that sits right on the foundation, was badly rotted. But that hasn’t happened here. “Overall, things are as straight and square as you can expect in a house this old,” Tom says.

His eyes and hands inch down the facade. “I see that it has a fresh paint job. That can mean major problems have been covered up, but it’s also a common thing to do before selling, so it may not be important.” Framing the double-hung window to the door’s right with his thumbs and forefingers, he notes, “There’s already some serious peel-



**The intersection** of barn and ell creates the perfect protected spot for a future vegetable garden. Plans call for the dilapidated ell to be torn down and replaced with a new building on the same footprint that will house a handyman’s dream woodworking shop.

BY BRAD LEMLEY  
PHOTOGRAPHS BY KELLER & KELLER



ing around that window. That could mean a wet basement and no vapor barrier, so moisture in the house is pushing the paint out."

Tom's gaze lingers at the fieldstone foundation. A home's connection to the earth is critical. Serious problems often start here, and, given that tons of house sit atop them, can be brutally expensive to fix. "You look at the elevation of wood to ground," he says. "It should be at least eight inches." Otherwise, splashing rain and drifting snow can rot sills. Strolling around the house, Tom finds that standard isn't generally met. In fact, in the rear, dirt covers the first course of clapboards. When he pushes the soil away with his foot and gives the bottom clap a swift kick, it emits a punky tock, like a thumped overripe melon. "Sound can tell you a lot. That doesn't sound too solid."

Craning his neck to inspect the rear walls and roof, Tom discovers more moisture. "There's a little weed garden growing in one corner of the gutter, and the gutters are blackened, so water has been running over them. I also see there's no soffit ventilation anywhere." A massive, artless glob of tar around a vent pipe coming up from the kitchen means "it most likely was leaking."

The ravages of water's patient, relentless assault grow even clearer as Tom trudges down the worn wooden steps to the cellar. The odor of mildew assaults the nose, the whitewashed fieldstone sports dense patches of mold, and silted puddles dot the brick floor. "A lot of these sills are in rough shape," he says, prying spongy fibers from

one. The subfloor is also decaying, particularly a section just above the old furnace. "We'll have to tear that out and replace it."

The joists, 2x10s that support the floor above, aren't original. Tom can tell because they sit beside the sill's chopped-out pockets, not in them. Most of the joists rest on a hodgepodge of beams installed in the early 1950s. Those in turn are supported by concrete-filled steel columns known as Lallies, which tell their own woeful tale. "Look at the base of this one," Tom says, peeling off a palm-size flake of ochre rust. "They sank it directly into, instead of on top of, the concrete. That's not smart. Water collects and eats away the steel, so you have only the concrete in the column holding it together." He judges the Lallies strong enough to remain, but he'll discuss replacement with other crew members.

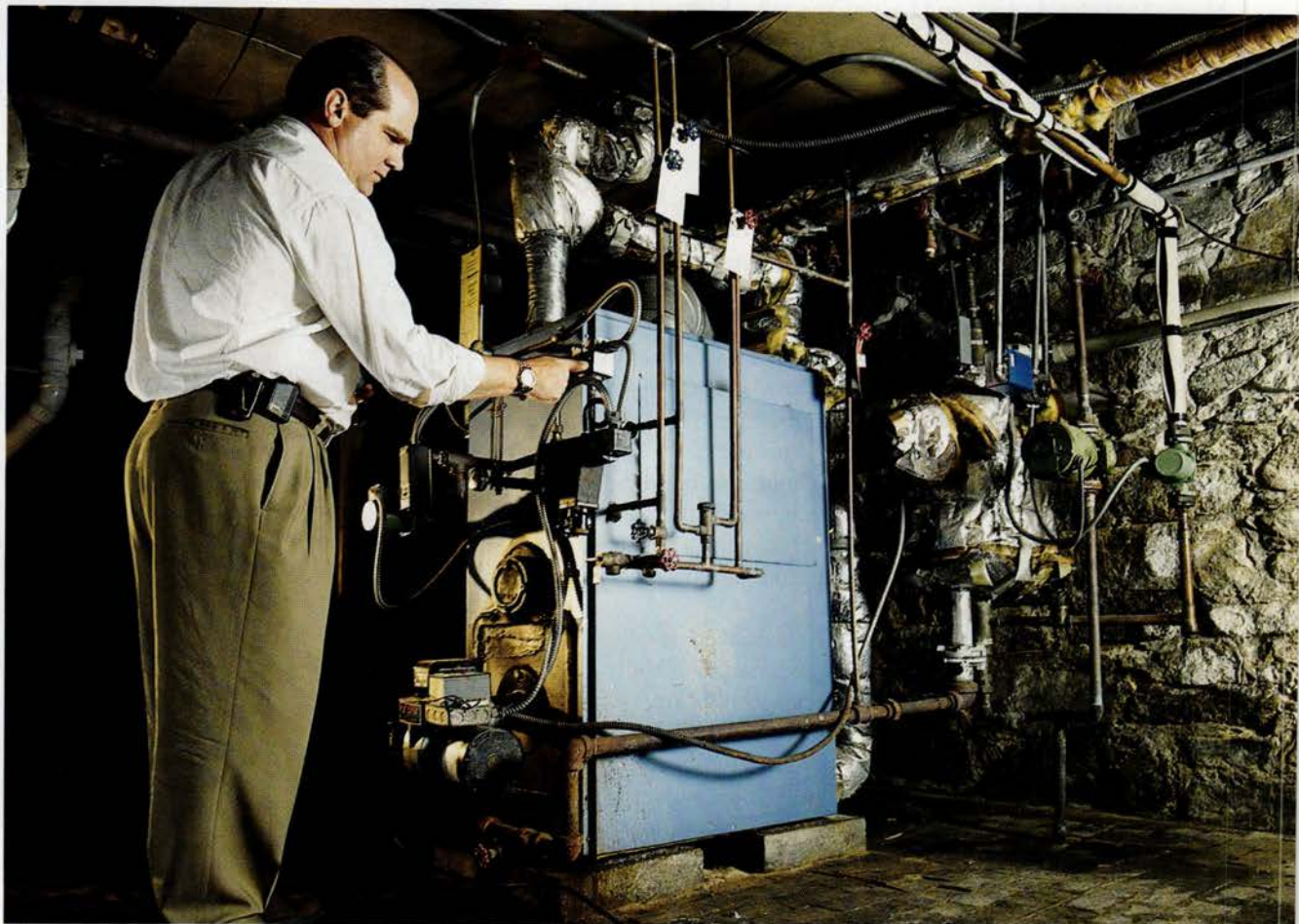
Moisture has eaten into more than just the house's structure. Joining Tom down in the cellar, Richard Trethewey gazes skeptically at the webwork of supply, drainage and boiler pipes. "These are what we call wet returns," he says, pointing at several badly corroded galvanized steel pipes that traverse the moist floor. "These carry the water that condenses in steam radiators back to the boiler. When they look this bad, they're like corroded arteries. You barely touch one, and it breaks."

By contrast, Richard lauds the bread-box-size Grunman controller for the two solar hot-water panels that were installed on the addition in the late 70s. A gauge on the unit reports that now,



## Week 6

**TEAR DOWN** greenhouse. Jack up corner of house above old kitchen, and remove old Lally column. Install steel-reinforced flitch beam to support second floor. Erect new posts in the barn. Lay out the trenches for the dust-removal ducts and for piping that will hold the vacuum and electrical systems in the shop. Cover shop floor with plastic vapor barrier. Jack up barn wall to install new post and sill. Strip the barn's sidewall shingles.



**One look convinces Richard Trethewey** that the inefficient 1970s-era boiler and tangled maze of rusty pipes in the basement should be junked. "This is a tankless boiler that stays hot even in summertime," he says. "It heats a large mass of water all the time to get a small amount of hot potable water now and then."



# A home's connection to the earth is critical. Serious problems often start here and can be brutally expensive to fix.

at 11:30 a.m., the water temperature is 105 degrees. "It's still working great in 1997," Richard says. But his crew will tear out the solar hot-water system because the rooftop panels, while environmentally noble, look out of place on this old Colonial.

Another basement visitor, master electrician Al Gallant, finds the wiring as pitiable as Richard finds the plumbing. Most is armored cable known as BX, popular in the 1940s but subject to corrosion, especially at junction boxes. Knob and tube wiring,

dating back perhaps to the 1920s, services most of the second floor. Gallant says decades of overloading made it overheat, embrittling its fabric insulation. Ironically, the 100-amp breaker panel, added in 1983, is in even worse shape than the old wiring that leads to it. "The original installer didn't seal the meter socket properly. Water dripped directly from it right into the panel." Although the panel should have lasted 30 years, it's ruined—and a serious hazard. With all the breakers corroded, it won't trip predictably if overloaded. And, like most old houses, this one is underwired, Gallant says, with just two outlets in most rooms.

When the inspection moves up to the living areas, Steve Thomas joins in, pointing out charming historic flourishes he hopes will remain untouched. Among his favorites: whole-wall raised-panel pine, known as breastwork, that imbues the upstairs master bedroom and the parlor below with honey-colored warmth; gorgeous wide-pine floors that "I wouldn't even sand—you'd lose that wonderful patina of age"; and an eclectic collection of fireplaces ranging from shallow Rumford-style one-room heaters to a vast-throated hearth in the central downstairs room.

These appealing touches are confined mostly to the original building, and the team plans few changes here. But the kitchen, subject of a 1962 remodel, suffers from aqua countertops, pseudo-Colonial cabinetry and fake ceiling beams, and it broods in the perpetual shade of the home's north corner. "Aside from aesthetic



**Destined for demolition**, the old kitchen, left, sports an unfortunate early 1960s color scheme and decor Steve Thomas terms "Colonial whoop-de-do." The rotted bottom of a corner board on an addition built in the 1880s, above, yields easily when Tom pokes at it with his screwdriver. The culprit: downspout splash. Tom says such downspouts "should connect to solid pipes or troughs that carry the water away from the house."



problems, it's on the wrong side of the house," Steve says.

Creaking stairs lead Tom and Steve from the second floor to the attic. The dim garret features one ragged bedroom, which was created by simply sawing out one of the horizontal braces, known as collar ties, that keep the roof from spreading. Luckily, the old bones survived this insult with no apparent damage. An inadequate four-inch layer of rock-wool insulation lies beneath the attic floor-

boards, and mildew blooming on the roof sheathing indicates stagnant air. Tom says the single gable vent is not enough; he'll have to create at least one more opening to promote cross ventilation. Continuous venting along the soffit would help even more.

At the end of the house tour, resting against an old cable spool in the yard, Tom is upbeat, despite all the skew, rot and sag he's uncovered. "As houses this old go, the structure here is somewhat

**The relatively** plumb and level lines of the Colonial's facade impress Tom Silva. "If you don't believe a house this old needs work, you're just living in a dream world," he says.

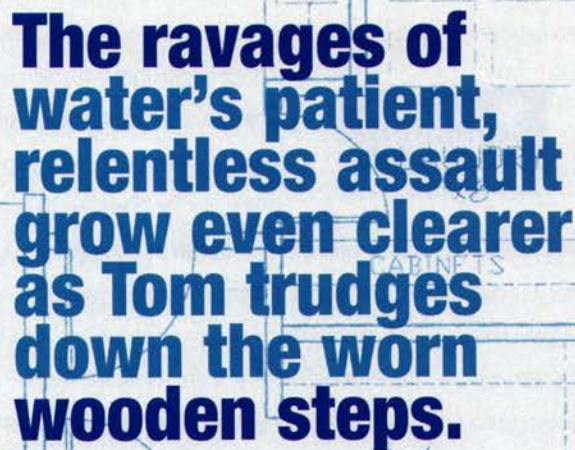


## Week 7

**BREAK THROUGH** stone foundation under the kitchen to install duct for heat and insulated water pipes to the barn. Rip down the side porch. In the barn, make foundation forms for the front wall, set posts and frame the walls for the garage doors. Install new wind braces and 2-by-10 joists for loft. Stud outside wall of exercise room. Build sills for shop and install new LVL headers where barn joins shop. Cut old floorboards for barn's sidewall sheathing.







# The ravages of water's patient, relentless assault grow even clearer as Tom trudges down the worn wooden steps.

better than average. The former owners made some effort to keep up with problems as they arose, like adding the new joists and beams in the basement ceiling. There are definitely problems, but nothing beyond what you would expect."

HEARTENED BY THE OLD COLONIAL'S fix-up potential, Tom ambles 30 yards across the lawn to join Norm in the barn. This red-shingled circa-1880 post-and-beam structure excites the guys even more than the house. Steve believes the barn's planned amenities, including an ultra-modern exercise room, cedar-lined sauna and dream workshop, will make the whole property "the ultimate cocooner's paradise."

On the whole, the big old barn is in "relatively good condition," Norm reports. "The main reason is that the roof has remained pretty tight." But trouble spots, springing from the bottom up, aren't hard to find. The piled-rock foundation holds the structure just a foot or so above a dirt-floored crawl space. One hundred and twenty years of trapped, rising damp has rot-riddled the bottoms of many of the 8x8 posts.

Luckily, the most recent owners, Donald and Virginia Devine, took action in 1981. Workers sawed off the decayed bottom of the northeast wall and replaced it with an elevated concrete foundation. "We were really encouraged when we saw that repair," Norm says. "It meant someone was watching out for the place." Other repairs were less successful. In 1984, the Devine's son Chris replaced a section of the original, rotted floor with pressure-treated joists topped with spruce planks and plywood. The Devines parked their cars on the planks, but "parts of the structure need reinforcing for the constant added weight of vehicles, and the footings are basically nonexistent—just concrete blocks sitting on the dirt," says Tom. "Because of all the added work needed, the best thing to do is put a concrete slab in here to make a more solid floor. As an added benefit, we can install radiant heat in the slab."

"Check this out," Norm says, squatting by a post near the garage doors. Because it was rotting, "somebody just cut the bottom off." Testifying to the integrity of the old structure, the post, levitating a foot above the foundation, led to no noticeable sag.

But other dips and bends are easy to find. "Tommy got out his laser level and shot along this beam," Norm says, indicating a floor timber near the barn's center. From one end to the other, "it drops

three inches." Suddenly, to Norm's surprise, the beam sinks as one of Tom's workmen steps on it. "Wow—lost another inch right there."

Fortunately, repairing this old barn will be a blessedly unfussy task. "The idea isn't to make it gorgeous; it's to stabilize the structure," Norm says. "Even if I owned it, that would be where I'd put my effort. I'm confident we can do that without too much pain."

The only part of the barn that's beyond salvation is the rotted, leaking, swaybacked ell that projects off to one side. As the first official act of renovation, the Silva Brothers crew will rip it down and on its footprint build a new wing that will house a Norm-designed state-of-the-art woodworking shop.

The synergy of vast, glorious space and snazzy tools has Steve salivating. "I'm intensely jealous," he moans. "At my place, all I have is a tiny, squalid garage."

THE GUYS EMERGE FROM the cavernous barn, blinking in the sunlight. The acreage spread before them is the domain of landscape architect Tom Wirth, who squints and scribbles as he assesses what's here—and what could be here. Wirth strolls through the remains of a flower garden in the south meadow. "We've got daffodils, wild mustard, irises, a lot of naturalized bulb plantings," he says. "All around you can see old bushes—hollies and lilacs. They were planted in the Victorian period and have gone past their maturity."

The result, to the untrained eye, is a landscape gone to seed, almost totally without structure. But Wirth not only discerns a man-made pattern; he likes it and will preserve as much as he can. "There's a lovely conifer edge around the whole property, and it has some wonderful specimen trees that were obviously planted. Traditionally, these old farmhouses have trees planted as mementos to relatives or friends. So," he says, spreading his arms wide, "you get this lovely sense of containment around this big open space that combines yard and meadow."

Wirth says he'll stick with the enclosed meadow theme but spruce up the details. The existing driveways don't work: One leads to a small parking lot on the house's west side; the other is a straight shot to the barn. Neither is within 50 feet of the new kitchen, so hauling in groceries would be a trek. Old photos show a grand, curving lane swooping right by the facade—stare hard at the front yard and you can just make out a vestigial crease of the original track. Wirth would like to bring the driveway back.

The 120-foot-wide area between the house and the barn is perhaps the most appealing feature of the whole property. But punctuated now only by a ragged fountain, the protected space has yet to be seen in its full glory. "There is too much big, featureless lawn here," says Wirth. "You really want to have a smaller amount of lawn, and bring in the driveways and gardens. Think of driving up into this area from the west side, feeling screened out from the world, with interesting features to draw your eye. There's a huge amount of potential in this big space that we need to realize."

Wirth aims to create a mix of shade and ornamental gardens here that will literally pull the new owners into the landscape. The idea is to create a more casual division between indoors and out—the sort of constant, pleasant interplay between home, barn and property that earlier residents enjoyed as they worked the land.

"This was first a working farm, then a gentleman's farm and only recently a suburban home. Everything we're doing is inspired by the property's history." ■



If you've ever cooked on an ordinary gas grill, chances are, you've apologized for it. The flare-ups that singed your expensive steaks. The cold grill corners that made it impossible to cook food evenly. The shoddy construction.

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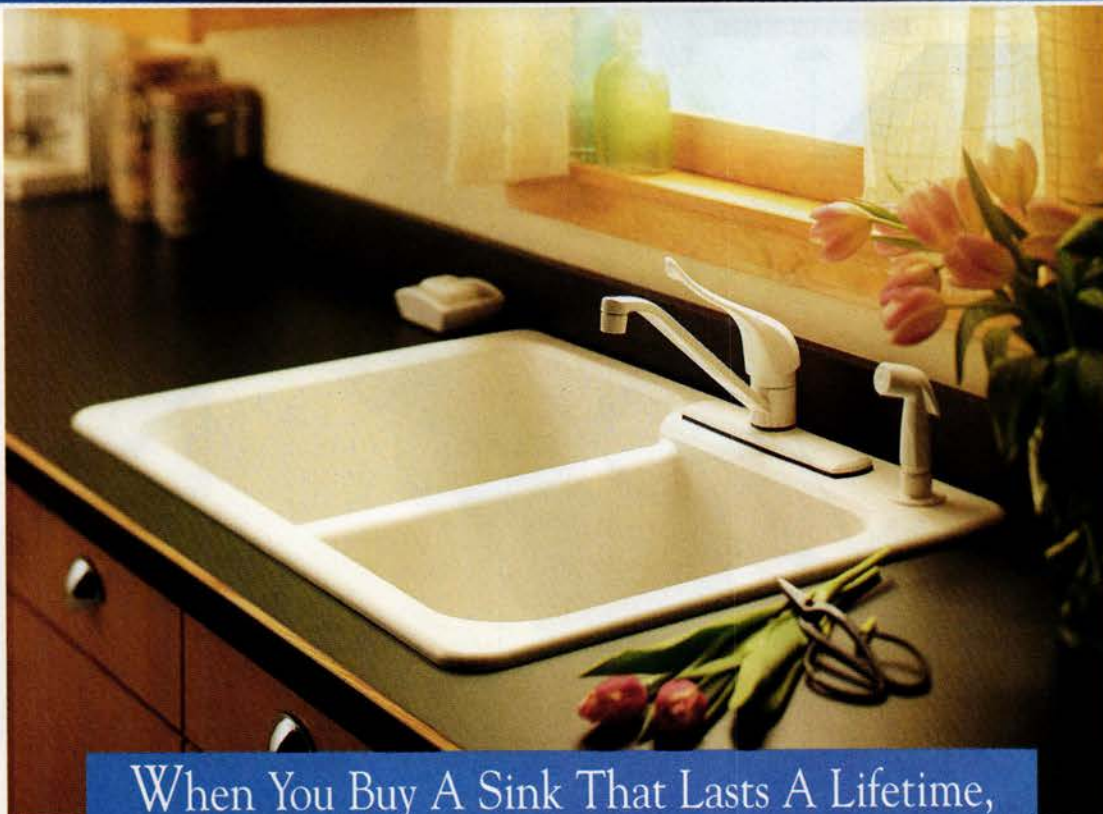
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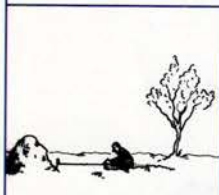


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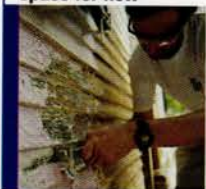
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### Week 8

TEAR DOWN OLD laundry room. Gut space for new



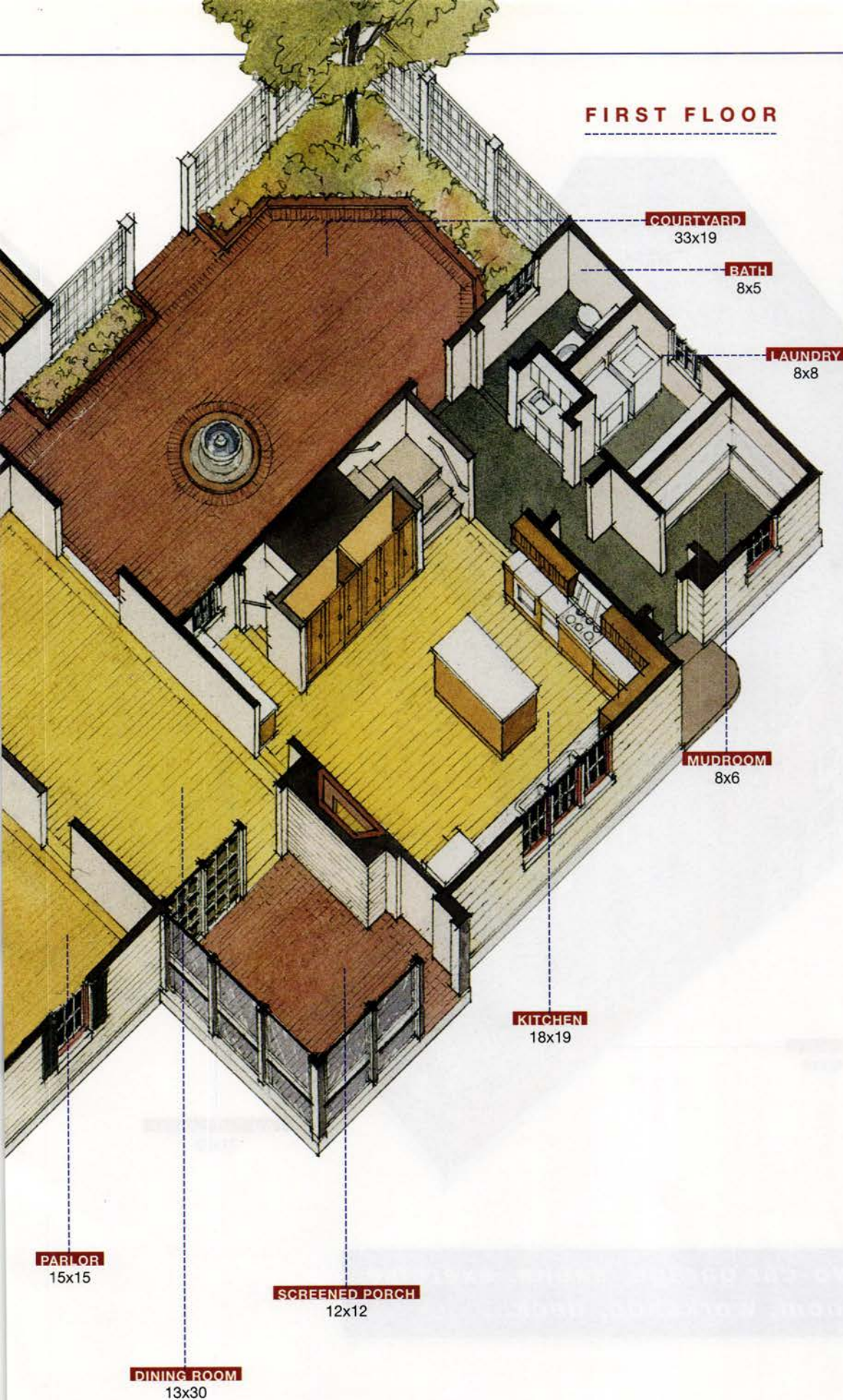
kitchen and rooms on second floor. Repair kitchen's stone foundation. Strip paint from facade. At the shop: Make ridge beam. Install radiant-heat tubing, and cover it with concrete. Dig and backfill around the foundation.

# imagine this:

*New kitchen, laundry, mudroom, baths, screened porch, media room, wine cellar...*

BY JILL CONNORS ILLUSTRATIONS BY TIM SLATTERY





## FIRST FLOOR

COURTYARD  
33x19

BATH  
8x5

LAUNDRY  
8x8

MUDROOM  
8x6

KITCHEN  
18x19

SCREENED PORCH  
12x12

PARLOR  
15x15

DINING ROOM  
13x30

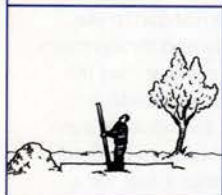
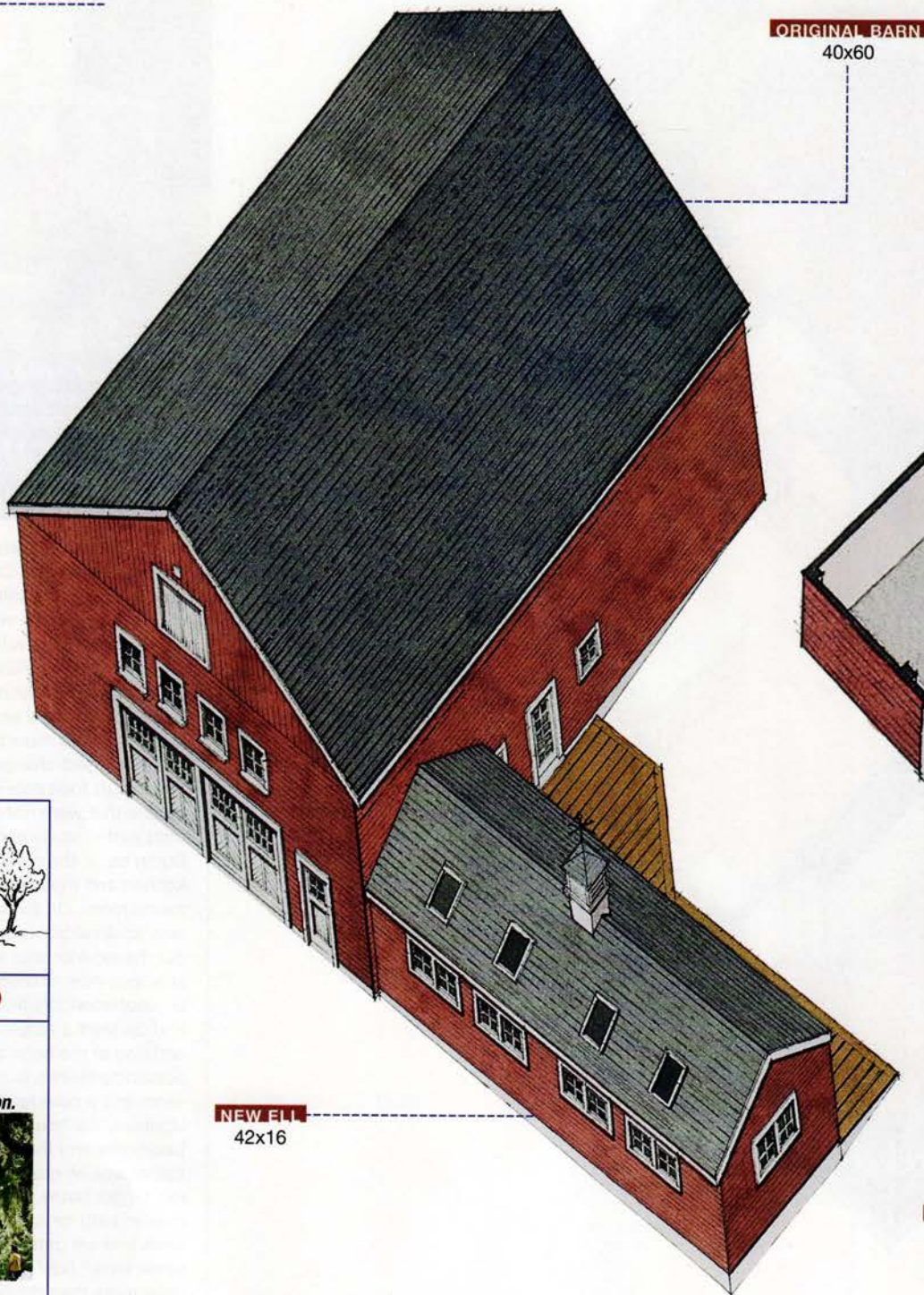


Stationed before the sunroom they plan to raze, *TOH* contractor Tom Silva and master carpenter Norm Abram meet with architect Rick Bechtel to map out renovation of the Milton house.

The front rooms were wonderful antiques when *This Old House* bought the 1720s Milton house. But the back was a warren of small, dark rooms with poor traffic flow. So architect Rick Bechtel came up with a strategy: "Keep the front rooms formal and intact. Make the back rooms casual, and do the biggest changes there." Thus, *TOH* took care to hide all the repairs that were needed in the front parlor, study and dining room. But in back, the crew gutted the kitchen and replaced it with a media room. On the house's sunnier, south side, workers pushed out the exterior wall 4 feet for a spacious new kitchen. Down came an uncomfortably hot greenhouse, and up went a screened porch. An addition at the back of the house accommodates a laundry, a mudroom and a powder room. Upstairs, the house still has four bedrooms and three baths, but the bathrooms all grew. "People today like bigger baths, especially a big master bath for a couple who both work and are getting ready at the same time," Bechtel says. The crew more than doubled the master bath, using space gained from the construction of the screened porch just below. They also removed a stairway in the middle of the dining room and built a new back hallway on the second floor. The hallway leads to stairs down to the kitchen, creating what will surely be a well traveled flight path: from kids' bedrooms down to the kitchen and out the side door near the mudroom.



## BARN PLAN



### Week 9

**BUILD WALLS**  
and roof of  
mudroom addition.

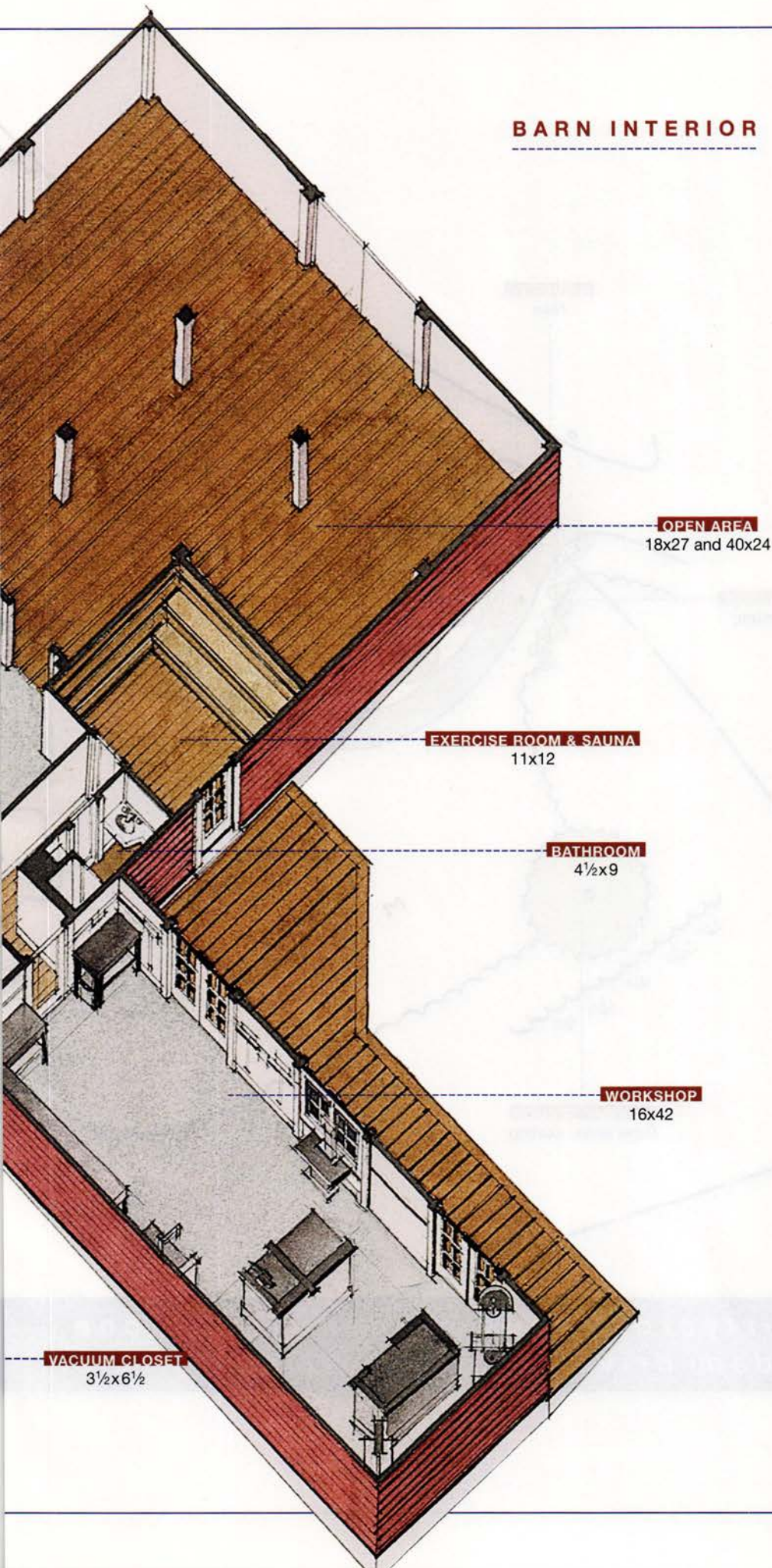


Jack up kitchen ceiling until it's level. From main house to barn, run power lines and insulated plumbing for heating system. Replace rotted sill in old part of house. At the barn, erect the new ell using structural insulated panels.

*...new two-car garage, sauna, exercise room, workshop, deck...*



## BARN INTERIOR

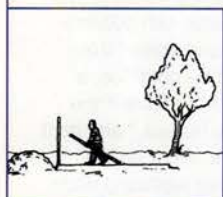
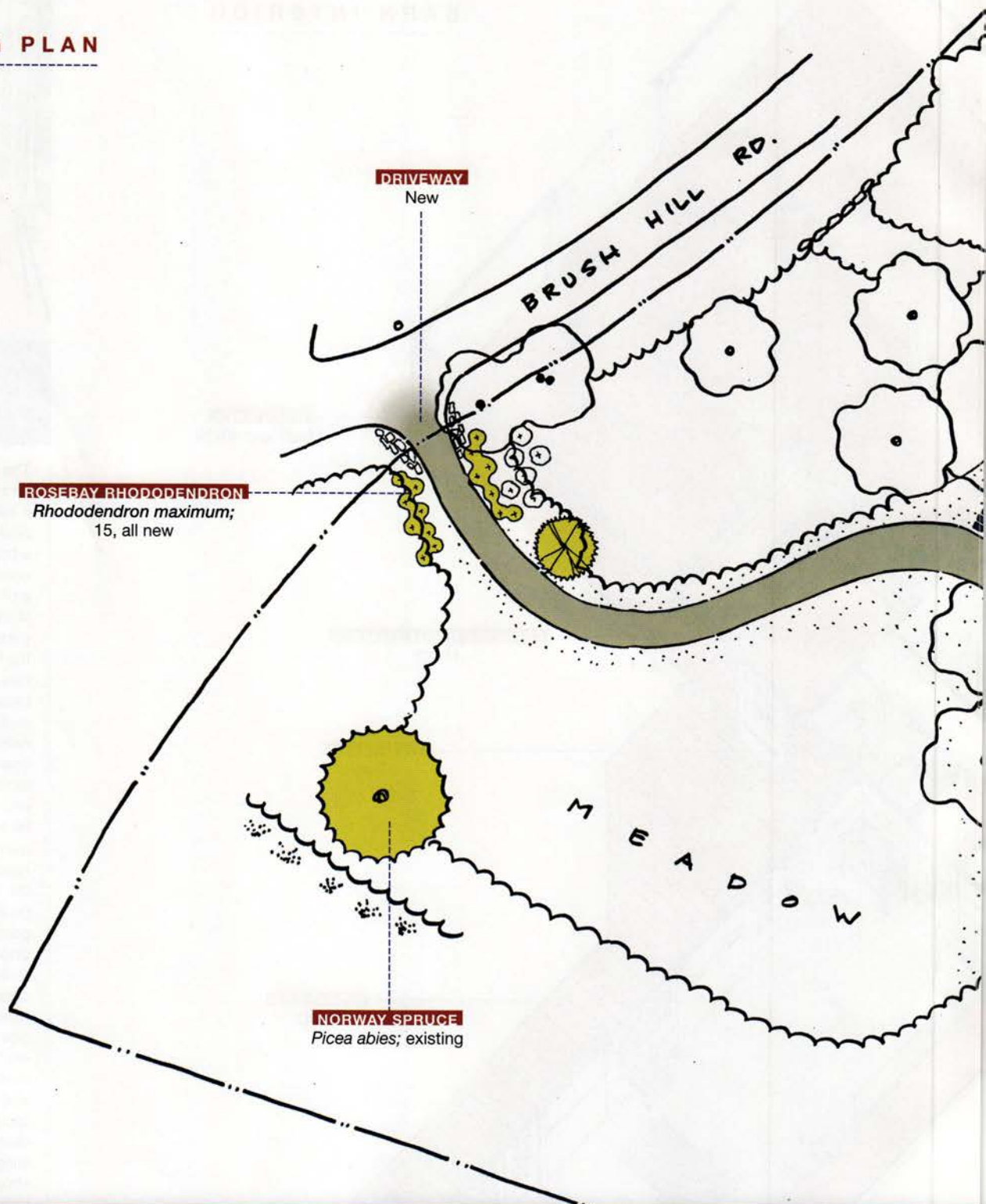


Thanks to panelized shingles, carpenters Charlie Silva, in blue shirt, and Phil Jones zip siding onto the barn and workshop in 1½ weeks.

The picture-perfect red barn looks on the outside much as it did when it was new in the late 1800s. But peek inside. It's been re-created as a barn for today. The main section once housed horse stalls, a hayloft, a chicken coop and a room for storing carriages. Today, a two-car garage, a new hallway and a bath fill the front half of the barn. An exercise room and sauna jut into the back half, but the rest remains just as it was—complete with soaring ceiling, dirt floor and stalls. This open area “could be an office, a storage area, even a stable if the new owners have horses,” architect Rick Bechtel says. Work on the main barn included replacing and repairing several posts, rebuilding the foundation under the front wall, pouring a concrete floor in the garage area and adding new garage doors and windows. A new fire-resistant wall separates the garage area from the rest of the barn, and a new deck leads out from the exercise room. But probably the most exciting change was to an addition built long ago as lodging for a stable hand or a gardener. Deemed too shabby to save, the ell was demolished to make way for a new wing that houses a dream workshop designed by *This Old House* master carpenter Norm Abram. Two sets of French doors bring in natural light along a back wall that formerly had only windows. And a nearby closet houses a sawdust-collection system connected by hoses to all the cutting and sanding tools in the shop; the closet also conceals a central vacuum with intakes in the shop and in the garage.



## LANDSCAPING PLAN



### Week 10

INSTALL RADIANT heat and pour concrete floor in mudroom and screened porch. Set the porch posts and header. Tear up floorboards in kitchen, and jack joists up 1 1/4 in. Build stairways to basement and second floor. Frame master bath. Gut dining room ceiling and insert joists. In the barn, frame and sheathe the bathroom, the hallway and the vacuum closet leading to the shop. Tar-paper shop roof.

...new courtyard, shade garden, fieldstone path, macadam driveway and carriage circle.



# RECIPE FOR A COURTYARD WITH SHADE GARDEN

## Trees & Shrubs:

Cornelian cherry dogwood, *Cornus mas*  
 Mountain andromeda, *Pieris floribunda*  
 Common boxwood, *Buxus sempervirens*  
 Hybrid yew, *Taxus x media*  
 Small-leaf rhododendron, *R. hybrid*  
 White catawba rhododendron, *R. catawbiense* "Album"  
 Mountain laurel, *Kalmia latifolia*  
 Drooping leucothoe, *L. fontanesiana*  
 "Rollisani"  
 Sourwood, *Oxydendron arboreum*  
 Blue holly, *Ilex x meserveae* hybrid

## Vine:

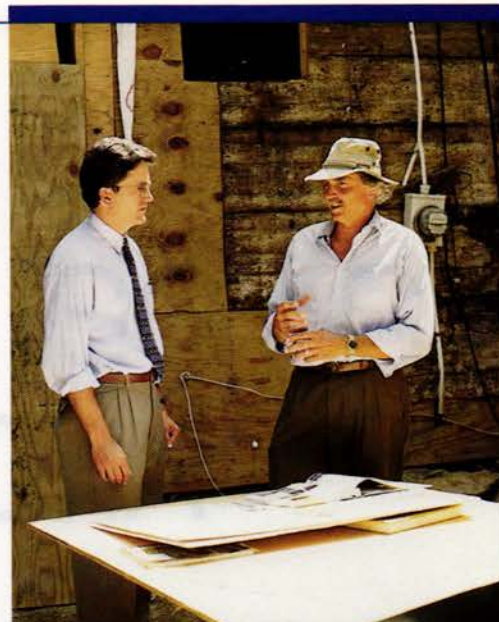
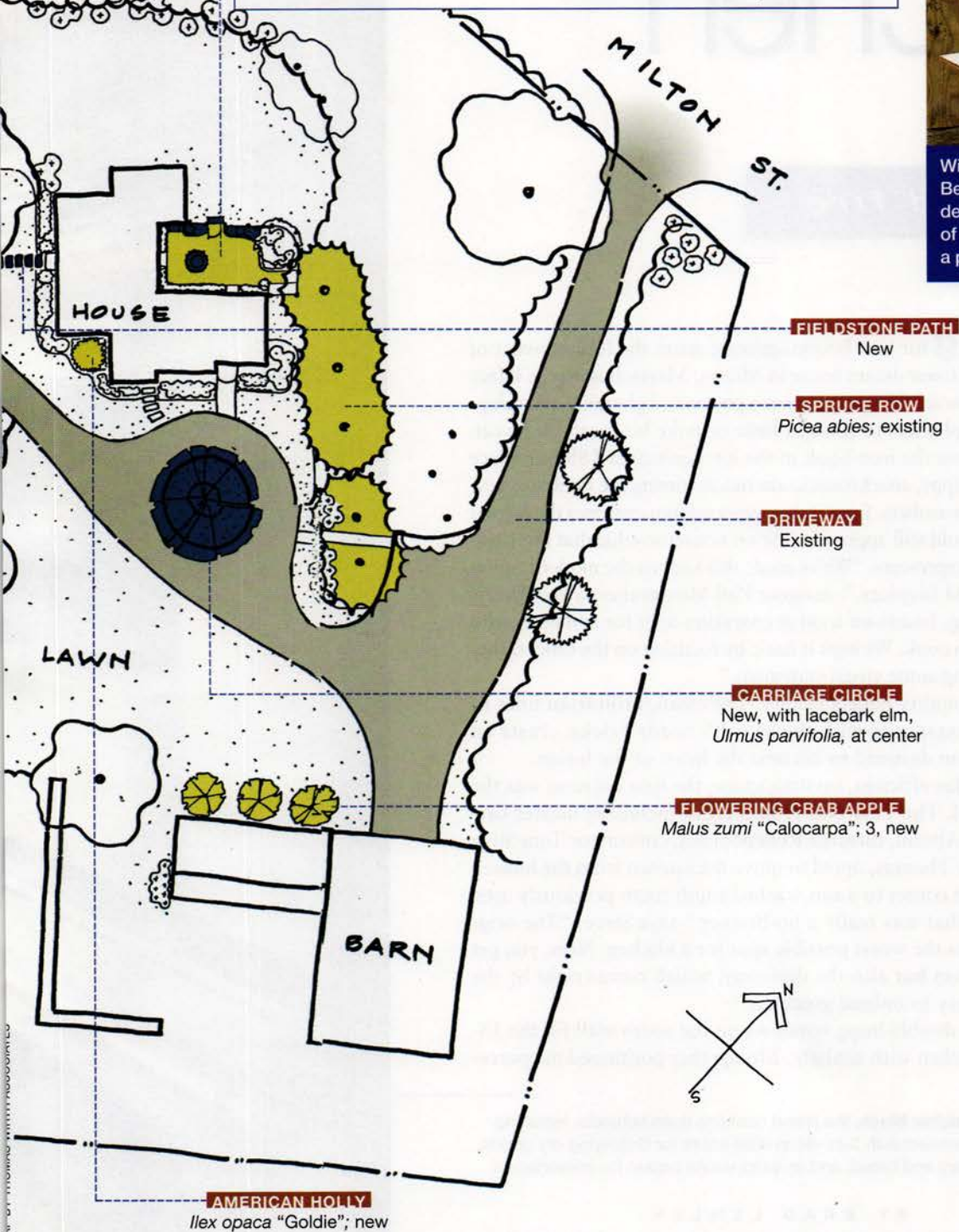
Five-leaf akebia, *A. quinata*

## Perennials & Ferns:

Maidenhair fern, *Adiantum pedatum*  
 Yellow bishop's cap, *Epimedium x versicolor* "Sulphureum"  
 Jacob's ladder, *Polemonium caeruleum*  
 Creeping liriop, *Liatris spicata*  
 Fringed bleeding heart, *Dicentra eximia*  
 Cranesbill, *Geranium sanguineum*  
 Small Solomon's seal, *Polygonatum biflorum*  
 Snakeroot, *Cimicifuga racemosa*  
 Sweet woodruff, *Galium odoratum*  
 Periwinkle (myrtle), *Vinca minor*

## Bulbs:

Musk grape hyacinth, *Muscari racemosum*  
 Summer snowflake, *Leucojum aestivum*



With a nearly 3-acre canvas, architect Rick Bechtel, left, and landscape architect Tom Wirth decide to emphasize what Wirth calls a "sense of history." The plant list is drawn mostly from a palette available in Massachusetts by 1830.

The 2.9-acre Milton property, with its sweeping meadow and dense evergreen woods, was stunning when *This Old House* arrived—and it's even more so now. Landscape architect Tom Wirth was particularly taken with the meadow and with what he affectionately calls the "granddaddy" of the site, a century-old Norway spruce that towers 80 feet over the southwest edge of the meadow. But where change was needed, Wirth worked some magic. The old driveway gave an unflattering view of the house and ended with steep steps up to the front door. So Wirth laid out a new macadam drive that gracefully winds past evergreens, past the meadow, around a new carriage circle to the new side door and then on to the garage. In the carriage circle, he planted a disease-resistant lacebark Chinese elm—selected, as were most of the plants he added, because it was a species available in Massachusetts by 1830. (Wirth says he picked that date because it allowed him to use research done by a nearby living history museum, Old Sturbridge Village.) To separate the house from busy Milton Street, Wirth designed a brick courtyard with a fountain and shade garden on the northeast side of the house. But perhaps his best move of all was knowing when to take advantage of local knowledge. In return for a lecture he gave, nine women from the Milton Garden Club planted all the perennials in the shade garden.



# a real cook's kitchen

*Light, stone and fire*

## when a craving

for beef bourguignonne seizes the future owner of the *This Old House* dream house in Milton, Massachusetts, he'll face an intriguing choice. He can program a phalanx of gleaming microchip-controlled appliances to simmer, bake or nuke his meal. Or he can hang a pot from the iron hook in the kitchen's circa 1880 fireplace and spend a happy, anachronistic afternoon stirring the bubbling stew and nursing the embers. Even if the owner seldom exercises the second option, he should still appreciate the no-nonsense ethic that the 19th-century hook represents. "We've made this kitchen the modern equivalent of the old fireplace," designer Phil Mossgraber says. "This is a hardworking, hands-on food preparation area for someone who really wants to cook. We kept it basic by focusing on the tasks rather than on making some visual statement."

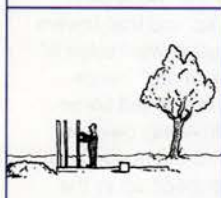
Yet functionality begets beauty. The clean, utilitarian lines of the design, juxtaposed with the hearth's ruddy bricks, create an appealing room destined to become the heart of the house.

To create this efficient, inviting space, the first decision was the most essential. The *This Old House* crew, including master carpenter Norm Abram, director Russ Morash, contractor Tom Silva and host Steve Thomas, opted to move the kitchen from the house's dim northwest corner to a sun-washed south room previously used as a study. "That was really a no-brainer," says Steve. "The original corner was the worst possible spot for a kitchen. Now, you get not only the sun but also the driveway, which comes right by the door so it's easy to unload groceries."

Three new double-hung windows on the south wall fill the 18-by-19-foot kitchen with sunlight. Mossgraber positioned the porce-

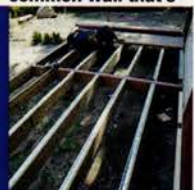
**Topped with butcher block**, the island contains three cabinets, including tall glass-front drawers with 3-in.-deep false fronts for displaying dry goods, drawers for cutlery and bread, and an extra waste basket for convenience.

BY BRAD LEMLEY  
PHOTOGRAPHS BY KELLER & KELLER



### Week 11

**INSTALL NEW**  
studs to reinforce the  
common wall that's



between mudroom  
addition and kitchen.  
In media room, level  
the floor, frame walls  
and roof, and nail on  
all the sheathing.  
Reframe the kitchen  
ceiling with I-joists  
of engineered wood.  
Wire shop and barn.  
Finish laying the  
synthetic deck-  
boards next to shop.





**Julia Child** tours the kitchen-in-the-rough with Marian Morash, chef of the PBS series *The Victory Garden*, and gives her stamp of approval. "You've got the sun and the view. It's jolly!"







lain-enameled cast-iron sink directly below these windows—and not just to give the cook a charming view of the old barn. Anyone rinsing off leeks in this light will have no excuse for grit in the vichyssoise. Steve likes the 9-inch-deep pot-friendly basins. “That’s an example of the workshop mentality we used here,” he says, adding that the tiny subbasins typical of trendy designer sinks are fit “only to hold your lemon zest shavings.” In other words, useless.

The sink is under-mounted, which means it has no protruding lip to catch water and peelings, and it hangs below a soapstone countertop. The ½ ton of subtly veined blue-gray stone (see sidebar) bridges a difficult aesthetic gap, appearing both informal and dignified. “Soapstone doesn’t have the glitz and gloss of granite, but it has that timeless quality with a softer feel,” says Mossgraber. Glenn Bowman, owner of the 148-year-old Vermont Soapstone Company, reports that demand for soapstone countertops in residential kitchens has soared during the last decade. “People like the fact that it instantly looks like it’s been there for 100 years.”

For the base cabinets, Mossgraber and the *TOH* crew picked a model with flat-panel doors and hidden hinges. The stain—an off-white with the brand appellation “muslin”—renders the cabinets neutral to the point of vanishing. “We chose a plain, simple style to go with the character of the house,” Mossgraber says. “The colors make the room seem even lighter.”

In the buttery sunlight, the stainless-fronted appliances glow. Early in the design process, when famed cook Julia Child visited the raw space that would become the new kitchen, she proffered her simple appliance philosophy: Buy the best. “You are better off getting professional equipment because it’s made for hard use,” she says. “If you cook a great deal, it’s less expensive in the long run.”

On the other hand, a behemoth professional-quality range can cost up to \$7,500. “That’s overkill,” says Steve. “Yes, they are gorgeous, but they take up a lot of space, and the burners are so big that you have to replace a

lot of your cookware.” So the team outfitted this kitchen with what Steve terms crossbreed appliances, which incorporate Wolfgang Puck toughness with June Cleaver sizes and prices. The most powerful burner of the six-ring gas cooktop is capable of producing a potent 12,000 Btu. That’s slightly less than restaurant-grade ranges but more than enough for high-temperature specialties such as authentic Chinese wok dishes. (For safety’s sake, *TOH* plumbing and heating contractor Richard Trethewey positioned a sprinkler head nearby.) The capacious double ovens offer both radiant and convection heat.

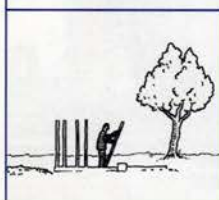
One short step from the cooktop and ovens—as well as from an 850-watt wall-mounted microwave and an ultra-quiet dishwasher—is the maple butcher-block countertop, the kitchen’s central preparation area. Although butcher block’s popularity has declined in recent years, the surface—perfect for chopping and slicing—is one of Child’s favorites.

Flush with the edge of the counter, the refrigerator looks almost built in. While the average residential refrigerator is between 27 and 30 inches deep, this one is just 24. That shallowness makes the contents easier to see, lowering the likelihood of obscured, forgotten—and ultimately moldy—boysenberry yogurt.

Next to the fridge is a 32-bottle wine cooler. This glass-paneled under-counter system operates as a satellite of the wine cellar Tom carved out of a corner in the basement and chills white wine to 55 degrees or lower, depending on the wine and the owner’s taste.

Although the room was quite sunny, electrician Al Gallant installed 15 recessed and three surface-mounted fixtures regulated by a wireless central lighting control that lets the home owner snap on lights not only from the kitchen’s three entrances but also from an automobile 60 feet away. “So if you’ve got your arms full of groceries when you come in the door, the lights are already on in whatever pattern you’ve preset,” says Gallant.

A built-in desk nook in the room’s northwest corner will allow the bill payer to carry on a conversation with the cook. “This will be the spot for a message board on



## Week 12

**FRAME, SHEATH** and tar-paper roof over master bathroom. Strap mudroom ceiling with 1x3s, and frame interior walls. Strap ceiling of kitchen for drywall crew. Build wall in basement where electrical panels will go. Remove rooftop’s solar panels. Install some media room trim. Look at sample roof shingles. Install all of exterior trim—fascia, soffits and rake—on the shop. Go over installation of its metal roof.



**Charlie Silva and Rod Coldwell**, far left, slip the six-burner gas cooktop into its soapstone slot. A stainless steel back-splash and hood go in next. As **Jeff Hosking**, middle left, taps tongue-and-groove laminate floor strips into place, he uses a polyethylene block to avoid crushing the tongue. After using a jig-saw with standard wood-working blades to chop a hole for the sink, **Jim Heath**, near left, finishes the counter edge with a router—performing the dusty work outdoors.

A green-painted wood mantel on the 18th-century fireplace coordinates with the cabinets on the kitchen's work island.



the wall,” says Mossgraber. “And I envision cookbooks in these glass-door cabinets—it’s sort of a nerve center.”

The floor is perhaps the sole element that falls short of the hardworking-kitchen ideal. Made of multi-ply tongue-and-groove strips topped with pine  $\frac{1}{8}$  inch thick, the relatively soft surface will likely appear battered within several years. “It represents that exquisite process of compromise that always marks remodeling,” says Steve, pointing out that vinyl was deemed too cheap-looking and tile too unyielding for comfort. Although the pine surface

of the floor will accommodate no more than two sandings, Tom contends that a solid-wood tongue-and-groove floor would have provided negligible improvement. “Even then, you could sand only down to the groove. It would really give you just a tiny bit of extra sanding depth,” he says.

Tom’s solution: “Take care of the finish.” He recommends hiring a flooring professional every two years to buff the polyurethane surface with a fine-mesh screen and apply three more coats. “You’ve also got to scatter area rugs in high-traffic spots, like at the sink.”

Whether the future owner will conscientiously protect the floor remains to be seen. But, generally, this architectural paean to culinary efficiency stands ready to serve hungry inhabitants just as the fireplace’s black hook and glowing coals might have during the Garfield Administration. A glory of stone and wood, of long, lovely counters and tight work triangles, the room fulfills Julia Child’s prediction. Perched on a stool as construction was just beginning, she envisioned a room both “wonderful and beautiful. To me, there is nothing nicer than a kitchen that is really made for a cook. I think things that are designed to be used always have an innate beauty.” ■

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Craftsmen have assembled soapstone slabs into sinks and laboratory countertops since the 1700s. Unlike marble and granite, soapstone has a unique crystalline structure that allows it to heat and cool thousands of times without cracking—in fact, the more wear it gets, the better it looks. The stone consists of about 70 percent talc, the same stuff that, in powdered form, soothes diapered bottoms. The remaining 30 percent can comprise various minerals such as iron or magnesium, accounting for hues ranging from white to gray, green and brown, although only gray stone is used for countertops.







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# a better barn

*There's still room for horses, hay and tractors, but now you can make an Adirondack chair in the workshop, burn off a few pounds in the exercise room and revive in the sauna*

## tom silva made a

surprising discovery as he worked on the Milton barn. He was standing on a scaffold 24 feet in the air, ripping off old shingles with his hammer claw, when 2 feet below the peak, he found a heart-shaped hole about 6 inches high cut into the sheathing.

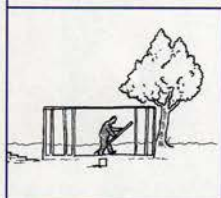
The hole served a mundane purpose, venting the hot air that accumulates under the ridge. But the distinctive shape—sawn, perhaps, by the barn's builder in the 1880s—was pure expression. Clearly, the shingler who hid it lacked either romance or practicality, but Tom, who confesses to a measure of each, grinned at the whimsical Valentine. "I guess somebody just wanted to say, 'I love my barn.'"

That nameless craftsman was just the first in a long line of admirers. Everyone loves this barn. With its open framework of massive dun-colored pine posts and beams enclosing more than 40,000 cubic feet of space, the barn is a cathedral—awesome, thrilling and humbling. Its woody aromas, beckoning loft and peaked roof, some 30 feet off the ground, seem to reawaken the child in anyone who walks through its big, welcoming doors. The most recent owner, Virginia Devine, recalls her four children swinging on ropes from the loft; later, her son Chris and a friend built a trimaran in the soaring center bay. "They just

**The Milton barn**, shorn of its ragged old ell, receives a new skin of panelized shingles. After eight months of rebuilding, the century-old structure now boasts a two-car garage with heated floor, a sauna, an exercise room and a fully equipped woodworking shop designed by Norm Abram.

BY BRAD LEMLEY

PHOTOGRAPHS BY KELLER & KELLER



### Week 13

**RIP OUT OLD**  
stairs to basement  
and second floor,



and close opening.  
Run underground  
power supply from  
street to house.  
Trim out screened  
porch. Wire security  
system for house  
and barn. Cap the  
workshop with  
standing-seam  
metal roof. Install  
windows in barn.  
Hang doors to shop  
and exercise room.









had the best time out there," she says.

"The barn is a major reason we chose this project," says *This Old House* producer Bruce Irving. "Nothing compares to standing in an old, raw wood structure redolent of hay and animals. Step inside, and you're back on the farm—just 9 miles from downtown Boston." *TOH* director and executive producer Russ Morash found the old structure's potential even more inspiring: "A large multipurpose building separate from one's home allows you to do all sorts of things you can't do properly in a cellar." So Russ, brainstorming with the *TOH* team and architect Rick Bechtel, decided to add a woodworking shop, exercise room, sauna and bathroom to the cavernous timber-frame structure.

But before the barn could become a locus for



After sundering and scraping away the original ell, the backhoe operator dug a 4-ft.-deep trench, left, for the foundation forms, center. Plumbing and heating specialist Richard Trethewey supervised the installation of some 700 feet of radiant-heat tubing atop panels of foam insulation. Encased in a 4-inch-thick concrete slab, right, the high-tech plastic tubing will deliver even, gentle and quiet warmth from a hot-water furnace located in the main house.

## OVERVIEW OF THE WORKSHOP ILLUSTRATIONS BY ALLAN MARDON

Norm clustered all the stationary tools in the west end of the shop, leaving the east end open for assembling pieces and storing materials. "It may look a little cramped," Norm says, "but it's easy to move smaller tools like the drill press or band saw into an open area if you need to."

### POWER TOOL PRIORITIES

Most home shops grow slowly as money, time and space permit. The tools in our dream house shop are listed in the order Norm suggests acquiring them. Prices are real-world retail, which is generally about 30 percent less than the manufacturers' suggested list price.

### STATIONARY TOOLS

- 1) 3-hp table saw with 50-in. fence and right-hand extension table: \$1,568
- 2) 6-in. jointer: \$1,279
- 3) 12-in. compound miter saw with left and right extension tables: \$409
- 4) 14-in. band saw: \$699
- 5) 16½-in. drill press: \$395
- 6) Benchtop 12½-in. planer: \$399
- 7) Benchtop router-shaper: \$319
- 8) Benchtop sharpening center: \$175
- 9) Benchtop oscillating spindle sander: \$199
- 10) Variable-speed wood lathe: \$519

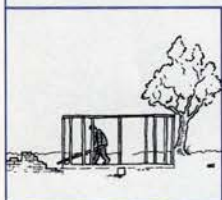
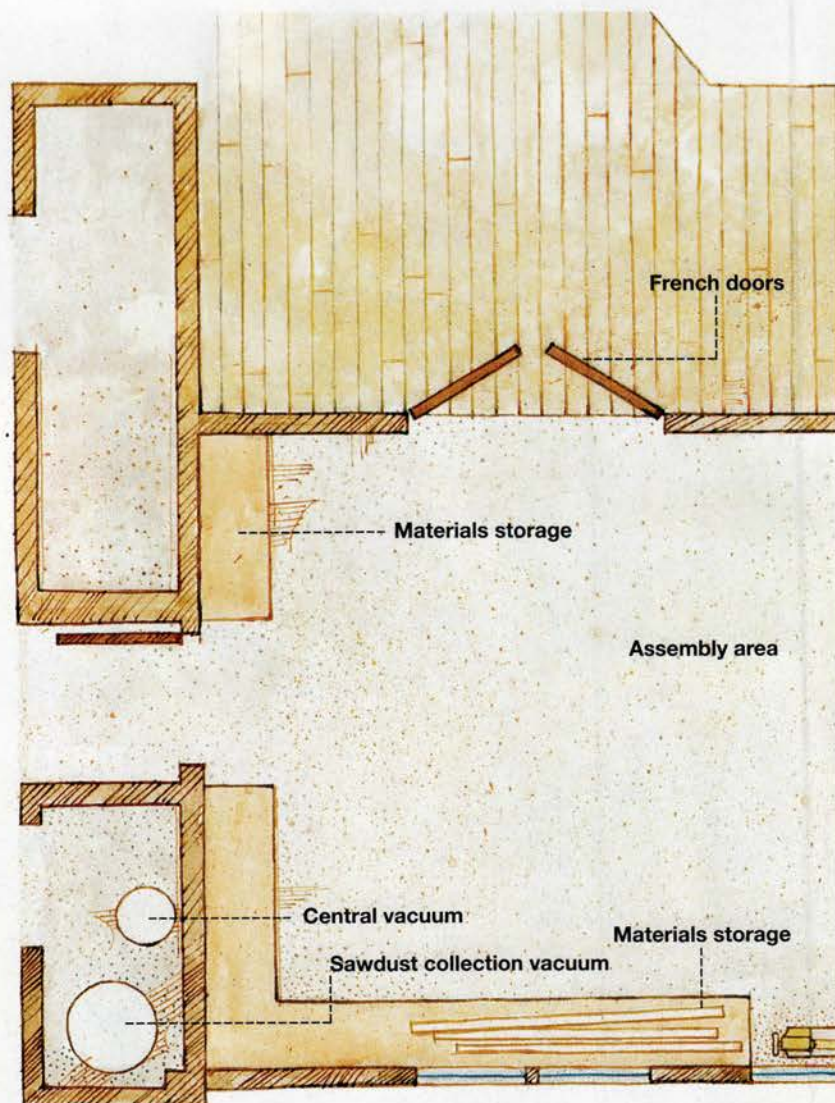
### HANDHELD TOOLS

- 1) 6-in. circular saw: \$123
- 2) 14-v. ½-in. cordless drill: \$218
- 3) 1½-hp plunge router: \$201
- 4) Barrel-grip jigsaw: \$159
- 5) ¼-sheet finishing sander: \$54
- 6) 5-in. random-orbit sander: \$72
- 7) Plate joiner: \$386
- 8) Belt sander: \$255
- 9) 6-in. variable-speed random-orbit sander kit with dust collection: \$173
- 10) Profile sander kit: \$129
- 11) 1½-hp 4-gal. side stack compressor: \$320
- 12) Finish nailer: \$397
- 13) Brad nailer kit: \$148

### DUST COLLECTION

Central sawdust collection system and drum: \$2,249

**TOTAL: \$11,071**



### Week 14

**FRAME WALL IN** barn's vacuum closet and wall dividing the garage from exercise room. Apply cement fire-stop. Finish installing windows in barn and shop. Pour concrete over radiant-heat tubing in the barn's garage, exercise room and bathroom floor. Hook up no-freeze faucet outside exercise room. Re-side barn with panelized, primed red cedar shingles. Prime and paint the shop's walls and ceiling.





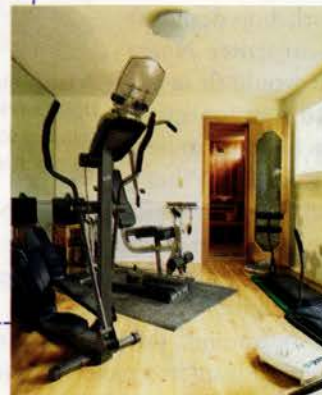
**Structural insulated panels** deliver Lego-construction velocity to grown-up-size projects. With construction adhesive, plywood splines and 8-in. screws, workers mate two panels, left, to form the gable end, then hoist it into place with a crane, center. The 4 $\frac{3}{4}$ -inch-thick walls and 6-inch-thick roof sections, right, have a filling of modified expanded polystyrene foam, the same ozone-friendly stuff used in foam coffee cups, but with a fire-retardant additive.

## FROM HORSE STALLS TO HEALTH SPA

With the sweaty work of revamping the barn complete, perspiration will continue to flow in two elegant barn venues built for that very purpose.

The first is the 11-by-12-foot exercise room, located on the barn's west side. "You wouldn't want it to be any smaller," says exercise physiologist Cyndy Bennett,

who helped design and outfit the space. "But we managed to fit in a complete workout facility." A stationary runner, which moves the exerciser's feet in an elliptical (rather than a linear) motion, anchors the equipment collection. Another com-



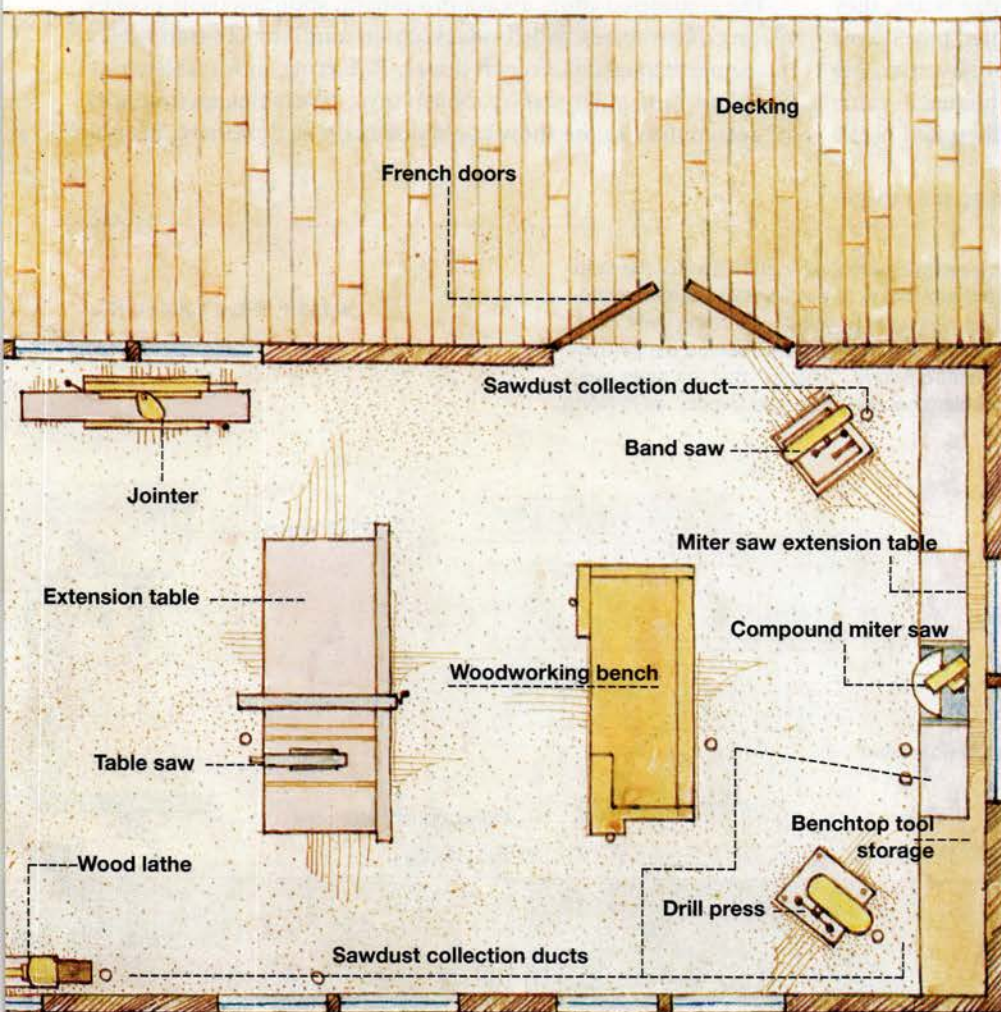
From the bicep-building machinery in the exercise room, it's just a few steps to the sauna's relaxing heat.

compact machine uses body weight—not stacks of clanking metal weights—to provide resistance for weight-training exercise. To fend off boredom, there's a wall-mounted TV, and to make sure one's trapezius remains proportional to the pectorals, a mirror covers one wall.

When a vigorous workout seems too daunting, a sweat seeker can passively express a pint or two while lounging in the cedar-lined sauna adjacent to the exercise room. He need only flip on the 60-minute timer, wait 20 minutes for the room to reach 175 to 194 degrees Fahrenheit, then luxuriate in the waves of warmth rippling from the 8-kilowatt electric heater. To make steam, the requisite exertion is minimal: Splash a dipperful of water on the heater's volcanic rocks.

Installation was straightforward. Tom and his crew first framed a cube roughly 7 feet on a side with 2x4s, spray-insulated the space with foam and sheathed it inside and out with fire-rated  $\frac{5}{8}$ -inch gypsum board. Then workers from the sauna company lined the interior with tongue-and-groove cedar; installed the benches, slatted floor and prehung door; and wired the heater and lights.

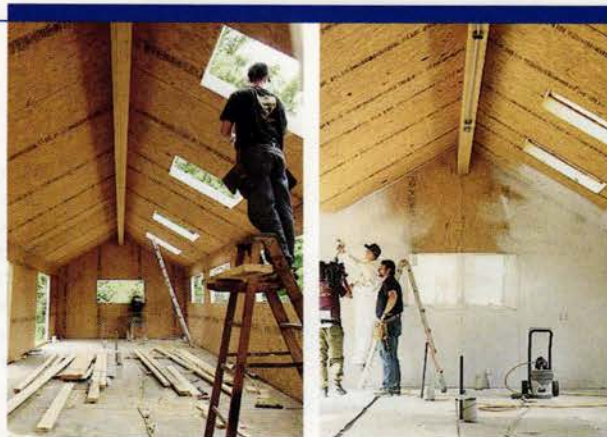
Because the company precuts all components to the client's specifications, on-site sawing—with its attendant potential for goofs—is eliminated. "It's a 'have-your-brother-in-law-do-it' type of project," maintains Tom Smithson, whose company manufactures the kits. "Anybody who is reasonably handy could put this together."





producing sawdust and sweat, there were many wounds to heal. The first step was the most dramatic—amputating the swaybacked single-story ell tacked onto the barn's west wall. "We had no choice there. It was simply too far gone," says Russ. In its place, he decreed that TOH should build a new addition, which would house a workshop designed by TOH master carpenter Norm Abram, and that it would fit in the razed ell's 42-by-16-foot footprint. "Norm wanted the building to be 3 or 4 feet wider," Russ says, "but I thought the original ell was very picturesque." Norm worried that some workstations would feel cramped, but he shed his concerns as the shop came together. "I think we've designed around the narrowness pretty successfully," he says.

Instead of using 2x framing, the team built the new ell's walls and roof with structural insulated panels—rigid foam insulation sandwiched between  $\frac{5}{8}$ -inch sheets of oriented strand board. The panels are so stiff and strong that, aside from a ridge beam, they require no supporting framework. Structural insulated panels cost slightly more than conventional stud framing but have two big advantages: superior insulation (roughly a third higher R-value than that for an equally thick wall of studs and fiberglass batts)



**A long, strong glue-laminated ridge beam, left, means glorious open work space uninterrupted by trusses or posts. Because this is a utilitarian building, the TOH team opted to save money by painting the flake-board walls rather than installing drywall.**

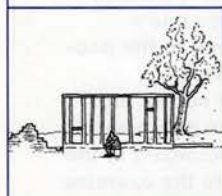
and astonishingly rapid construction. Workers wrestled together the new ell—complete with roof, walls and factory-cut rough openings for doors and windows—in a time-lapse-quick 6 hours, 14 minutes.

Tom and his crew then outfitted the workshop with a metal roof, a new cupola, 14 windows, four skylights, two capacious French doors, and a deck for the doors to open onto. When the tools arrived, it took Norm and Tom three days to uncrate them and set them up in their designated spots. Even with everything in place,

the shop has a spare, utilitarian feel, perhaps because it isn't filled with the faddish widgets, one-trick joining machines or byzantine jigs hawked in woodworking catalogs. "The inventory of tools you need is very basic," Norm says, "and it hasn't changed much over the years." He focuses instead on durability. "You should pay the extra money up front for professional-quality tools, or you'll replace them sooner or later. The right tools will last a lifetime."

The completed shop, awash in sunlight, spontaneously evokes visions of armoires, Adirondack chairs and Shaker side tables emerging through its French doors. Referring to his PBS series *The New Yankee Workshop*, Norm says, "Anything anyone sees me accomplish on the show could definitely be done here. It's not

## PROFILE OF WORKSHOP

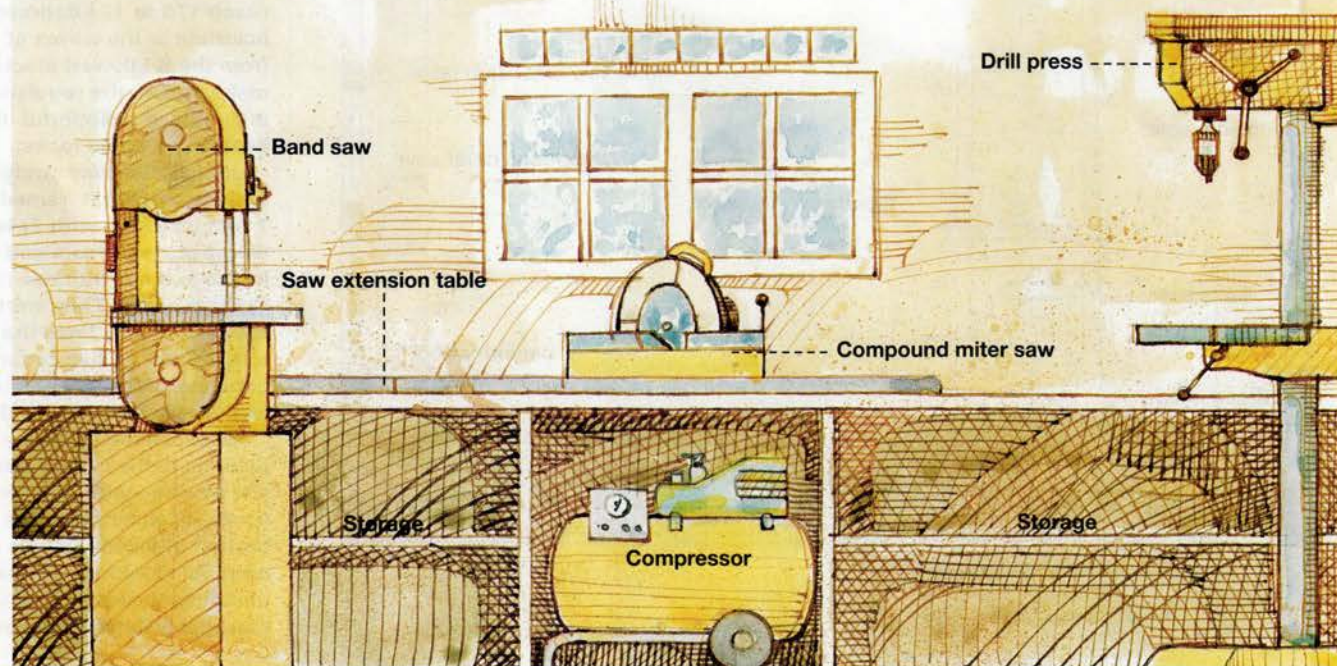


### Week 15

**AROUND CHIMNEY,** apply waterproof membrane, flashing, counterflashing and shingles. Patch old roof as necessary. Roof the mudroom addition. Reframe rough opening for the kitchen windows. Frame new interior walls on second floor. Recess mudroom doorway 12 inches. Thicken the sills of the barn's four awning windows. Level ceiling for the master bath and closet and the children's bath. Uncrate tools.

Given his six-foot height, Norm likes a relatively high, 42-inch bench for the compound miter saw, because bringing the tool closer to eye level yields more accurate cuts. Hand tools will likely hang on wall pegs to either side of the west window. Positioning the 36-inch-high woodworking bench 6 feet behind the 34-inch table saw will help when cutting sheets of plywood. "The fact that the table saw's a little lower than the bench isn't a problem because plywood bends," says Norm.

### WEST ELEVATION



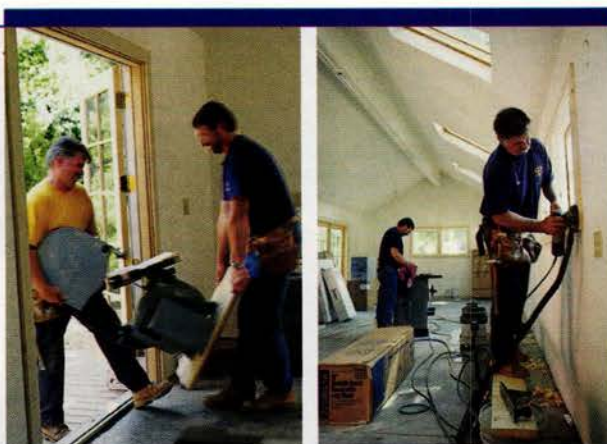


a production-level shop, but it's as good as any serious hobby woodworker could want."

As work on the shop proceeded, Tom and his crew began patching and shoring the barn. The Devines had replaced the east wall's foundation and sills in the mid-1980s, so Tom's crew turned to the west and south walls, hand-digging a trench atop the old, buried stone base; pouring in a new concrete foundation; and rebuilding the rotted lower sections of the walls.

Then came the posts. A half dozen of the 8-by-8-inch timbers were punky, largely because little or no foundation undergirded them. Although no longer trees, the posts' raw ends retained a tree's habit of sucking water from the earth, leading to bottom-up rot. Earlier patchwork repairs rested on quadrupled 2x8s. Tom and his crew extracted the patches, fitted new ends to the posts on the fresh perimeter foundation and placed the posts inside the barn on the new concrete piers.

The carpenters next advanced on the roof. Its 10-year-old asphalt shingles were sound, but Tom focused on an east-side rafter where a hole in the roof had allowed a fan-spray of rot to bloom and caused a rafter, plate and beam to drop 8 inches. "We spent a week fixing that: jacking it up, making it solid and



**Tom Silva helps Norm** haul a band saw through the shop's big French doors, left. Unpacking, assembling and calibrating the tools kept them happily occupied for hours. As Tom sands window trim, Norm tweaks the shop's powerful 220-v. table saw.

watertight," says Tom. "It's the kind of work no one would really notice, but water coming in through that hole would have spread the cancer. It would have become at least a three-week job before long."

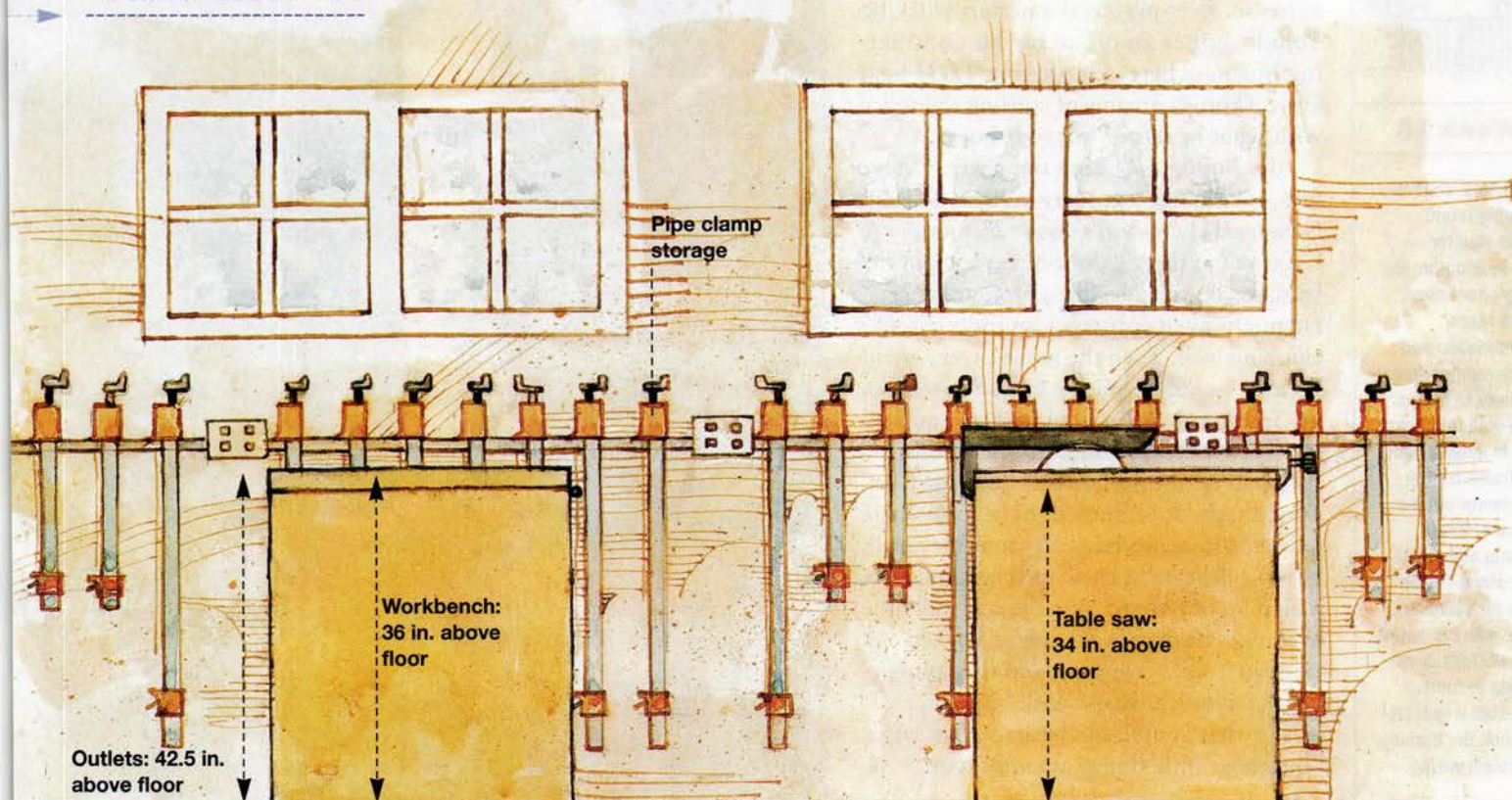
The crew reframed most of the barn's front gable end for the new garage doors and awning windows; installed new panelized shingles; and framed and insulated the spaces for the sauna, bathroom and fitness center. The last step, connecting plumbing for radiant-floor heat and hot-water fixtures, was simple.

Instead of installing a separate boiler and hot water heater, *TOH* plumbing and heating contractor Richard Trethewey ran four insulated underground pipes 120 feet from the house's heating plant to the barn. And thanks to a timer-controlled recirculating pump, there's no water-wasting wait for a hot shower in the barn.

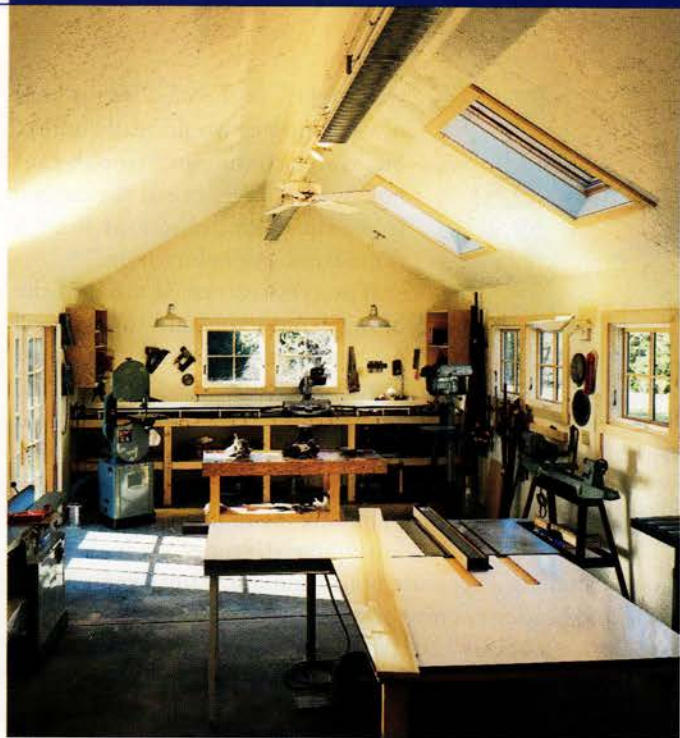
The *TOH* crew fulfilled its vision for the barn—but left plenty of space for future owners to express their own dreams. "About two thirds of the ground floor and the entire loft have been fixed structurally but otherwise left basically as they were," says Tom. "More could be done here."

Typical Silva understatement. For all the appeal of the new amenities, the 3,500 square feet of unimproved space make vis-

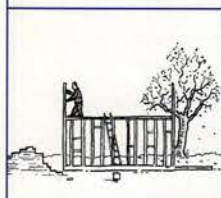
#### NORTH ELEVATION







**The completed shop**, above, beckons. Tom built cabinets under the compound miter saw, but he and Norm expect the future owner to add other storage areas. "Shops are never done—they evolve," says Norm. The green dye of the hydroseeded grass, right, sets off the vivid red barn.



## Week 16

**REFRAME CEILING** in dining room. Frame wall for first-floor bathroom. Shingle roof over media room. Weather-strip and epoxy-repair original windows in house. Open wall for pocket door in master bath, and frame master bath bump-out. At the barn, finish decking and build deck steps. Frame walls for sauna and cover with fire-rated drywall. Take down staging in front of barn. Call inspector to check the framing and rough wiring.

itors almost giddy. Like kids seeing shapes in clouds, adults who stroll the site can't repress fantasies kindled by the echoing expanse. Ever-practical and hardworking Tom imagines an office for his contracting business here. Fun-loving *TOH* host Steve Thomas dreams of stuffing the space with what he terms "toys for boys."

"I'd build an Alerion out there," Steve says, envisioning legendary sailboat designer Nathanael Herreshoff's classic 26-foot sloop. "You've got the big door in the back of the barn, so you could handle a project that big." He might even construct an indoor rock-climbing wall. Then the home owner—and his kids—could replicate a desperate push up Yosemite's El Capitan and still make a 9 o'clock meeting—and the school bus.

Whatever the new owners do in the barn, Tom made sure they'd have one little memento to appreciate every time they walk by—the delicate heart-shaped vent hole. He nailed an old board over the original hole to bring it flush with the siding, flashed and caulked it like a window, and then plunge-cut the identical shape with his router. "It wasn't that simple to restore," Tom says, "but those little things are important." ■









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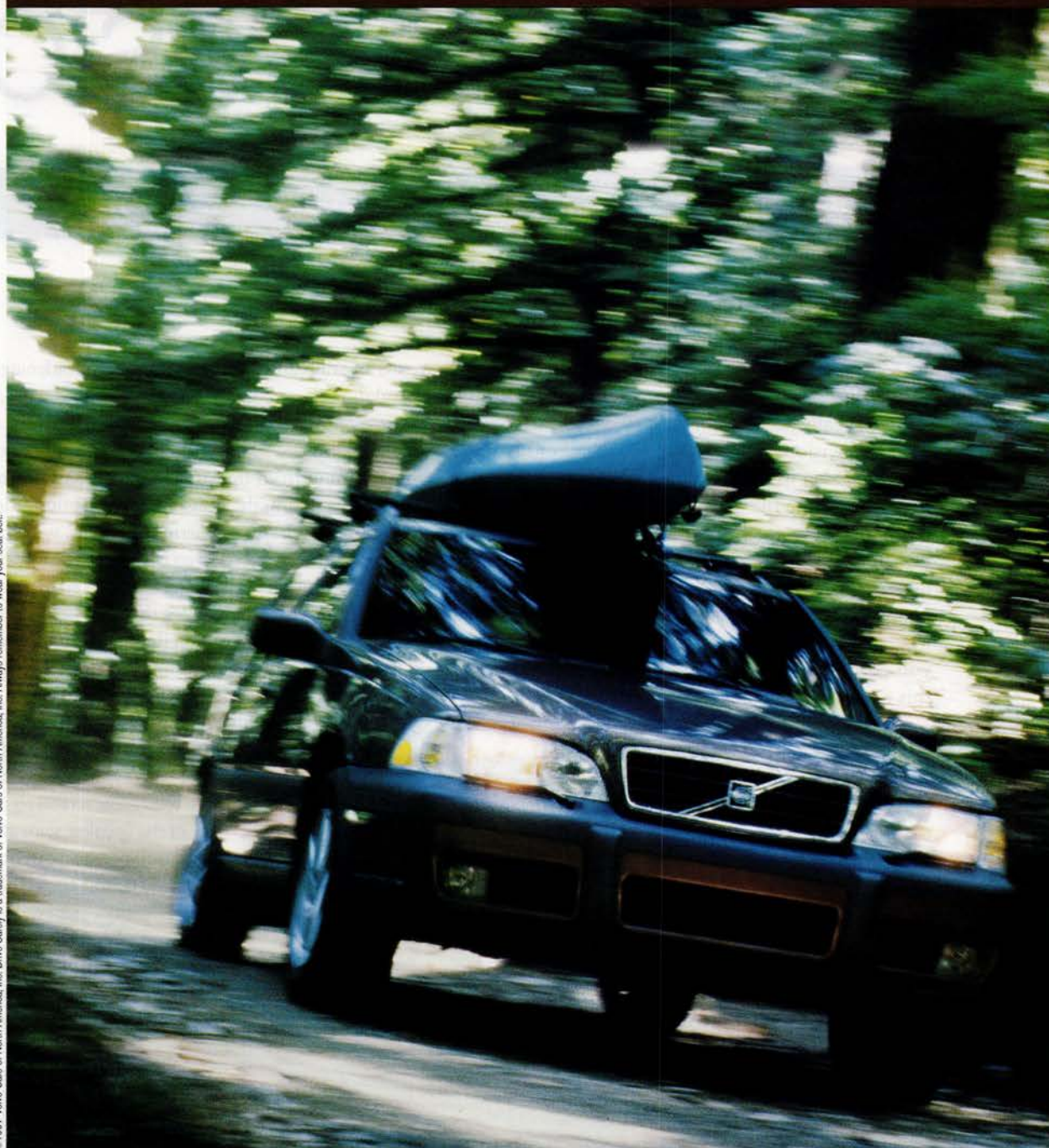
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**VOLVO**



# if George Washington had television

...his media room would look like this

## through the years,

Russ Morash, director of *This Old House*, looked askance at the idea of building an acoustically perfect room just so home owners could watch television. "If all you're talking about is a little 4-inch speaker in a TV set, then why bother?" he asks. But by the time the Milton house came along, technology had changed his opinion. With rooftop digital satellite systems beaming in hundreds of cable stations, digital versatile disks creating a noticeably sharper image, and speakers pumping in movie-theater-quality sound, Russ was convinced: "Suddenly the idea that you could build a specially tuned room to house all this equipment did not seem excessive."

Once he made the decision, the challenge was to find a location that would not disrupt the house's 18th-century ambience. The old kitchen on the north side was an ideal size but faced a busy road with rumbling traffic that was audible even through closed windows. Originally fashioned from an old, crumbling porch, the room needed to be rebuilt anyway. TOH contractor Tom Silva seized the opportunity to use two-by-six construction for the

exterior walls and fill them with sound-deadening Icynene insulation. Combined with new insulated windows, the result is a nearly sound-proof space—ideal for a media room. "We ended up with a room so quiet you can't hear a thing from the street," says Russ. To minimize vibrations within the house, Tom also sound-deadened the room with resilient furring channels, which builders have used for years to keep the peace in condominium projects. The galvanized steel furring strips, which are perforated with small holes that cut off sound vibrations, lie in a grid across ceiling joists and wall studs. They are strong enough to support wallboard, and keep it from coming in contact with the framing.

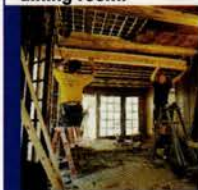
Media rooms tend to contain the same basic equipment. What differs wildly is the cost—everything from the size of the television screen to the quality of the speaker wire affects the total outlay. "You can quickly go from \$10,000 to \$100,000 or more," says Steve Hayes of Custom Electronics Inc. in Falmouth, Maine, which designed and installed the system at Milton. Whatever the cost, a

**While gutting the old kitchen,** right, the crew made the dismaying discovery that the room destined to hold a home theater had no foundation. The media room, left, had to be built from scratch.



### Week 17

**FRAME OPENING** from kitchen to dining room.



Rebuild guest bedroom and master bath walls. Relocate toilet in master bath. Strap ceiling in dining room. Repoint chimney. Stake property for new driveway. Replace 15 feet of sill along back wall of house. Install barn lighting.

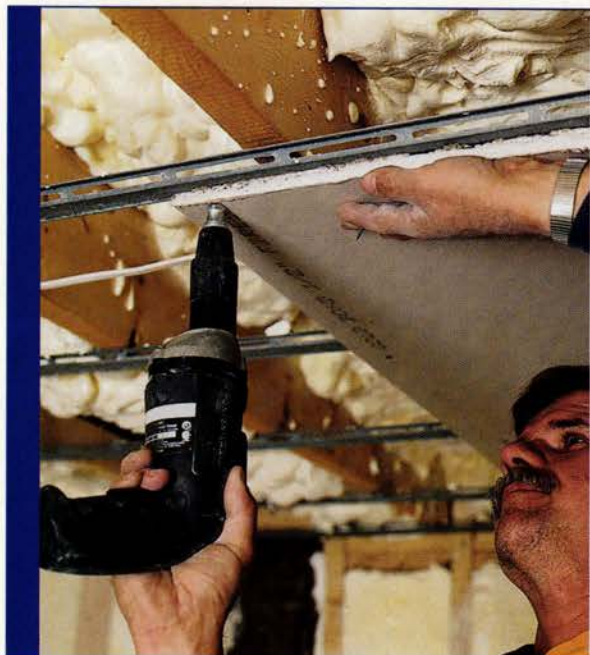
BY CURTIS RIST  
PHOTOGRAPHS BY  
KELLER & KELLER











**Tom Silva fastens** wallboard to galvanized steel strips he installed perpendicular to the media room's ceiling joists. Called resilient furring channels, the perforated 1/2-in. strips help to deaden sound.

media room will undoubtedly contain a surround-sound system similar to those used in movie theaters for decades. Consisting of five speakers and a "sub-woofer," a component that makes low-frequency vibrations that listeners feel more than hear, the system fills the room with realistic sound that tracks the action on-screen. A helicopter, for instance, can sound like it is flying from right to left; an explosion can feel as if it is scattering debris overhead. A big-screen television is also a must—but bigger isn't always better. Buyers who choose a TV too large for the space often

find the scan lines too obvious. "It can be annoying," says Hayes. Instead, home owners should size a television according to its distance from the seating area. A good rule is to measure that distance and divide by two. The result gives the diagonal screen-dimension best suited to the room—which at the Milton house translated to 53 inches.

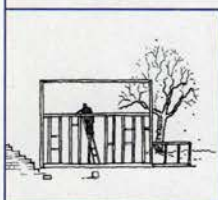
In outfitting the media room, Hayes stuck to the low end of the price spectrum. Even so, the room brims with gadgets: a 200-disk compact disk changer, a digital satellite system, a digital versatile disk player, and perhaps the least Early American feature of all, WebTV. To keep all this from assaulting the timeless decor, *TOH* master carpenter Norm Abram crafted a cabinet especially to contain the equipment, including the television. "It doesn't stick out into the room like a great big hunk of furniture," says Hayes. A tight budget meant that he had to skip the centralized control-panel, which is common in more expensive systems but would have added \$4,000 to this system's cost. Still, the new owners won't have to fumble through a basket of remote controls to turn up the volume during *ER*. Hayes connected everything to one handheld remote control clicker through the surround-sound receiver. The setup requires a lot of button-pushing, but at least everything operates from one control. "They've got a screaming system for 12 grand," says Hayes.

When furnishing the room, interior designer Anne Fawcett followed Hayes's rule on positioning the main sofa, placing it 9 feet away from the television (twice its diagonal screen dimension) and facing it squarely. She put the other furniture on an angle "to make it a more interesting arrangement," she says. Where good sound is concerned, the room itself is as important as the equipment. A listener wants to hear sound coming directly from the speakers, not the distorted sound that ricochets off walls. Fawcett upholstered the two sidewalls with silk stretched



**The TV cabinet's** bottom panels are removable, allowing access to the TV—which rolls out on wheels—and all wires. Norm Abram and Tom Silva built the cabinet from medium-density fiberboard.

over polyester foam batting 1 inch thick, and triple-lined the silk draperies—traditional decorating choices that enhance the room's sound quality. For the rear wall, she opted for a truly historical sound diffuser: Three hundred antique books now line the shelves. It helps with the sound and the mind, she says. "This is a media room. And what's more important to media than books?" ■



## Week 18

**BACK-PRIME THE** window casings and thicken sills.



**Install new windows** on second floor. Rough in new plumbing. Grade yard for new driveway. At the barn, install custom redwood garage doors, mount new cupola. In the shop, assemble the vacuum, hang the lighting fixtures.





## WHAT'S IN THERE?

Within the paneled cabinets and bookcases of the dream house media room are more than \$12,000 of state-of-the-art electronics.

- 53-inch color television (\$4,200)
- Left and right front speakers (\$1,400)
- 2 rear "surround" speakers (\$900)
- Center front speaker (\$110)
- Sub-woofer (\$440)
- Surround-sound receiver (\$1,000)

- Video cassette recorder (\$350)
- Digital satellite system (\$600)
- WebTV (\$500)
- Wireless keyboard (\$110)
- 200-disk compact disk changer (\$1,000)
- Cassette deck (\$250)
- Digital versatile disk player (\$1,200)
- Infrared repeater network (\$150)
- Video modulator (\$90)

A maze of cables connects all the electronics, but not a cord can be seen. *TOH* prewired the room with category 5 telephone cable (higher capacity than normal phone wires), RG6-quad coaxial cables (for hooking up cable television and digital satellite system) and oxygen-free speaker wire (corrosion-resistant, it maintains pure sound transmission). Cost of cables: \$600.





### Week 19

**REPLACE WINDOW** in second-floor guest bedroom. Cover sheathing with building paper. Install water table and nail up new clapboard siding on south side of house. Rough in new wiring. Adjust dining room's French doors so they open completely. Hang exterior doors for screened porch, mudroom addition and barn. Hang interior door for shop entry. Trim and insulate shop skylights. Cut openings for shop vacuum exhaust.

# from cobwebs to cabernet

*A barrel-vaulted ceiling inspires Tom Silva to*

BY JACK McCLINTOCK PHOTOGRAPHS BY KELLER & KELLER



A photograph of a rustic wine cellar. A wooden door with a glass panel and a handle is open, revealing the interior. The cellar has a vaulted stone ceiling and walls. On the left, a wooden rack holds several wine bottles. On the right, a long wooden rack is filled with many more bottles. The floor is made of stone tiles. The lighting is warm and focused on the interior of the cellar.

Tom Silva, left, takes the first step toward creating a gracefully arched entrance to the wine cellar. Later, stocked bottle racks and a tasting table furnish the completed chamber, right.

*build a rustic wine cellar*



## the stairs creaked

eerily that first day as *This Old House* director Russ Morash and series producer Bruce Irving crept into the Milton house basement. A dank, musty breath rose to meet them, and their eyes turned toward a dark chamber. Was that a faint scream from behind the wall?

Well, no. But peering beyond, the two men seemed to hear a single voice. It whispered: wine cellar.

With table-wine consumption rising, personal wine cellars are becoming as popular with social sippers as they are with wine-collecting connoisseurs. These spaces range from converted closets with no temperature or humidity control (\$100 and up) to freestanding cooling units (\$1,000 and up) to one-of-a-kind retreats such as the cellar behind the vault door at a former bank in Ohio (\$175,000). Any nook big enough to accommodate wine racks and a cooling unit will do if it can be protected against temperature and humidity fluctuations, vibration, and direct light, all of which could upset the delicate chemistry inside a bottle.

With its rough stone walls and brick floor, the handsomely proportioned, cobwebby Milton chamber suggested a wine cave in France. More than 8 feet deep and 5 feet wide with a barrel-vaulted ceiling that supports five fireplaces above, the space had a neat, compact grace. And it was cool and dark—a good start on a wine cellar's ideal climate of 55 degrees Fahrenheit with 70 to 75 percent humidity. The cellar would nonetheless need custom-built wine racks and a special cooling unit supplied by Baltic Leisure, a Pennsylvania firm that specializes in wine storage. Baltic usually insulates a cellar and lines it with redwood or cedar paneling, but in this case *TOH* wanted to show off the rugged walls.

The chamber's only flaw was the entryway: a dull rectangular hole. *TOH* contractor Tom Silva took stock of the situation, picked up his framing hammer and began knocking out brick. He had a plan. He would turn the hole into an arch to match the chamber's ceiling, then create an

arched door and frame. In the shop, he built a plywood form, duplicating the barrel vault, and installed the form in the opening. That gave him a shape to fill in with brick and mortar. When he stepped back, he had a graceful brick-lined archway.

Next he needed to build a wall to frame the doorway. He recessed the wall 1 inch within the arch, leaving a curved edge of brick visible. Tom thought it would be nice to install the cooling unit (similar to an air conditioner) up high so the heavy, chilly air would fall and spread. But to do that, he would have had to notch the ceiling and arch, destroying its clean line. Putting the unit low to blow upward, however, would have required notching the stone foundation, which would have been much too labor-intensive. He shrugged: Design is compromise. The cooling unit squatted in the lower right corner, and the door went slightly to the left.

Tom's nephew Charlie Silva helped by cutting 2-inch-thick polystyrene insulation board to fit between the wall studs, and Tom sealed the perimeter with caulk. He screwed galvanized-wire lath to the studs, mixed a batch of plaster and troweled on a thick base coat, then headed back to the shop to build the door frame and door, a slab of insulation board 18 inches wide sandwiched between two cedar panels. Weather stripping applied to the door made it airtight, and Tom decided to finish the job with a double-paned window of tempered glass and a hand-carved wooden pull.

After laying a second coat of plaster on the wall, Tom hung the door. He trimmed a little off the bottom, and it fit perfectly. Next came the racks, which hugged the right-hand wall and rested on a cedar platform that had been scribed and trimmed to fit the uneven brick floor. Nearly 7 feet long, 1 foot deep and 4 feet high, the racks would soon be stocked with wine donated by Richard L. Elia, a longtime supporter of WGBH and publisher of the *Quarterly Review of Wines*. He chose 240 bottles to represent a global variety of wines, from champagne to port—and to make the house even more welcoming to its next owner. ■



### Week 20-21

#### INSTALL NEW basement windows. Dig trench next to



stone foundation, and pour in crack sealer. Install last window. Cut out kitchen and media room ceiling for recessed lighting. Hammer out rough opening for wine cellar door. In barn bathroom, frame shower stall and install exhaust vent.

### POURING A WINE CELLAR

With a brick floor and a sealed stone foundation—but no vapor barrier to protect it from the high water table—the Milton basement was plagued by damp. So before building a wine cellar, Tom Silva dug a trench at grade level against the exterior of the foundation wall. He installed a duct system to remove moist air and introduce fresh, dry air. In case the water table ever rose, he also installed a sump pump. To fight future damp, he used exterior-grade materials: pressure-treated lumber; foam insulation board instead of fiberglass batts, which can hold moisture; galvanized-mesh lath and rot-resistant cedar.

1. Because the chamber and basement floors are uneven and on different levels, Tom builds a threshold to bridge them. "This will give a nice level place

for the door and a straight line for weather stripping." As he frames up the wall, he saws the tops of two-by-fours to match the arch of the vault and attaches them to the brick with construction adhesive and concrete screws. He installs foam insulation between the studs and caulks the crack where the foam and studs meet. He removes two rows of brick floor and digs down 6 in. to gravel. He sets the frame's feet inside a curb form and pours in quick-setting concrete. 2. He screws in galvanized-wire lath. 3. He then covers the lath with plaster. 4. To make the door, Tom and master carpenter Norm Abram lay out 1-by-4-in. strips of tongue-and-groove V-joint Western red cedar face down on sawhorses and pull the strips together with bar clamps, creating one

panel with a 10-by-42-in. hole sawed out for a glass window. For bracing and spacers, Tom cuts scraps of spruce to size and planes them to the same thickness as the insulation. He then glues and screws the pieces to the back of the panel. 5. After cutting insulation and gluing it between the spacers, Tom and Norm glue and nail up the back side of the door, completing the sandwich. 6. The next day, they trim the cedar to size. The tricky part is matching the top of the door to the curve of the arch. Having traced this oddball arc off the form he used to build the archway, Tom uses a band saw to duplicate it at the top of the door. Later he will glue 3/16-in. cedar laminates around the door's sides, carefully bending the pieces to follow the curve of the top.





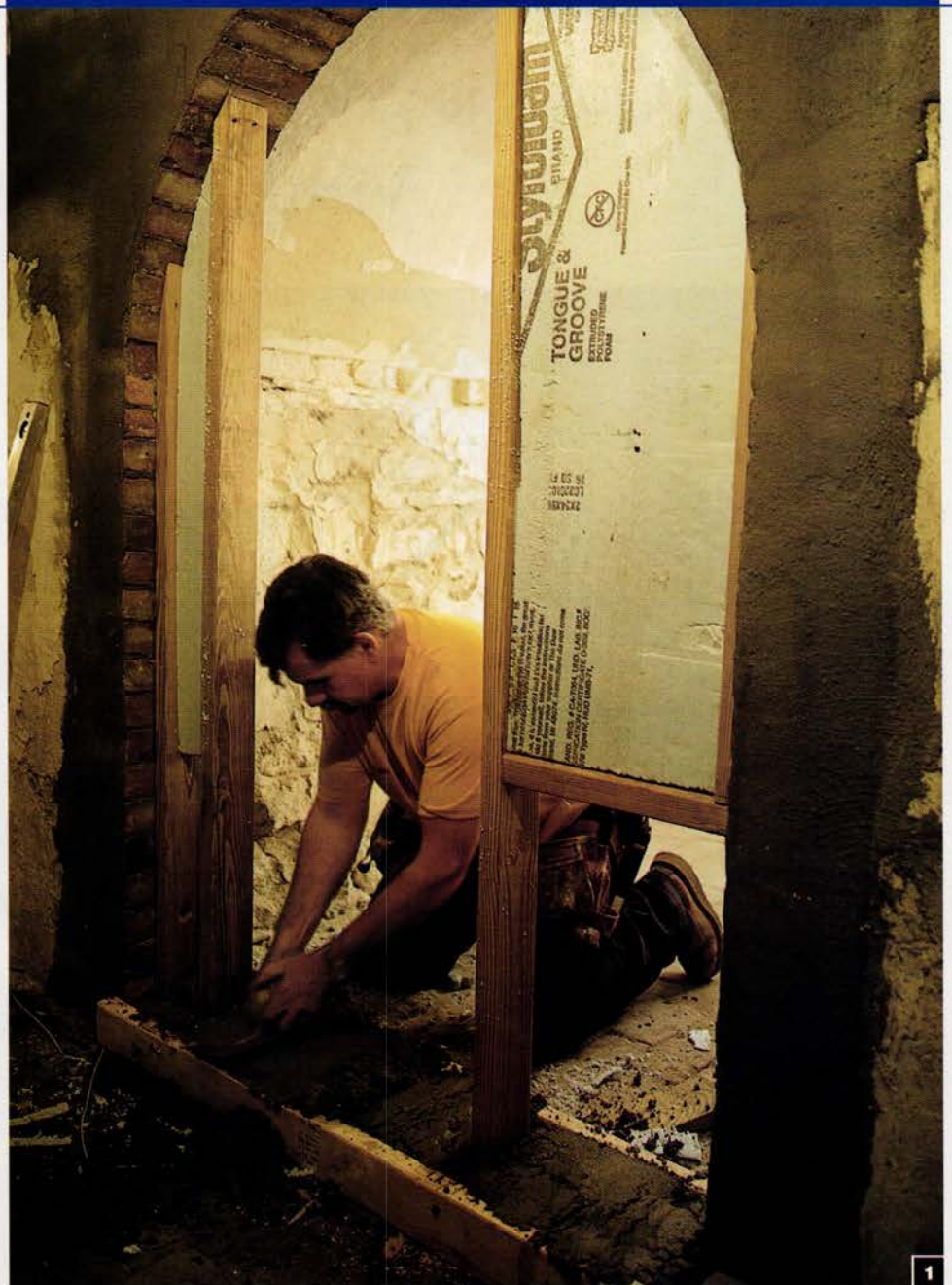
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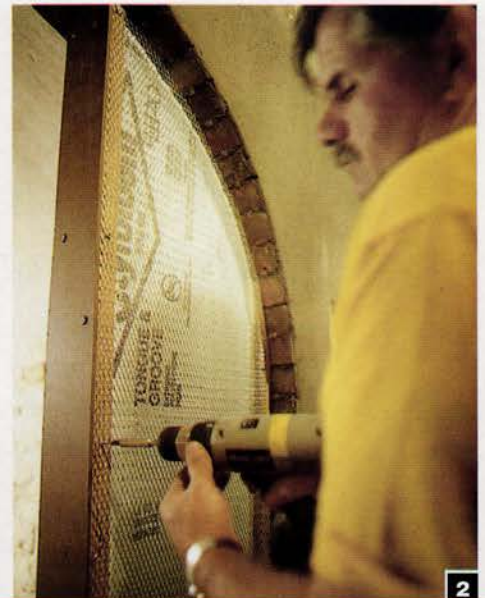
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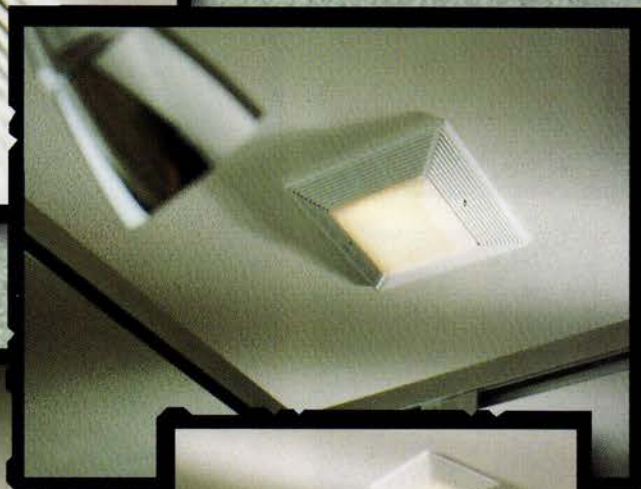
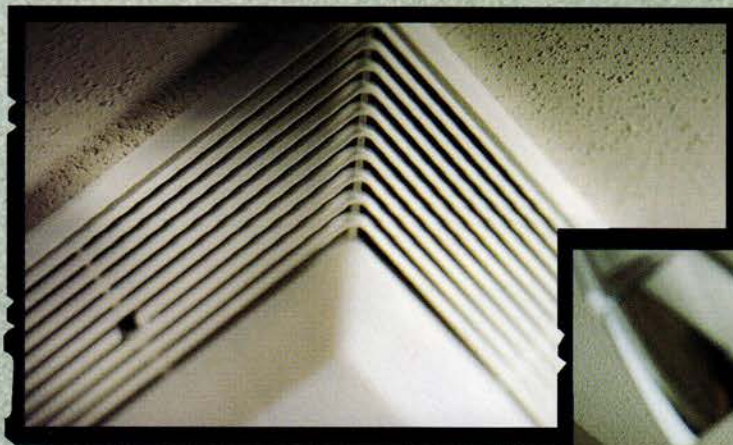


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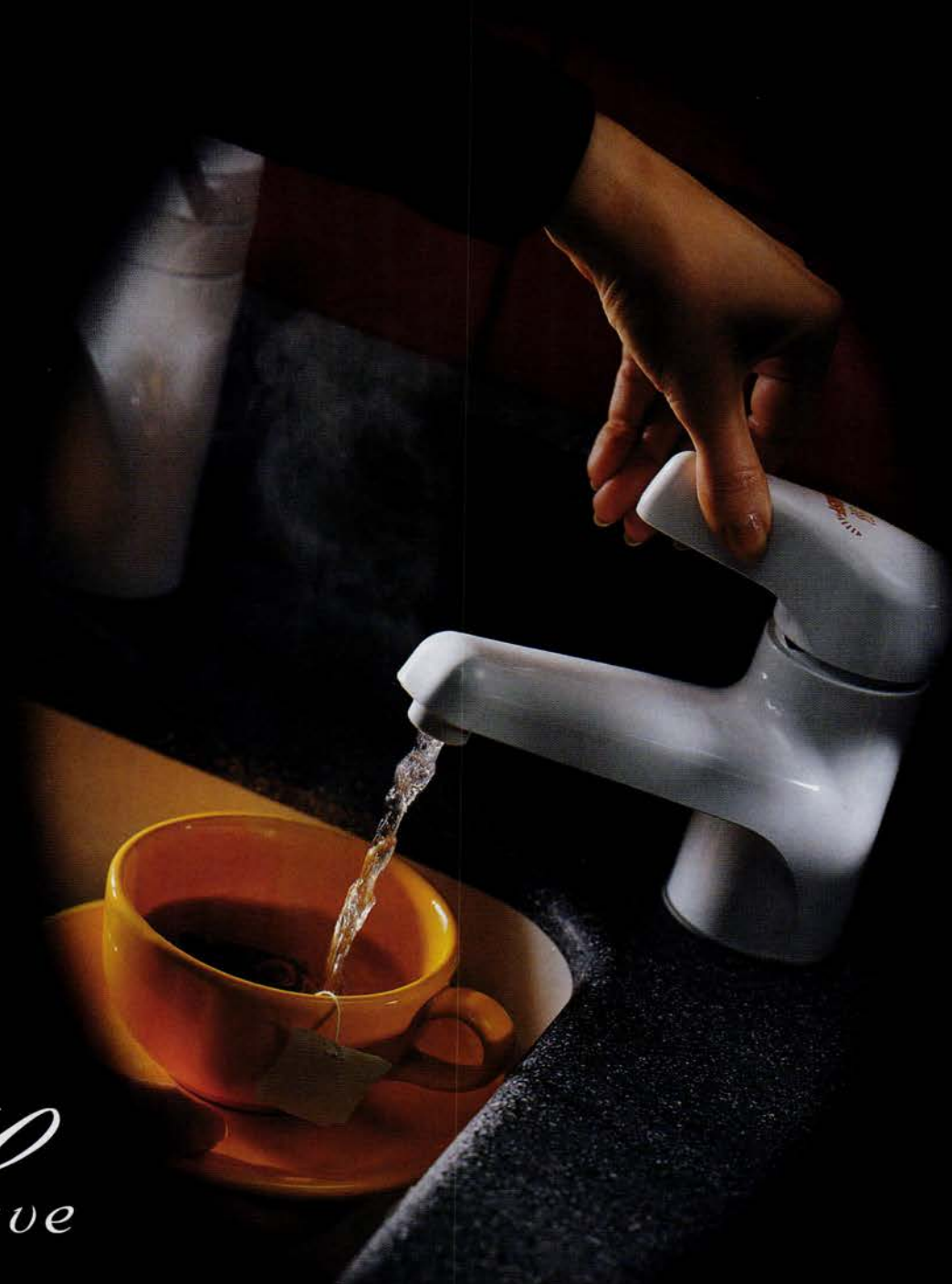
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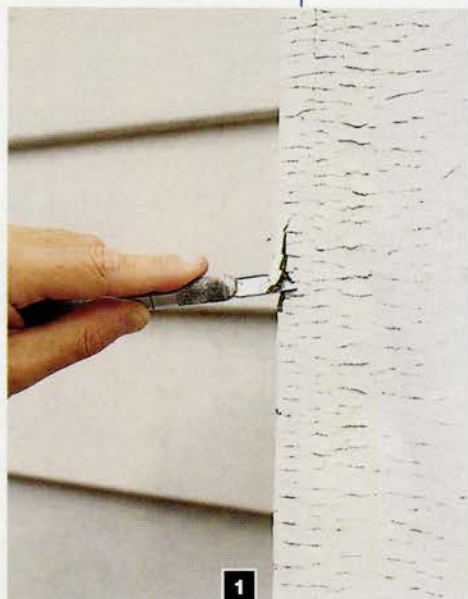


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# paint archaeology



1



2



3

## Rediscovering a colorful past in 20 layers

### she came armed

with a razor-edged stainless-steel scalpel. When architectural conservator Andrea Gilmore went treasure hunting at the dream house last spring, she headed for a corner of the facade and ran her fingers across a clapboard that had been nailed in place nearly 300 years ago. Then, with one precise stroke of the scalpel, she sliced through multiple layers of paint and shaved off a sliver of white pine less than ½ inch long.

Gilmore's eventual treasure haul—nearly two dozen paint-covered slivers delicately extracted from clapboards, shutters and window trim—looked to the naked eye like a small pile of construction detritus. But when viewed in cross section under a microscope and magnified 75 times, each tiny sliver presented a panoramic view of the house's history as layer after layer of color unfolded across the miniature screen. Gilmore discovered that the house had been painted 20 times during the past three centuries. "The color schemes trace the history of typical paint styles in this country," she says. The paint choices also reflect the idiosyncrasies of the house's owners over the years and occasionally raise the question: What on earth were those folks thinking?

When farmer John Crehore built the Milton house in the 1720s, he blanketed the clapboards in a thick layer of dark brown paint and detailed the window trim in russet. Crehore apparently was a man of austere tastes, but the dreary brown also happened to be one of the few colors available to him. House painters of the day carried their own ingredients and mixed paint on-site. Earth colors—reds, browns, yellows, grays and tans—dominated because their pigments were easy to find. "Technology drives style," says Robert Schweitzer, adjunct professor of architectural history at Eastern Michigan University in Ypsilanti.

Crehore's grandson, John, lightened the atmosphere inside the house by removing the heavy paneling surrounding the antiquated hearth and adding a new wing with space for a stove and pantry. Outside, he used lead paint to render the house pristine white. Clearly, the times were a-changing. "The American Revolution—and the notion that we were one of the only countries in the world without a king—had created a fascination with the Greek city-state," says Schweitzer. "White was the color of the day because it emulated



### Week 22

**CHOOSE COLOR**  
scheme for house  
exterior. Finish re-



siding the house. Remove old dining room paneling so that Norm Abram can turn it into wainscot. Discuss dining room wiring with electrician. Lay macadam driveway. Hydroseed the lawn. Select new leaf-resistant gutters.



BY JILL CONNORS  
PHOTOGRAPHS BY KELLER & KELLER



The dream-house facade changes its hue. **1.** Andrea Gilmore slices a window casing protected by a porch since the early 1800s. **2.** A magnified sliver shows 1720s pine casing at left, plus 20 layers of paint. **3.** Solvent-based chemicals stripped the facade. **4.** *This Old House* tests new colors in a small patch. **5.** A painter details a sash where freshly coated original clapboards look remarkably new. **6.** Now dark green, the shutters were black when they were added in the mid 1800s.

the marble and stone found in Greek temples.”

On the eve of the Civil War, mechanization transformed the paint industry. “It was the beginning of paint in a can,” says Gilmore. Color choices multiplied. But Jonathan Mann, who is believed to have made the house an Underground Railroad station for runaway slaves en route to Canada, chose a conservative color scheme. Around 1860, Mann painted the clapboards taupe and the window trim red. He later experimented with gold clapboards and off-white trim but eventually settled on gray with darker gray trim. The house was repainted with the gray color scheme three times. “During the high Victorian era, at the end of the 19th century, people loved intensely colored schemes—not necessarily bright and garish, but heavy in tone,” says Gilmore.

John Freeman Brown, a judge who donned his city suit to putter around the property, painted the house white again just before the turn of the century. The popular Colonial

Revival style of the period celebrated simple, classic forms, and pure white suited the ethos. Subsequent owners including Henry Beecher—an anesthetist who in the late 1930s turned the house’s 19th-century kitchen into a study with a large Colonial-style brick fireplace and bay window—kept the house white until the arrival of *This Old House*’s crew last spring.

To prepare the house for the next century, *TOH* used a solvent-based chemical stripper to take off the facade’s 20 layers of paint. Then the *TOH* crew sorted through a spectrum of color choices that John Crehore would have found staggering. “We didn’t go with the original scheme because it was too stern and forbidding,” says producer Bruce Irving. “We liked the yellows, and we wanted some red to tie the house to the barn.” In the end, *TOH* chose colors that both enhance the traditional charms of the house and give it a vibrant new look: yellow ocher clapboards, off-white window trim, red sash and green shutters. ■



#### Color Cues

The clapboards wore nine different colors over the years, each shade true to a particular architectural style—and the fancies of individual owners.

#### Georgian, 1720s-1830



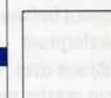
#### Greek Revival, 1830-1860



#### Victorian, 1860-1890



#### Colonial Revival, 1890-1997







### Week 23

**MAKE THE DOOR** for wine cellar in basement. Open guest bedroom wall to add insulation. Install the kitchen mantel and the vent-hood ductwork. Build screen frames for porch—the first project completed in the shop. Foam-insulate dining room wall and kitchen floor. Break through stone foundation for new basement bulkhead. Put waterproof membrane over floor in master bath. Install ridge vent.

# america's first

*To imagine what it was like to live here 300*





Which is harder? Imagining life as it will be in the future—say, 300 years from now—or life as it was in the past, 300 years ago? No matter which direction you look, forward to 2298 or backward to 1698, you find yourself obliged to assess the most essential elements of human experience, which are continuity and change. One way to grasp how far 2298 lies from the present is to ask what, in contemporary America, still survives from 1698. The answer, in purely physical

terms, is not much. But does change in our physical environment—the circumstances of living—change who we are? And, if so, what can a house from that remote era—a house built before the American Revolution—tell us about the character of its inhabitants and, ultimately, about our own character?

To get at these questions you can, of course, go to New England and visit a succession of early colonial-era houses. You will quickly gain a sense of the development that took place between, say, the Fairbanks House in Dedham, Massachusetts, a so-called First Period house built in 1637, and a more transitional structure like the Crehore house in Milton, Mass., built in the 1720s and renovated by *This Old House*. You could almost imagine the houses rectifying their asymmetry as time passed, growing more formal and finished, more spacious and elegant as their owners and builders grew increasingly sophisticated and began to copy early Georgian architecture from England. But nearly any surviving house of such early vintage has been expanded again and again, making it difficult even on-site to confine your imagination to the house's core as it was first constructed. This is certainly

**Built like a Medieval manor** in 1655, the John Whipple House in Ipswich, Mass., is a "millionaire's mansion of the 17th century," says its curator, James Z. Kyprianos. It began as a "half house" with only an 18-by-20-foot all-purpose room to the left of the chimney and a like-size chamber above. The builder's son added six rooms to the right of the chimney. He also added the front gables, which were rebuilt in 1953.

# houses

BY VERLYN KLINKENBORG  
PHOTOGRAPHS BY DUNCAN SIM

years ago, try to forget everything you take for granted





## Week 24

### FIT SCREEN

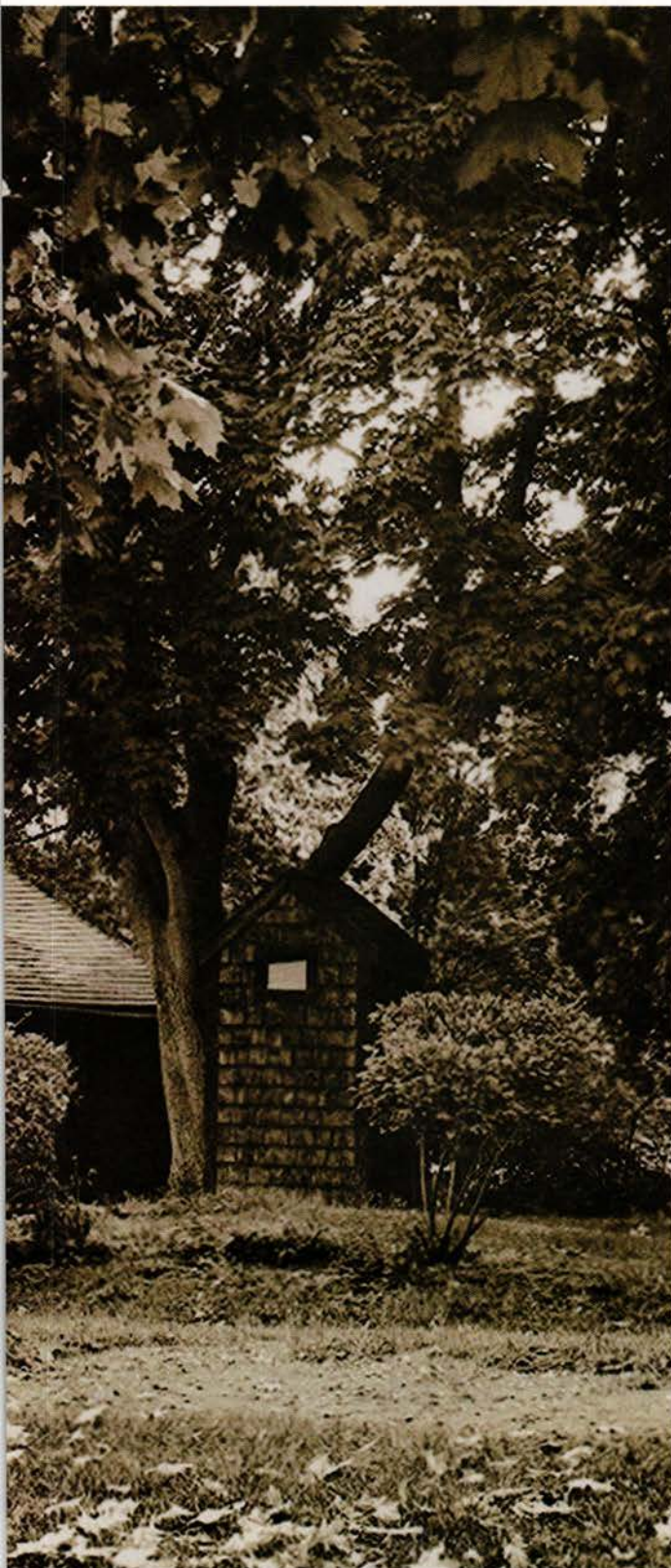
frames in porch. To deaden sound, foam-insulate the media room and install resilient furring channels. Foam-insulate the rest of house. Build stairway for bulkhead. Carry water heater and boiler to basement. Cut wine cellar door to size, and weather-strip it. In the barn, install the sauna. Outside, build stone wall across old driveway, and trim apple tree near the back of Norm's workshop.

true of the Crehore house. Its original elements—hall, parlor and central staircase—are clearly discernible, but it can be hard to put out of mind the warren of rooms that run away to the back of the house, rooms that have become, now that the renovation is finished, a kitchen, laundry, mudroom and half bath.

Reconstructing the past requires research, but it also

takes imagination. The day I visited the Crehore house, Andrea Gilmore, the architectural conservator who heads the Building Conservation Associates office in the Boston area, was taking paint samples from a relatively undisturbed remnant of window casing. Under a microscope, she examined the stratigraphy of paints and found a palette of colors several layers thick: blacks, browns, green, white,





tectural artifact but in your own home, not on a brief visit to an unfamiliar landmark but in a setting with which you are intimately acquainted. Try to imagine the changes you would have to make in your own house to turn it into a house of the kind a yeoman farmer might have built in the colonial era. (Because this is a thought experiment, there's no dust, no noise, no bills—only the seamless transformation of present into past.)

Start with the obvious. Completely disconnect your house from the outer world. No power, no phones, no cable or satellite TV, no radio, no city water or sewer system, no natural gas lines. Less obviously, you would also have to remove all of the structures that mediate between nature and the house itself. Strip away the deck and the veranda, anything that eases the transition from the interior to the exterior. While you're at it, remove the garage and reduce the foundation to fieldstone. Suck out all the insulation except for bricks and clay or, perhaps, some tightly packed eel grass.

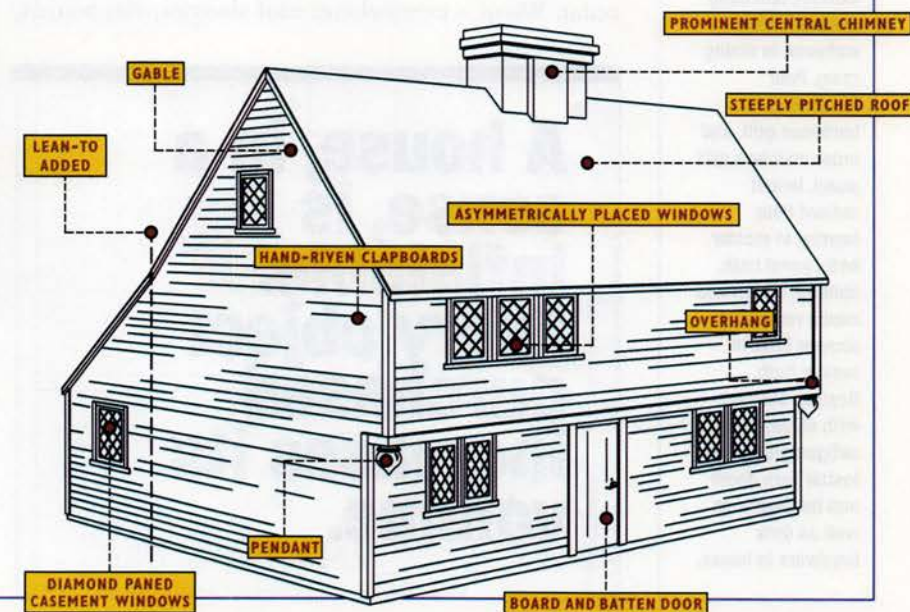
But how do you reimagine the interior space of your house to make it conform with late 17th- or early 18th-century standards? Instead of trying to calculate the difference in square footage—a relatively abstract exercise—imagine the difference in the contents of the two houses. A house, in one sense, is an inflatable structure. Every object purchased increases its interior volume. A TV, for instance, demands a certain viewing distance: the larger the TV, the longer the focal length, so to speak. (The same is also true of windows: A small window invites you to sit closer to it than a large window does. First Period houses have very small windows.) So what happens when you dispossess yourself of everything except the objects a colonist would have owned 300 years ago? The house deflates readily to scale.

This kind of mental auction is trickier than it seems at first. I happen to own a lot of books, and I seem to

#### The 1687

Boardman House in Saugus, Mass., has relatively new siding, roofing and windows. But it remains true to the 17th century with its oddly placed windows, its second-floor overhang and a gentle roof dip where the lean-to was added, probably in 1696.

### FIRST PERIOD PRIMER



yellow, gray and a rust red. "This is a color typical of the 17th and 18th centuries," she said, referring to the rust-red bottom layer on the wood trim, and I could see her imagining the Crehore house in its original form.

You can get a vivid picture of what it might have been like to live in a Colonial house simply by performing a similar mental exercise, not in the presence of an archi-

ILLUSTRATION BY MARK ROSENSHEIN



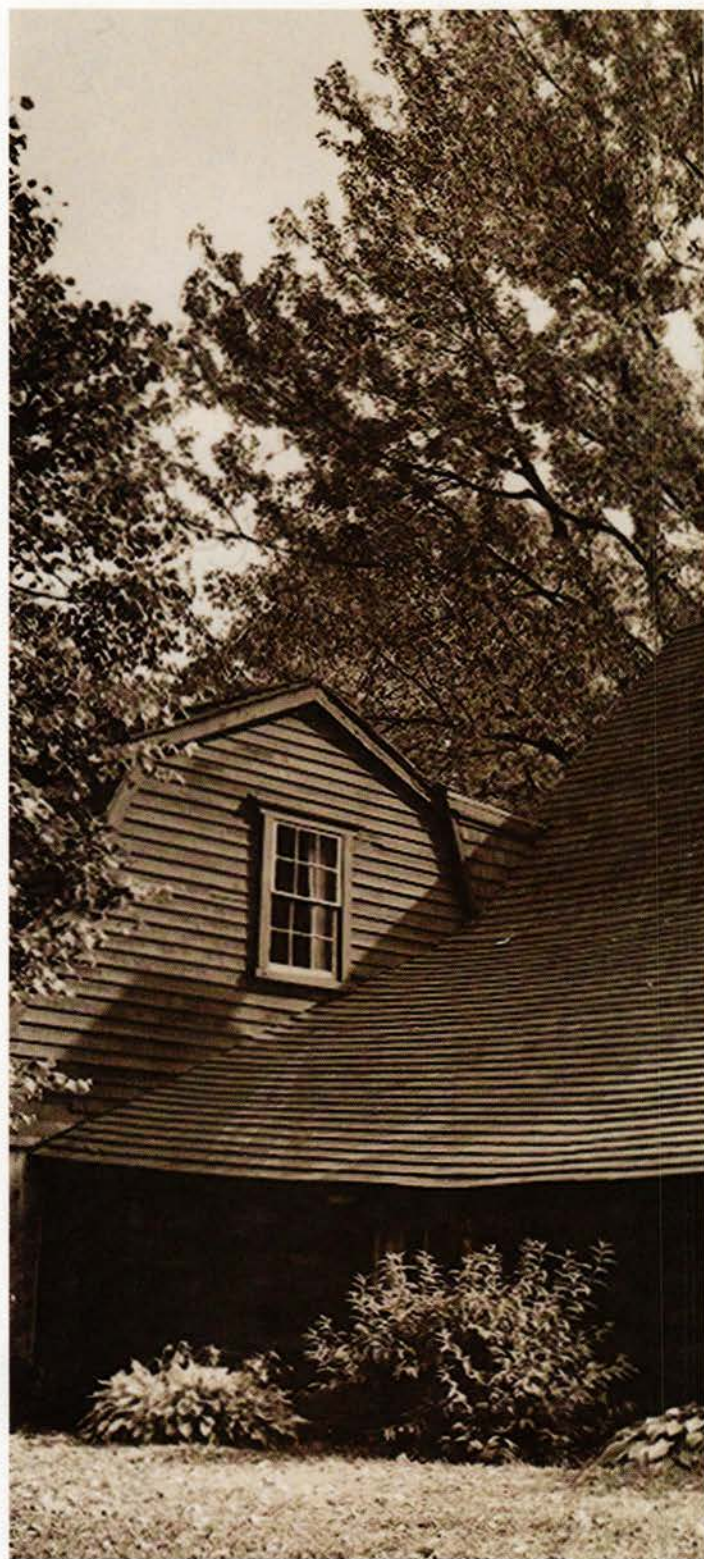
be perpetually searching out virgin expanses of wall on which to erect new shelves. But if I had lived 300 years ago in Massachusetts Bay, I would probably have owned at most a single shelf of volumes and more likely only a Bible and assorted unbound sermons and one or two devotional books.

Out go nearly all the kitchen paraphernalia and the cutlery—especially the forks, which are not in common usage—and the china. Out go the sofas, the overstuffed chairs and the beds with box springs. The armoires and closets turn into one or two chests, which are more than adequate for the extremely reduced inventory of clothing. The dining room set and the breakfast nook devolve into a plain board laid across simple trestles.

And as the house shrinks, its rooms lose their specialization. Instead of a mudroom, kitchen, pantry, dining room, living room, den or study, and separate bedrooms and bathrooms as well as a basement workshop or sewing room, there is a hall (perhaps 20 feet by 25 feet) set on one side of the central staircase and a parlor (slightly smaller) on the other, with two rooms upstairs.

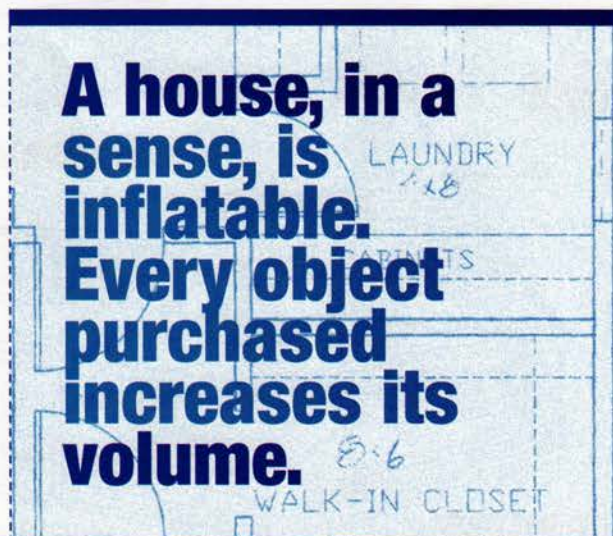
You may, perhaps, live in a house that has only a hall with a chamber upstairs. In the rear of the house, there may be a lean-to addition, which adds space for the storage of cheese presses, churns and farm equipment and will eventually include a kitchen. But for the most part, all the living you have to do—and all the living of everyone else in the family—will be done in the parlor and hall, where the warmth of an enormous fireplace subdivided into fires with several different purposes can make itself felt. For everything else, you must seek the outer world, which luckily is near.

As the house changes dimensions, other transformations occur as well. The doors, which grow narrow and short, are now made of boards and battens. The roof steepens dramatically. The framing, invisible in a modern house, becomes prominent and swells to massive proportions. You become intimate with the textures of wood—pine, black, red and white oak, chestnut and cedar. Wood is everywhere: roof shingles, clapboards,



## Week 25

**PAINT HOUSE** exterior, and hang gutters. Install wainscot in dining room. Pour foundation for barbecue grill, and order stainless grill panel. Install radiant floor heating in master bath, guest bath, children's bath and media room. Set shower base in master bath. Reglaze old sash with salvaged antique glass. Install barn doors and hardware, as well as door hardware in house.



flooring, furniture, a virtual symphony of wood grain. When the technology of lumber production becomes more sophisticated in the 19th century, houses will be built from lighter and lighter members. But the massiveness of the timber framing in a house constructed during the colonial era is not just a technological artifact. It also acknowledges the wealth of New England's raw materials: its forests. The stoutness is in itself a gesture toward a harsh world, a defiance of sorts.





#### **The Fairbanks**

House, still owned by the same family after three and a half centuries, proudly wears its wrinkles, including a painted birthdate that scholars no longer think accurate—it should be 1637. The swaying lean-to roof dominates one side view of the house, which also has add-ons at both ends.

And yet as you picture life in such a house, for everything you remove in imagination from your present life, you must preserve—even add—something too. Surviving pre-Revolutionary houses—whether First Period or transitional, forward-looking ones like the Crehore house—vividly attest, albeit very differently, to their owners' concern for balance and proportion, their sense of texture, their attraction—always bounded by financial and technological limits—to ornamentation that arises from well con-

ceived function. Perhaps the most beautiful thing I have ever seen in a house—modern or ancient—lies concealed at the heart of the Crehore house. It is an opening under the central staircase, next to the brick chimney. I crept through a tiny door, shone a flashlight upward and gasped. Directly above me, caught in a shifting beam of light, was a bending and swooping of pure geometry, a chorus of bricks rising upward, hidden behind the only source of warmth in a house now nearly 300 years old. ■



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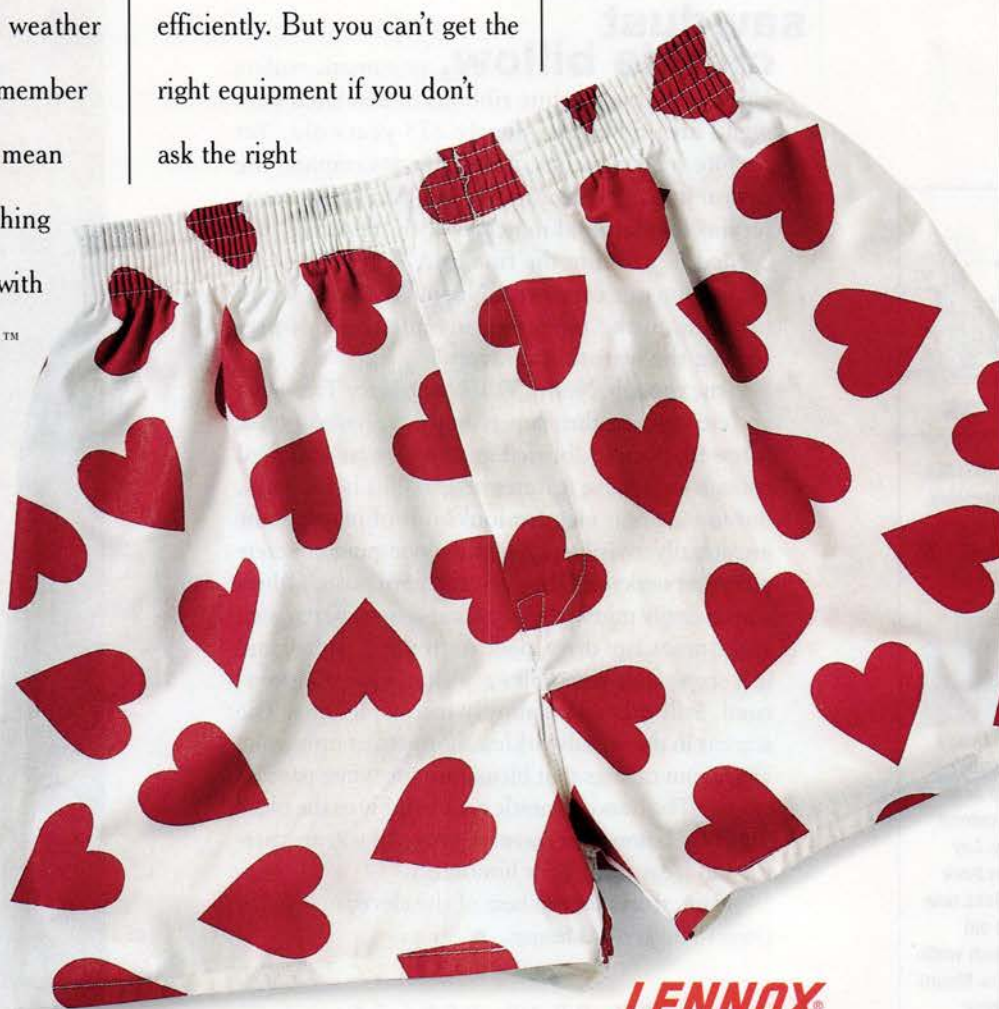


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# smart stuff

*Steal these ideas*

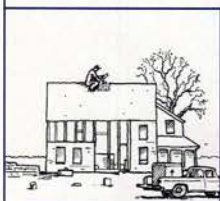
**sawdust clouds billow,** pneumatic nailers chuff, and bright white ribbons of insulated wire wend around beams nearly 275 years old. Yet despite such vigorous, ambitious revamping, the dream house project in Milton, Massachusetts, retains its Colonial majesty. "I think we've succeeded in walking the fine line," says *This Old House* master carpenter Norm Abram. "We're bringing in the modern conveniences but preserving the historic character."

True enough. Norm, *TOH* contractor Tom Silva and crews under their supervision have nailed, glued, screwed, poured, buried and otherwise installed enough innovative features here to fill a home show, but not a single element looks out of place. Some are literally invisible, such as the one-pour concrete piers that undergird the deck and barn posts. Others convincingly mimic their historic counterparts, such as the macadam drive made of recycled asphalt and grit stone that resembles a well-mannered gravel road. Still others are simply inconspicuous: The screens in the woodworking shop retract into white aluminum casings that blend into the white painted walls. "The new can nestle comfortably in the old," says *TOH* show host Steve Thomas, "if you are careful and treat them both honorably."

Here, then, are the best of the clever new additions to a very old house. ■

BY BRAD LEMLEY

PHOTOGRAPHS BY KELLER & KELLER

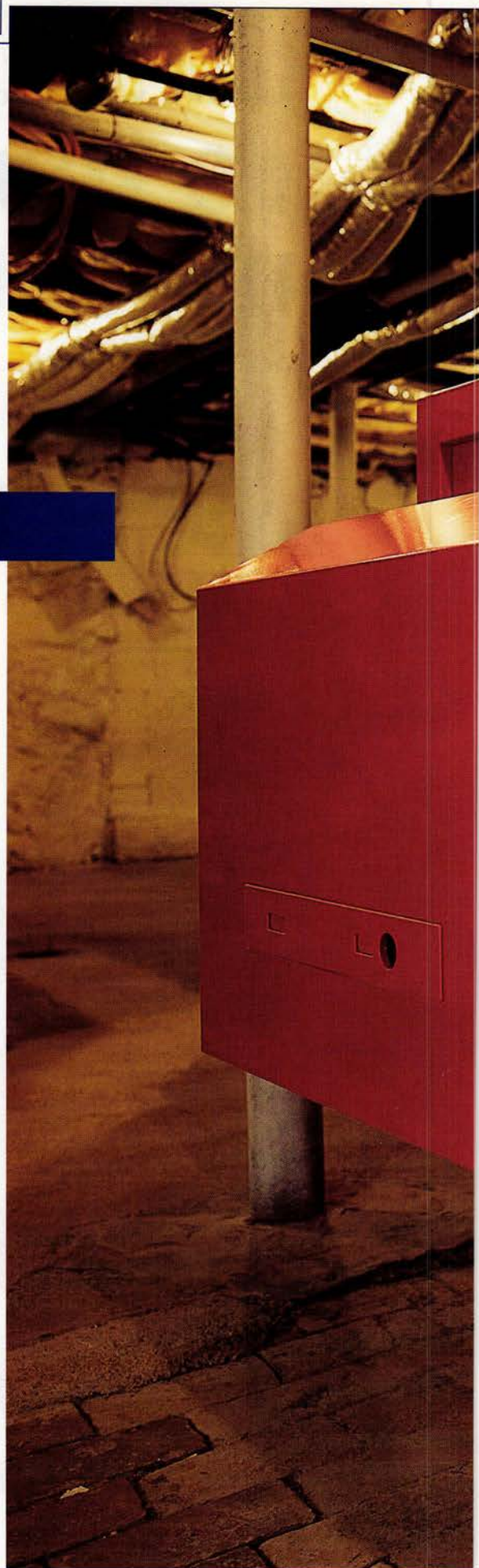


## Week 26

**MAKE AND INSTALL** trim for wainscoting and two new doors.



Hang door to media room. Add jamb extensions to new windows in second floor hallway. Lay brick patio in back courtyard. Make new stops for the old windows. Patch walls in front rooms. Mount the exterior door hardware for the house and barn.







### cool boiler

"This isn't just a boiler, it's a system," Richard Trethewey says. "And it isn't just any system, it's like putting your car on cruise control versus stop-and-go driving." Heating systems in Boston and other areas with cold, wet winters are typically designed to combat a zero degree outdoor temperature, so boilers routinely heat supply water to 180 degrees, even on relatively warm days. By contrast, a microchip brain in this \$5,000 all-in-one boiler, burner and control unit responds to changes in the temperature outdoors and continuously varies the temperature of the water that heats the house's radiant floor systems. Most boilers last 15 years, but this system should last 40.





## modern macadam

John Loudon McAdam (1756-1836), a Scotsman whose immodestly named macadam roadways speeded 19th-century travel in England, would easily recognize this updated version of his revolutionary paving system. "The composition is something like peanut brittle," says TOH producer Bruce Irving. In McAdam's day, the peanuts were a bed of stones, and the binding brittle was a sprinkling of fine sand or cinders. Today, paving contractor Larry Torti substitutes crushed recycled asphalt paving, securing the chunks by spraying on liquid asphalt. He tops the lumpy black goo with 1/4-inch gravel, then mashes the whole to monolithic stability with a 10-ton roller. The finished driveway is so solid that a 30-ton truck will leave no impression, yet the look is pleasantly casual—more like a Nantucket scallop-shell drive than a blacktopped highway. Although the surface isn't quite as plow-resistant as asphalt, Torti says, "If you put skids or runners on the bottom of the blade, you can plow it fine." He adds that his macadam drives come in 14 colors, provide excellent traction on icy days and require minimal maintenance—just a new coat of liquid asphalt and grit stone every decade. "When you resurface, you can change the color if you want to." But perhaps the most appealing advantage is cost. Torti charges \$7 per square yard for macadam versus \$13 for asphalt. The reason: The 4-inch base of recycled asphalt chunks is a bargain. "I can get it for \$3 a ton as opposed to \$10 a ton for gravel," says Torti. "There are mountains of the stuff. I'm glad I could find a use for it."



## Week 27

### PLANT LACEBARK

Chinese elm in carriage circle and holly tree near screened porch. Insulate and skim-coat walls of master bedroom. Install tub and toilet in guest bathroom. Hang doors in guest bedroom, powder room and workshop. Move toilet over because tub is too wide. Install radiant-heat floor in kitchen. Wainscot media room. Make trim in new shop. Unpack the kitchen cabinets. Put old floorboards back in the attic.





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## strong support

**1.** Concrete pilings provide rot-proof support for decks and other outdoor structures. Making the pilings' inverted-mushroom shape usually requires two pours: first to create the wide footing, then to fashion the narrow concrete column atop it. But these broad plastic pans, slipped into standard fiberboard cylindrical forms, allow contractors to make the footing and column with just one pour. The pans cost \$14 apiece. "You would spend more than that in labor costs alone, messing with a two-stage pour," says Tom, who used the system to create concrete supports for the posts in the barn and the deck in the workshop.

## hot line

**2.** The roar of a woodworking shop (or your son's proto-Metallica band) is best sequestered in an outbuilding—but how to heat it without shelling out for a new furnace? *TOH* plumbing and heating contractor Richard Trethewey opted to transport heated water from the dream house's boiler to the workshop, some 120 feet away, via this pipe. Warm water courses through the 1¼-inch cross-linked polyethylene pipe, which is swaddled in a jacket of foam insulation 2 inches thick and buried 5 feet underground. After the water passes through the radiant tubing embedded in the shop's concrete floor, another insulated pipe returns it to the house's boiler. "The heat loss in transit is virtually nil," Richard says.

## bug buster

**3.** Let a slimy wood-eating pest chomp away at Tom's framing repairs or Norm's workshop? No way. Rather than battle termites with liquid pesticides, which are often ineffective and sometimes toxic to people and pets, *This Old House* chose a bait system that exposes termites—and only termites—to hexaflumuron, a growth-inhibiting chemical. To locate termite breeding areas near the house, exterminators set dozens of green plastic cylinders in the ground and bait them with aspen wood. If the bait attracts takers, the aspen is replaced with paper tissues—treated with hexaflumuron—that the termites feast on. At roughly \$2,200 per house treatment, the system costs twice as much as liquid pesticides. But the hexaflumuron destroys entire termite colonies, not just individual bugs.



## swinging shingles

Traditional shingling, that repetitive Zen ritual of New England carpentry, gets turbocharged with the panelized system used on the barn and workshop. Instead of attaching thousands of individual shingles, Tom and his crew nailed up about 180 2x8 sheets of  $\frac{5}{8}$ -inch plywood to which red cedar shingles had been stapled and glued at a factory. Tom says the panels (at \$250 to \$325 per 100 square feet) are roughly the same price as traditional shingles. But the cost of installation is significantly less. "This would normally have been a three-week job," says Tom (inspecting the new shingles with Norm and Steve). "We did it in a week and a half, with two men." A further advantage: The plywood backing adds some structural rigidity, stiffening the barn's aged pine-plank vertical sheathing.



### Week 28

**WAINSCOT THE** hallway, bathroom, laundry room and mudroom closet with plywood bead-board panels. Install the base cabinets in kitchen. Build a desk and pantry along kitchen's north wall to match cabinets in the kitchen. Add jamb extensions to the windows in kitchen and mudroom. Strip paint from the old windows. In back courtyard, install a cast-iron fountain and erect 5½-foot-tall white cedar fencing along its northwest corner.





## slick roof

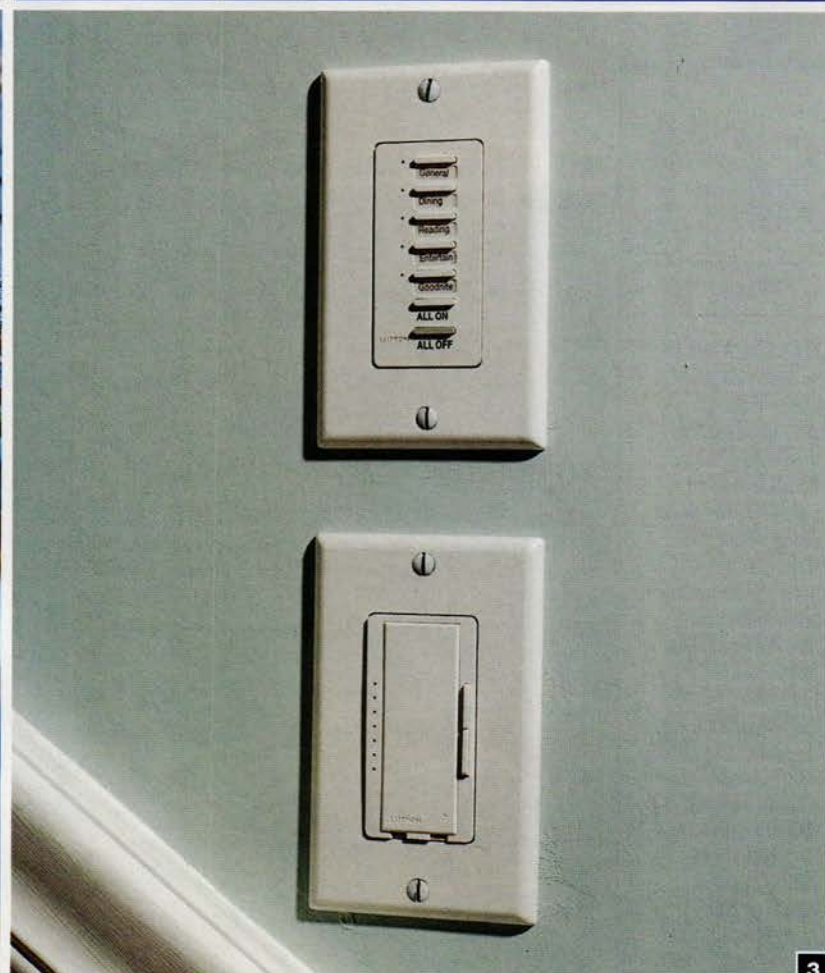
**1.** The roof atop the new workshop resembles terne, sheets of steel coated with lead and tin that have capped New England buildings for more than two centuries. But this ultramodern roof is made from steel sheets dipped in a bath of 55 percent aluminum and 45 percent zinc, then painted with a high-performance compound chemically similar to Teflon. Rain, snow and untethered people slide right off. A portable computerized hydraulic-electric machine formed these panels on-site, ingesting raw sheet goods from a roll and spitting out perfect cut-to-length panels. Contractor Al Smith (rear) and his son Jeff placed the panels on the roof, then piloted a power seamer that double-folded each panel's seams together. At \$500 per 100-square-foot section installed, this roof is triple the cost of asphalt shingle. But the paint alone is guaranteed to last 20 years.

## leafless gutter

**2.** A debris-shedding gutter will limit the need for the future dream house owners to scale dizzying heights and deal with rotting gutter muck. The curved hood deflects leaves and twigs while allowing water to dribble into the trough. Formed on-site from a single sheet of heavy-gauge aluminum, the installed gutter costs \$7 to \$10 a foot, about \$2 to \$4 more per foot than a quality seamless open gutter. If the gutter clogs, the dealer will clean it at no charge.

## inviting lighting

**3.** Push one button as you step inside the side door of the dream house and—presto—25 separate light fixtures in the mudroom hallway, the kitchen and the back stairs simultaneously switch on. The central lighting system operates on a radio signal and therefore doesn't require rewiring. "You can control any light from anywhere in the house," says Josh Feinstein, the lighting designer. A repeater that plugs into an electrical outlet is the key; at Milton it's hidden in a kitchen cabinet. But this new technology comes at a price: \$17,000 for the dimmer switches, repeater and master control panels, not including installation.







### Week 29

**MAKE MOLDINGS**  
and window and door trim for the dining room out of the room's old floorboards and paneling. Hang new pine interior doors throughout the house. Install 490-pound enameled cast-iron soaking tub in master bathroom. Shellac the entry hall trim, the pine stairway, and the inside of front door. Unload and unpack more cabinets. Paint chimney. Install radiant heat in dining room floor.



## dandy doors

1. "I love these doors," says Norm. So does virtually every visitor to the site. Daily, a small crowd collects around the dream house's barn to see the illusion revealed. What appear to be two pairs of traditional swing-out barn doors—complete with wrought-iron handles, true divided-light windows and massive strap hinges—roll up in segments like typical suburban garage doors. Made of clear, heart redwood lumber screwed to a poplar-luan core, each door weighs 400 pounds, triple the average garage door's weight, and requires custom heavy-duty steel tracks. Such quality doesn't come cheaply: A single door, installed, costs \$5,000. But door manufacturer Scott Hahn, who sold some 800 custom overhead models last year, predicts his doors will last 75 to 100 years if they are properly maintained. "I've built garage doors myself," says Tom. "I can tell you these are worth the money."

## super sash

2. All of the Colonial's original windows were basically sound but leaked around the sashes. Window restoration specialist John Stahl removed each bottom sash (the fixed top sashes didn't require treatment), planed the sides and bottom, and router-carved a 1/8-inch-wide by 3/8-inch-deep groove along sides and bottom and across the front of the meeting rail. He then pressed barbed nylon-pile weather stripping into the grooves and replaced each sash. "Replacement-window manufacturers have led everyone to believe that the efficiency of glass is what matters," says Stahl. "Actually, most heat loss from windows is air leakage around the perimeter." Stahl charges \$125 per sash for labor and materials but adds, "Anyone who can handle a hand or power plane, belt sander and router could do this on their own."

## screen gem

3. The typical exterior-door configuration—screen door swings out, main door in—eats interior space and defies easy passage with an armload of groceries or lumber. So in the woodworking shop, the French doors swing out over the deck, and workers installed ingeniously designed screens wrapped around side-mounted spring-tension rollers that unfurl across the openings only when needed. At \$300 per individual unit (or \$600 for a pair needed to cover a French door opening), "it's probably overkill for a shop," says Norm. Still, he says, "I like that you don't have a screen door constantly covering the French doors. You get more light and a clearer view."



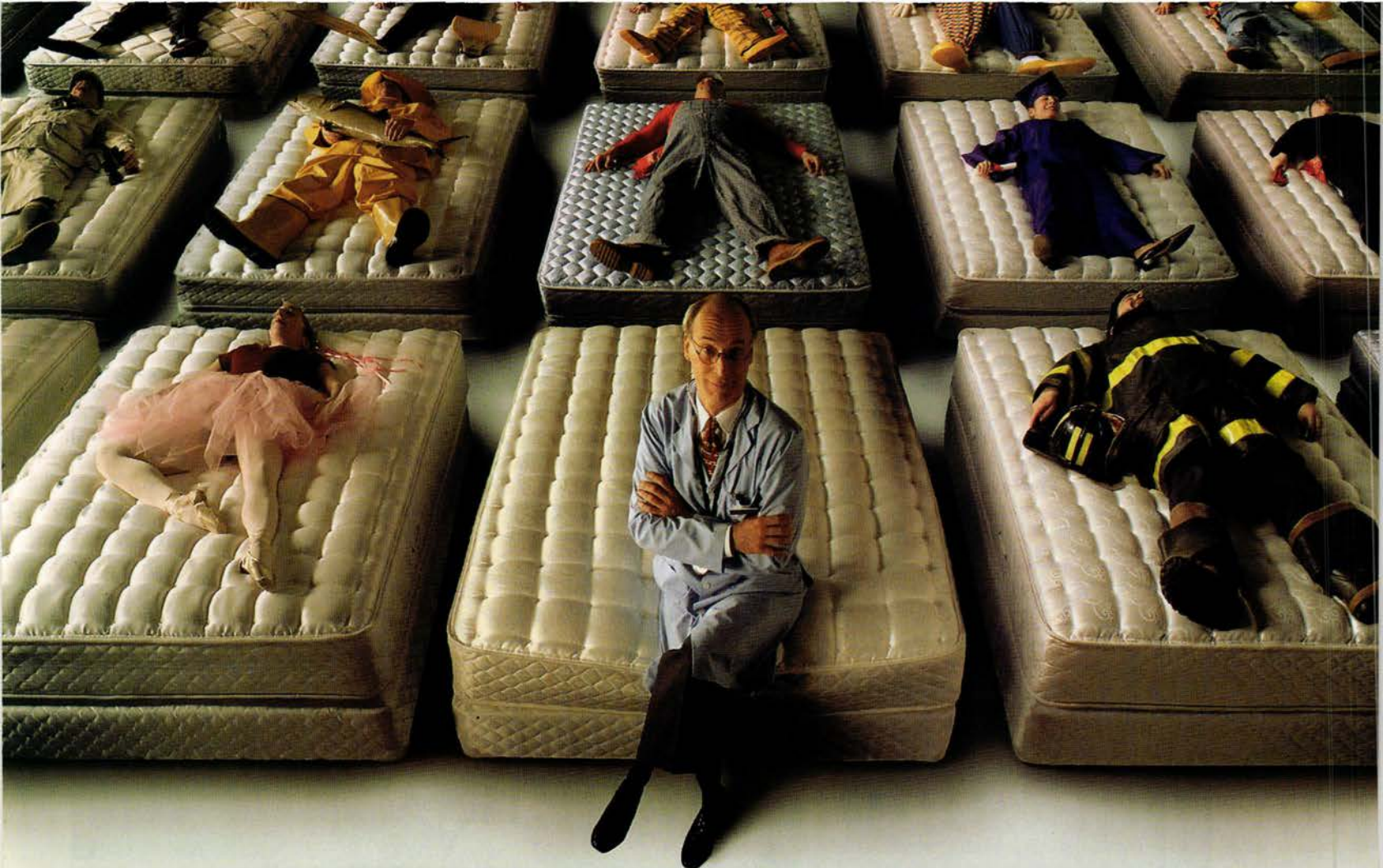
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# fixed, furnished, fantastic

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## Week 30

HANG SECOND-floor doors. Install window trim on



second floor and crown molding in media room. Wainscot back stairs, hall and barn bathroom. Hang cabinets in laundry room and cabinet doors in pantry. Scribe-fit treads and risers to walls. Dry-lay brick floor in the screened porch.

Now that the last shutter has been hung and the final tea table gently placed in the parlor, a sampling of raw numbers hints at the magnitude of change at the dream house. Seven miles of wire. Two miles of pipe. Ten thousand square feet of grass seed. One hundred twenty shrubs. Thirty-six doorknobs. One hundred fifty gallons of paint. Not to mention 11,000 man-hours and 15,000 phone calls. But the house, barn and property are greater than the sum of their invoices. The house, by turns opulent and informal, melds for the most part into a coherent whole. That is remarkable because this design-by-committee project involved director

BY BRAD LEMLEY PHOTOGRAPHS BY KELLER & KELLER





Steve Thomas, second from right, provides a drink for the newly planted lacebark Chinese elm in the carriage circle. Landscape architect Tom Wirth chose the hardy elm because it "comes up as a nice umbrella" giving shade in summer and, in winter, displaying beautifully mottled bark.





Russ Morash, producer Bruce Irving, contractor Tom Silva, master carpenter Norm Abram, plumbing and heating contractor Richard Trethewey, host Steve Thomas and many others. "When we put our heads together, I was afraid the result would be diffracted," says Bruce. "But I think everything hangs together quite beautifully."

The house exemplifies what has become, over the years, the *This Old House* aesthetic. The guys preserved original features that were attractive and functional: the brick-faced fireplaces, the honey-colored pine paneling in the front parlor and the wide-plank pine floors. Still, no one was at all shy about ripping and replacing to pre-

"What we did here was minimal," Tom Silva says of the study, right. Crews rewired walls and stiffened the floor but preserved the dentiled molding. Decorators injected a casual style by painting the woodwork white, slipcovering the sofa and an armchair in chenille and putting a sisal area rug on the oak-strip floors.



### Week 31

**MOUNT VANITIES** in children's bathroom and downstairs powder room. Trim kitchen and hallway cabinets to install under-mounted sinks. Drop grill into brick barbecue, and connect to gas line. Edge carriage circle with cobblestones. In the kitchen, trim all soapstone countertops to size, and install them. Build cabinets to hold electronics in media room. Paint the study and parlor. Trim new kitchen windows.





At the north end of the mudroom addition, top right, a glass-paned door leads indoors from the courtyard. This all-new construction features a slate floor, atop a radiant-heated concrete slab, and wainscot made of bead-board panels. Shucking dirt-caked boots here protects the pine floors in the adjacent kitchen. The mudroom addition also has a sink for post-gardening wash-up, bottom right, and a laundry room.







### Week 32

**DROP IN** cooktop; install its hood and stainless-steel backsplash. Install ovens, refrigerator, dishwasher and wine cooler. Finish stairway from kitchen to basement. Wainscot the barn hallway and exercise room. In media room, finish the crown molding, install bookshelves, hook up electronics and put up panels surrounding television. (Decorators bring in furniture, draperies and carpeting.)


pare for a 21st-century occupant. As the next owners amble from the barn's gleaming fitness area, past the high-tech kitchen appliances to the circuitry-stuffed media room, the closest they will come to the Spartan flavor of 18th-century life will be watching *The Last of the Mohicans* on a digital versatile disk.

Unlike a typical TOH project, after which the home owners extract their furniture from cold storage and arrange it in the revamped space, this spec renovation required decorating to make the property attractive. "We build. We

**No drum sander** violated the parlor's lustrous wide-plank pine. Floor installer Jeff Hosking gave the old floor a light screening to remove dirt, stained the bare spots and shellacked the surface. Following a colonial practice, he used rope to fill gaps between boards. Decorators kept to the colonial tradition as well, choosing reproduction furniture in styles common to the dream house's early years: a Chippendale camel-back sofa, a pair of Queen Anne tea tables, upholstered wing chairs, a blockfront chest with brass accents. Roman shades in linen cover the windows without hiding the parlor's original molding and trim.







**Laboriously removing 18 coats of paint—**including stubborn, gummy milk paint—revealed a striking stairway in the front entry hall. A painter, John Dee, applied shellac to the stripped old-growth white pine, and the stairway and hall now match the adjacent parlor.





**A high-tech combination** shower and steam room in the master bath has hedonistic appeal. The room's centerpiece is the 6-ft.-long enameled cast-iron soaking tub. French limestone tiles, each 16 by 16 in., are set in the floor on a diagonal.



### Week 33

**MOUNT REST** of cabinets and bookshelves in media room. Cover base of kitchen island with bead-board panels. Repair brickwork on dining room fireplace, and repair and replace its paneling. Install outlet in barbecue's soapstone backsplash. Sand and oil all the soapstone counters. Rebuild and weather-strip sash for attic window. Install subfloor and underlay in master bedroom closet.

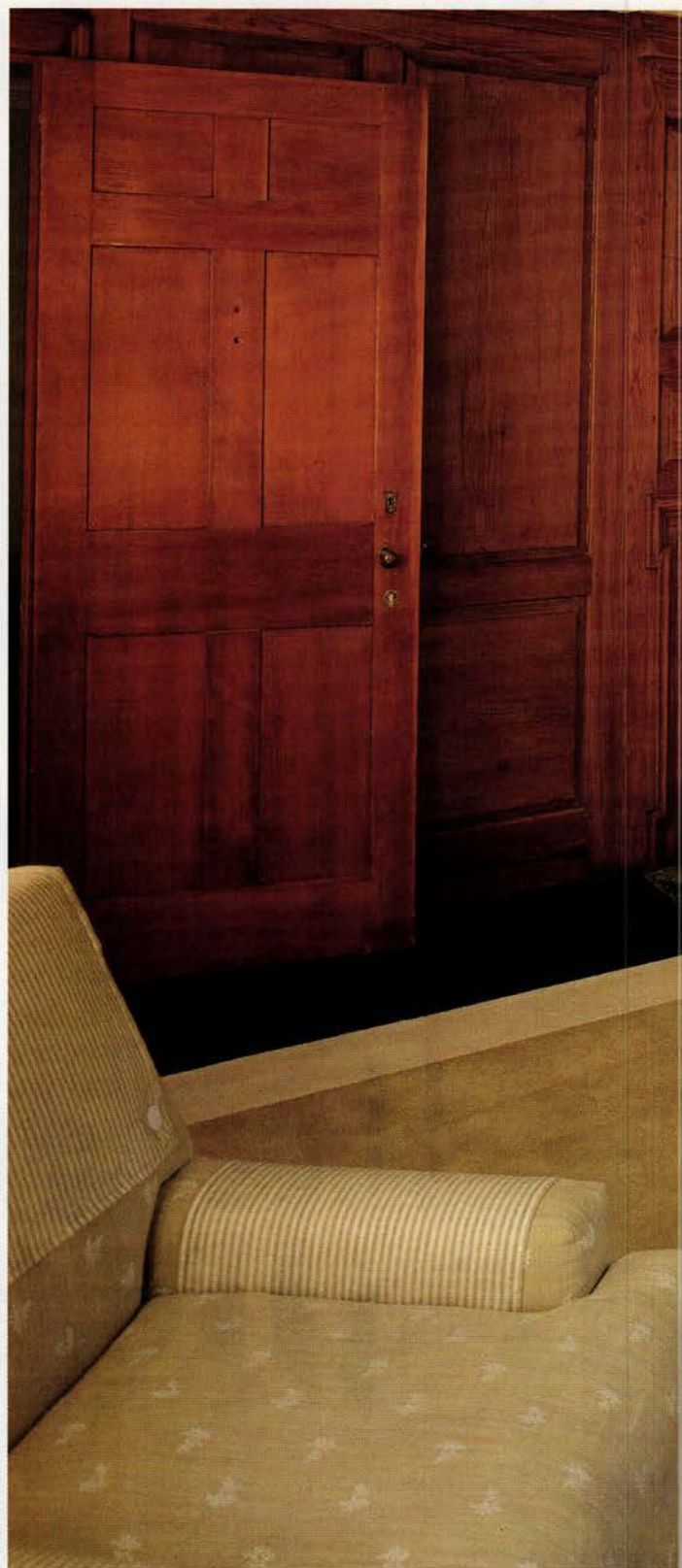
don't furnish. This is an area in which we have no clue," Bruce says. So Russ called his former assistant Nina Sing Fialkow, now a full-time mom, and asked her to take on a special assignment to "stuff this house."

"We decided to make it a designer showcase," Fialkow says. A different design team would outfit each room, and the property would then be opened for public tours. In typical can-do *TOH* style, Fialkow promptly cold-called national retailers. "My aim was to make it possible for someone seeing the television show or reading the magazine to be able to create the same room, if that's what they wanted."

Interior designers from a dozen firms signed on and by late summer were poking, peering and sketching the raw spaces they had agreed to transform. "I was incredibly surprised and gratified at how enthusiastic they were," Fialkow says. "There is a real interest on the part of designers to see what we do at *This Old House*."

Typically, decorators and construction workers inhabit separate universes but, as the dream-house deadline loomed, they were tape measure to tape measure. "You'd be building a bookcase, and the decorator already had the books ready to go in it," says Tom. Russ was impressed by how fast the work got done. "These designers are like theater people," he says. "Work 18 hours straight if you have to, but get it done by show time."

The fact that a different design team furnished, draped, painted and carpeted each room makes some transitions jarring. The ultramodern, blond-wood Swedish minimalism of the children's rooms, for example, contrasts sharply with the overstuffed Edwardian media room.



That, in turn, doesn't quite jibe with the Shaker-influenced kitchen cabinetry. Whoever buys the house will have the option, though, to keep or reject all or part of these widely varied furnishings, so the jangling discontinuity may eventually fade.

But some problems are endemic. Because the guys tried to do as little violence as possible to the original walls of the 1720s house, the formal dining room must now double





**Original pine** woodwork along the master bedroom's fireplace wall was left intact. The rest of the room has contemporary furnishings including a queen-size bed, with head- and footboards slip-covered in white canvas, and a custom-designed rug made of squares of off-the-roll broadloom in subtly varied hues, sewed together in a checkerboard pattern. An area of floor-to-ceiling closets leads from the master bedroom to the master bath.

as the major traffic artery, linking the parlor and study to the kitchen. The right owner will find this idiosyncrasy charming. The wrong owner will find it aggravating.

As Virginia Devine, the most recent owner of the house, walked through the finished project at the wrap-up party in December, she had both praise and criticism. "The way the rooms have been rearranged takes away some of the flexibility we had," she says. "Sometimes, we'd turn

the parlor into a bedroom, then into a children's TV room, then a guest room as our lives changed. These things happen in families."

Generally, she is pleased that the "things that needed doing for decades got done. There are better windows, a better heating system. We were always cold. The master bath and dressing room are so much nicer. And that whole utility-room-bathroom-laundry-room complex is



The old greenhouse yielded to this compact screened porch. Radiant-heat tubing snakes beneath the dry-laid brick floor. "If you made glass panels for the winter, you could use the room all year," says Tom Silva.



### Week 34

**FINISH THE** installation of door hardware, outdoor lighting fixtures, porch screens and the new mailbox. Hang shutters. Change some kitchen cabinet door panels from wood to glass. Patch holes left after relocating fixtures. Help decorators assemble furniture and hang mirrors and artwork. Install carpet on stairs in back hall. Trim doors on second floor to fit the carpet. Clean for wrap-up party.







**Tom inaugurated** the gas-fired barbecue in the dream house courtyard with a feast of venison and moose meat. "Building the thing was a huge amount of work," he says. "I figured we should celebrate."

just gorgeous." The barn excites her too. "Ten years ago, my late husband said he wanted to put a sauna in the barn in the exact place where they put it."

At the wrap-up party, at least half of the crowd consisted of workers who had labored on the house, barn or landscape—some for a day, some for months. "Every single person involved with the project was a true craftsman," says electrician Al Gallant, who spent nearly nine months on the site, adding 50 electrical circuits to the house and 22 to the barn. "It was amazing to see these guys in action every day."

For his part, Bruce is pleased that the crew worked just as hard on invisible but essential structural improvements as it did on spiffing up surfaces. "The house is set for the next century, and that makes us proud. This was not a developer flip job for a quick profit. It doesn't just look good. It is good, from the bones out."

Tom, who oversaw the project from the initial sledgehammer swing in April to the final paintbrush daub in December, says the house meets his highest criteria: "It has the comforts of a new house, but it feels like an old house. That's the mark of a successful renovation." ■



# directory

Another list of Milton project specialists and suppliers begins on p. 90.

## WHAT NEEDS FIXING FIRST?

pp. 14-19



**Further reading:** "Inspecting Your Home," No. A1.1, by Building Research Council, University of Illinois, 1993, 8pp., \$2 plus \$1.50 shipping-handling. Make checks payable to University of Illinois, and mail to School of Architecture-Building Research Council, College of Fine and Applied Arts, University of Illinois at Urbana-Champaign, 1 East Saint Mary's Rd., Champaign, IL 61820; 800-336-0616. **Our thanks to:** Allen Gallant, Gallant Electric, Waltham, MA; Fred W. Bucklin, F.W. Bucklin Appraisal Co., Walpole, MA; Tom Wirth, Thomas Wirth Associates Inc., Sherborne, MA; Donald Robbins, building commissioner, Milton, MA; Coleman, 1992, 212 pp., \$19.95; Chelsea Green Publishing Co.; 800-639-4099.

## IMAGINE THIS

pp. 22-27



**Architect:** Rick Bechtel, Bechtel Frank Erickson Architects Inc., 1840 Massachusetts Ave., Lexington,

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Massachusetts 02173; 781-862-3313. **Landscape architect:** Tom Wirth, Thomas Wirth Associates, Box 334, 133 Western Ave., Sherborn, MA 01770; 508-651-3643.

## A REAL COOK'S KITCHEN

pp. 28-31



**Kitchen design:** Phil Mossgraber, Natick, MA; 508-655-4138.

**All appliances:** Jenn-Air, 403 W. 4th St. North, Newton, IA 50208; 800-688-1100.

**Cooktop:** Expressions Collection Triple Gas, CCGX2620, \$899.

**Double ovens:** 27-in. Pro-Style Double Electric, WW27430P, \$1,599.

**Refrigerator:** 19.8-cu.-ft. designer line, JRSD209T, \$1,499.

**Dishwasher:** Ultimate Quiet Series Pro-Style, DW861UQP, \$595.

**Microwave:** M170A, \$327.

**Soapstone countertop:** 30-by-48-in. slab, 1 1/4 in. thick, \$50.35 per sq. ft., Vermont Soapstone Co., Perkinsville, VT; 802-263-5404.

**Butcher-block countertop:** 27 1/2 in. by 75 in., \$440, Counterwerks, Franklin, MA; 508-528-8610.

**Cabinets:** Maple with muslin stain (island with indigo stain), birch plywood carcass, Huntington door style, Kraft Maid Cabinetry, Middlefield, OH; 800-315-2202.

**Flooring:** planks 7 3/16 in. wide, Riviera Russett Pine USA5751, \$8 per sq. ft., Harris-Tarkett, Johnson City, TN; 800-842-7816.

**Wine cooler:** Model 15 WC, black trim, 32-bottle capacity, \$871, U-Line Corp., 8900 N. 55th St., Box 23220, Milwaukee,

WI 53223; 414-354-0300.

**Sink and faucet:** Both from Kohler Co., Kohler, WI 53044; 800-456-4537. Sink, \$241, model K-6587S4, White Cliffs. Faucet, \$439 model K-168, antique in chrome with spray.

**Range hood:** Best K42, Broan Manufacturing Co., Hartford, WI; 800-558-1711.

**Interior design:** Horchow Cooks' Collection; contact Eddie Nunns, 5950 Colwell Blvd., Irving, TX 75039; 972-969-3220 or 800-456-7000. Styling by Tom McGrath, Hancock Design, 18 Hancock St., Boston, MA 02114; 617-742-8588.

## A BETTER BARN

pp. 34-41



**Structural insulated panel:** Insulspan Inc., 800-726-3510. Structural insulated panel installer: Panel Pros Inc., 800-721-7075.

**Standing-seam metal roof:** Permetallic 2000 pre-weathered Galvalume panels, Englert Inc; 732-826-8614; metal roof panels \$500 per 100 sq. ft. installed, Al Smith Seamless Gutter and Metal Roof Systems, 247 Crystal St., Lenoxdale, MA 01240; 800-660-3189 (in Massachusetts only) or 413-637-3189.

**Deck under-mount system:** Shadoe Track, 800-459-5252.

**Synthetic decking material:** Trex, 540-678-4070.

**Virtual reality walk-through:** Envision Group, 860-232-8684.

**Coppersmith:** Larry Stearns, Vulcan Supply Corp., 802-878-4103.

**Shop stationary tools:** Special Edition Unisaw 36-821, 10-in. tilting-arbor table saw (with 3-hp, 230V, 60Hz motor); 50-



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**Shop handheld power tools:** Keyless-chuck cordless drill 9863 (12-v., ⅜-in.), \$218; 1½-hp plunge router 693, \$201; Sawboss 6-in. circular saw 345, \$123; variable-speed belt sander 360VS, with 3-by-24-in. belt, \$255; 5-in. random-orbit finishing sander with dust collection 333, \$72; 6-in. variable-speed random-orbit sanding kit with dust collection 97366, \$173; quarter-sheet palm grip finishing sander 340, \$54; variable-speed profile sander kit 9444VS, \$129; pocket-cutter 551, \$226; 1½ hp 4-gal. side-stack compressor CF1540, \$320; 18-gauge 2-in. brad nailer kit BN200, \$148, all from Porter-Cable Corp., 4825 Hwy. 45 North, Box 2468, Jackson, TN 38302-2468; 800-487-8665. Plate joiner DW682K, \$386, DeWalt Industrial Tool Co., Box 158, 626 Hanover Pike, Hampstead, MD 21074; 800-433-9258. Bosch 1584DVS variable-speed barrel-grip jigsaw, \$159, Skil/Bosch Power Tool Co., 4300 W. Peterson, Chicago, IL 60646; 800-815-8665. Finish nailer SFN40, \$397, Senco Products, 8485 Broadwell Rd., Cincinnati, OH 45244; 800-543-4596.

**Shop dust collection:** Central-system dust collector 50-903 and drum 50-183, \$2,249. Delta International Machinery Corp.

**Shop vacuum system:** Air Handling Systems, 800-367-3828.

**Sauna:** Sauna, \$1,793; heater, \$975; Baltic Leisure, 601 Lincoln St., Box 530, Oxford, PA 19363; 800-441-7147; Web site [www.balticleisure.com](http://www.balticleisure.com).

**Exercise equipment and room design:** Elliptical exerciser, Ellipse e7, \$700;

Nordic Track, 104 Peavey Rd., Chaska, MN 55318-2355; 800-445-2606; Web site [www.nordictrack.com](http://www.nordictrack.com).

**Exercise room floor:** Perstorp Flooring, 800-337-3746.

**Our thanks to:** John Dumke, director of sales and marketing, Roll Former Corp., 2425 Maryland Rd., Willow Grove, PA 19090; 215-830-9757.

## IF GEORGE WASHINGTON HAD TELEVISION pp. 44-47



**Equipment:** Sony, 800-222-7669.

**Media system designer:** Contact Steve Hayes at Custom Electronics Inc., 202 US Rte. 1, Foreside Place, Falmouth, ME 04105; 800-480-1988.

**Interior designer:** Anne Fawcett, Decorating Den Interiors, 551 Adams St., Milton, MA 02186; 800-255-5879 (in New England) or 800-332-3367 (national).

**Wainscot system:** New England Classic Interiors, 888-880-6324.

**Mural artist:** Verite, Julie Williams, 888-770-0690.

**Padded fabric wall covering:** Cornice Creations, 603-323-8000.

## FROM COBWEBS TO CABERNET pp. 48-51



**Designer:** Baltic Leisure, Oxford, PA; 800-441-7147; fax 888-422-5842.

**Cooling unit:** Breez Aire WKE3000 with Sentinel II microprocessor; \$1,395; Breez

Aire Products Co., San Diego, CA.

**Wine accessories:** Redwood bottle racks, single bottle system, \$1.50 per bottle; redwood tasting table, 24-bottle table with wineglass holder, \$150; both from Baltic Leisure.

**Our thanks to:** Anthony J. Wilke, Wine Racks Unlimited, Cincinnati, OH; 800-229-9813.

## PAINT ARCHAEOLOGY pp. 54-55



**Architectural conservator:** Andrea Gilmore, Building Conservation Associates Inc., 66 Church St., Dedham, MA 02026; 617-329-4145 or 888-681-6353.

**Exterior paint:** Dulux by Glidden. Clapboards in amberwave. Trim in icy peach. Shutters in tavern green. Sash in old redwood; 888-681-6353.

**Paint stripper:** NuTec Industrial Chemicals, 800-523-4114.

## AMERICA'S FIRST HOUSES pp. 56-61



**John Whipple House:** 508-356-2811.

**Fairbanks House:** 781-326-1170.

**Boardman House:** By appointment only, Society for the Preservation of New England Antiquities; 617-227-3957, ext. 267.

**Our thanks to:** Andrea Gilmore, Building Conservation Associates; Abbott Lowell Cummings; Richard Candee, director of preservation studies, Boston University;





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Katherine Cordova, Fairbanks House; Diane Viera and Brian Pfeiffer, Society for the Preservation of New England Antiquities; James Z. Kyprianos, Ipswich Historical Society.

**Dismantled houses for sale:** Willard Restorations Inc., 860-529-1401; David Ottinger, Antique Buildings and Materials, 603-463-7451.

**Intact houses for sale:** Historic Homes & Properties newspaper section listing old houses for sale in the Northeast; Bee Publishing Co., 203-426-3141.

## SMART STUFF pp. 64-71



**Boiler:** Viessmann Manufacturing Co. Inc., 83 Vermont Ave., Building 3, Warwick, RI 02888; 800-288-0667.

**Macadam drive:** Larry Torti Paving, 401-568-1500.

**One-pour piling:** footing forms, Bigfoot Footing System, F&S Manufacturing Inc., 800-934-0393; fiberboard column forms, Arlington Coal & Lumber, 781-643-8100.

**Pre-insulated plastic piping:** Ecoflex, 815-741-6700.

**Termite control:** Sentricon Colony Elimination System by Dow Agrosciences, 9330 Zionsville Rd., Indianapolis, IN 46268; 800-352-6776. Installed by Waltham Chemical Co., 817 Moody St., Waltham, MA 02154; 800-562-9287.

**Panelized shingles:** Cedar Valley Shingle Systems, 800-521-9523.

**Standing seam metal roof:** Permetallic 2000 pre-weathered Galvalume panels, Englert Inc; 732-826-8614.

**Debris-shedding gutters:** Englert Leafguard gutter system; installed by Minuteman Seamless Gutters Inc., 2383 Centre St., W. Roxbury, MA 02132; 617-469-2709.

**Lighting designer:** Josh Feinstein, Lighting Design Group, a division of Standard

Electric, 1339 Main St., Waltham, MA 02254; 800-299-5483.

**Lighting system:** Radio Ra by Lutron Electronics; 610-282-3800; Web site [www.lutron.com/radiora](http://www.lutron.com/radiora).

**Custom garage doors:** HWBD-HBTG-16, Hahn's Woodworking, 908-241-8825.

**Weather strip for windows:** Advanced Repair Technology, 607-264-9040.

**Screen doors:** Phantom Screens, 888-742-6866.

**Our thanks to:** John R. Dumke, Roll Former Corporation, Willow Grove, PA; John Stahl, Stahl Restorations, Hoboken, NJ; Angelo Borzillo, Galvalume Sheet Producers of N. America.

## FIXED, FURNISHED, FANTASTIC pp. 74-83



**Study:** Laura Ashley Home Styling by Suzi Briggs (Laura Ashley Inc., 75 Arlington St., Boston, MA 02116; 617-457-6319) and by Cheryl Tracy (Laura Ashley Inc., S. Shore Plaza, Suite 2065, 250 Granite St., Braintree, MA 02184; 781-843-6103). For information on the Laura Ashley Home Styling program, call 800-367-2000. Sofa: Kendall with slipcover in Avalon washable chenille, white, \$2,495; armchairs: Buchanan in herringbone, apple, \$845; armchair: Osborne in Avalon, white, \$945; ottoman: melton in gingham, apple, \$525; wallpaper: crackle; curtain fabric: Freshford. All from Laura Ashley. Leaf art by Kristina Fine, 99 Pond Ave., Suite 805, Brookline, MA 02146; 617-232-2560.

**Laundry room:** Neptune washer and dryer, Maytag, 800-688-9900.

**Parlor:** Ethan Allen Inc., Ethan Allen Dr., Danbury, CT 06881; 800-228-9229; Web site [www.ethanallen.com](http://www.ethanallen.com). Avon wingback chairs in brushed white denim; tea tables and Goddard-style chest from the Georgian Court collection; Roman shades in linen with grosgrain ribbon. Styling by

Stephanie Ganz of Ethan Allen; 203-743-8355. Floor by Hosking Floor Refinishing, 456 Lincoln Rd., Walpole, MA 02081; 508-668-8315.

**Entry hall:** C&J Katz Studio Inc., 60 K St., South Boston, MA 02127; 617-464-0330; contact Cheryl or Jeffrey Katz.

Antique prints: Gurari Antique Prints, 617-864-0404; sconces: Ironware, 615-269-5657; decorative painting: John Parsons, 617-328-0155; decoupage: Greg Kahler, Paperhanging & Design, 781-306-0750; hall table: Roosterfish Home Haberdashery, 617-720-2877.

**Entry hall slate:** Southland Stone, 11078 Fleetwood St., Sun Valley, CA 91352; 714-774-4466.

**Master suite:** C&J Katz Studio Inc., 60 K St., South Boston, MA 02127; 617-464-0330; contact Cheryl or Jeffrey Katz.

Upholstered bed, George Nelson bench, bed dressing and bath towels, all from Garnet Hill, 603-823-5545; carpet: Karastan, Able Rug Allston, 617-782-5010; nightstands: Black Ink at Home, 617-576-0707; lighting: Yard Co., 215-247-3390; armchair: Mantilla, designed by C&J Katz, built by Partners in Design, 617-969-3626; picture rail and drapery hardware: Home Depot, 781-623-0001; draperies: Custom Draperies, 781-665-0628; bath accessories: Fresh, 617-482-9411.

**Master suite closets:** California Closets, 800-274-6754.

**Master bath tile:** IMA Ceramic Designs, 50 Boening Plaza, Farmingdale, NY 11735; 800-394-2627. French limestone tiles by Rossi USA, 1750 S. Des Plaines Ave., Forest Park, IL 60130; 708-386-0183.

**Screened porch and shade garden:** Furnishings from Smith & Hawken, 117 E. Strawberry Dr., Mill Valley, CA 94941; 800-776-3336; Web site [www.smith-hawken.com](http://www.smith-hawken.com). Styling by Michael Walters, creative director of Smith & Hawken. **Courtyard:** Gas barbecue and side burner by Summit 475 Series, Weber-Stephen Products Co.; 800-446-1071.

**Dining room (not shown):** Neiman Marcus; contact Eddie Nunns, 5950 Colwell Blvd., Irving, TX 75039; 972-969-3220 or 800-825-8000. Styling by Manuel de Santaren Inc., 1 Design Center Place, Suite 632, Boston, MA 02210; 617-330-





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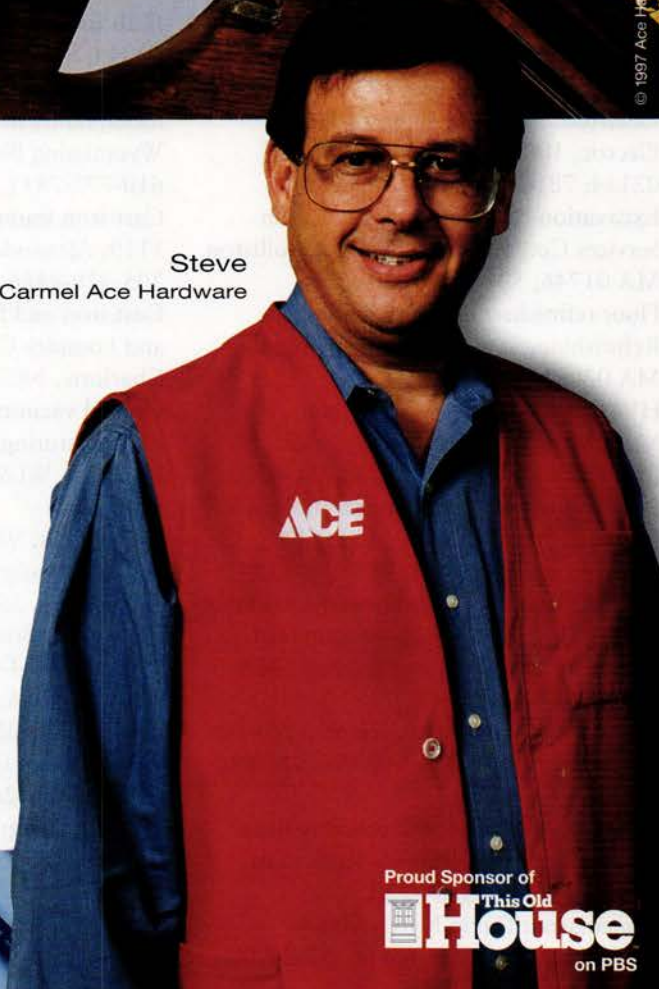
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6998. Fabric: Henry Calvin Fabrics; draperies: Eliot Wright; Gothic lantern: Blanche P. Field; fireplace screen: Adams Fireplace Shop, 617-776-3555.

**Guest suite (not shown):** Domain, Judy George, 51 Morgan Dr., Norwood, MA 02062; 800-436-6246; Web site [www.domain-home.com](http://www.domain-home.com).

**Children's rooms (not shown):** Ikea, 496 W. Germantown Pike, Plymouth Meeting, Pennsylvania 19462; 610-834-0180.

Styling by Ingela Carlsson. Wholesale Tile & Accessories Inc., 1902 Flagler St., Tampa, FL 33605; 813-985-2324.

Ceramica Vogue tile: John Valentine and Associates Inc., 104 Crandon Boulevard., Suite 303, Key Biscayne, Florida 33149; 305-365-3999.

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#### MILTON PROJECT SPECIALISTS

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**Arborist:** Matthew R. Foti Landscape and Tree Service, 30 Fairbanks Rd., Lexington, MA 02173; 781-861-0505.

**Brick Mason:** Lenny's Masonry Contracting, 60 Great Rd., Stow, MA 01775; 978-897-6256.

**Electrician:** Allen Gallant, Gallant Electric, 100 Villa St., Waltham, MA 02154; 781-893-4636.

**Excavation contractor:** Construction Services Co., 100 Gretchen La., Holliston, MA 01746; 508-429-1410.

**Floor refinisher:** Hosking Floor Refinishing, 456 Lincoln Rd., Walpole, MA 02081; 508-668-8315.

**HVAC contractor:** K. Winchester Mechanical Inc., 110 Middlesex St., N. Chelmsford, MA 01863; 978-251-0525.

**Landscape contractor:** Roger Cook, K&R Tree and Landscape Co., 6 Park Dr., Burlington, MA 01803; 781-272-6104.

**Lighting designer:** Josh Feinstein, Lighting Design Group, a division of Standard Electric, 1339 Main St., Waltham, MA 02254; 800-299-5483.

**Painting contractor:** S.L. Kiernan & Co., 8 Viola St., Milton, MA 02186; 617-698-6129.

**Plumbing contractors:** Trethewey Bros. Inc., 4280 Washington St., Roslindale, MA 02131; 617-325-3283.

**Stonemason:** David Nyren Mason Contractor, 134 Lovering St., Medway,

MA 02053; 508-533-5052.

**Tile consultant and supplier:** Gene Walsh, Shep Brown Associates, Inc., 24 Cummings Park, Woburn, MA 01801; 781-935-8080.

**Tiling contractor:** Ferrante Tile, 9 Charlemont Rd., Medford, MA 02155; 978-664-0729.

**Wood refinisher:** John W. Dee Painting & Decorating, Box 1415, Concord, MA 01742; 508-369-8897.

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#### MILTON PROJECT SUPPLIERS

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**Airless sprayer:** Wagner Spray Tech, 1770 Fernbrook La., Plymouth, MN 55447; 612-553-7000.

**Air-to-air heat exchanger:** Lennox Industries, Box 799900, Dallas, TX 75379-9900; 800-953-6669.

**Asphalt-saturated kraft-paper house wrap:** Dave Olson, Jumbotex, Fortifiber Corp., 300 Industrial Dr., Fernley, NV 89408; 800-773-4777.

**Bath fixtures:** Kohler Co., Kohler, WI 53044; 800-456-4537.

**Brass hardware:** Estate Collection rim locks, Baldwin Hardware Corp., 841 E. Wyomissing Blvd., Reading, PA 19612; 610-777-7811.

**Cast-iron fountain:** Robinson Iron, Box 1119, Alexander City, AL 35011-1119; 205-329-8486.

**Cast-iron and PVC piping:** Charlotte Pipe and Foundry Co., 2109 Randolph Rd., Charlotte, NC 28207; 800-438-6091.

**Central vacuum system:** Broan Manufacturing Co. Inc., 926 W. State St., Hartford, WI 53027-1098; 800-558-1711.

**Clapboards:** Western red cedar, pre-primed, Western Red Cedar Lumber Association, 555 Burrard St., Suite 1100, Vancouver, British Columbia, Canada V7X 1S7; 604-684-0266. Web site [www.WRCLA.org](http://www.WRCLA.org).

**Computers:** IBM, 3039 Cornwallis Rd., Building 203, Office AA141, R.T.P., NC 27709; 800-426-7235, ext. 4340.

**Copper piping:** Copper Development Association Inc., 260 Madison Ave., 16th floor, New York, NY 10016; 212-251-7200.

**Cordless nailer:** Impulse compact framing

nailer, Paslode, 888 Forrest Edge Dr., Vernon Hills, IL 60061; 800-682-3428.

**Engineered lumber:** Trus Joist MacMillan, 200 E. Mallard, Boise, ID 83706; 208-364-1200.

**Fiberglass bulkhead door:** Clamdoor, Palmer River Products Inc., 97 Broad Common Rd., Bristol, RI 02809; 401-253-1711.

**Floating floor:** Longstrip European Collection Riviera russet pine, Harris-Tarkett Inc., 2225 Eddie Williams Rd., Johnson City, TN 37601-2872; 800-842-7816.

**Floating laser level:** Laser beam plumb level, Eagle Construction Specialties Co., 10400 E. Independence Blvd., Matthews, NC 28105; 888-256-3245.

**Flue liner:** Z-Flex Inc., 20 Commerce Park North, Bedford, NH 03110-6911; 603-669-5136.

**High-velocity air-conditioning system:** Unico Inc., 4160 Meramec St., St. Louis, MO 63116; 800-527-0896.

**In-ground sprinkler:** Hunter Industries Inc., 1940 Diamond St., San Marco, CA 92069; 760-744-5240. Local supplier: Boston Irrigation Supply Co. Inc., 60 Stergis Way, Dedham, MA 02026; 781-461-1560.

**Insulation:** Icynene Insulation System, Icynene Inc., 5805 Whittle Rd., Unit 110, Mississauga, Ontario, Canada L4Z 2J1; 800-758-7325.

**Lattice fence:** Walpole Woodworkers Inc., 767 East St., Walpole, MA 02081; 800-343-6948.

**Lightning surge arrestor:** Delta Lightning Arrestors Inc., Box 750, Big Spring, TX 79720; 800-335-8252.

**Mattresses:** Sealy Inc., 1228 Euclid Ave., 10th floor, Cleveland, OH 44115; 216-522-1310; Web site [www.sealy.com](http://www.sealy.com).

**Nylon-reinforced window splining:** Moistop by Fortifiber Corp., 300 Industrial Dr., Fernley, NV 89408; 800-773-4777.

**Plywood, engineered trim, medium-density fiberboard, bead-board paneling, pine interior doors:** Georgia-Pacific, 133 Peachtree St., Atlanta, GA 30303; 800-284-5347.

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**Security system:** First Alert Professional Security Systems, 172 Michael Dr., Syosset, NY 11791; 516-921-6066.

**Shingles and waterproofing roof membrane:** XT Extra Tough 30 shingles and Winter Guard, Certainteed Corp., 750 Swedesford Road, Box 860, Valley Forge, Pennsylvania 19482; 800-782-8777.

**Skylights:** Velux America Incorporated, Box 5001, 1418 Evans Pond Road, Greenwood, South Carolina 29648; 800-888-3589.

**Superinsulated heat pipe:** Ecoflex, Rovanco Piping Systems Inc., 20535 SE Frontage Road, Joliet, IL 60431; 815-741-6700.

**Three-piece adjustable level:** Levelution, Box 3351, Hailey, ID 83333; 888-475-3835.

**Top-sealing chimney cap:** Lyemance International, Box 505, Jeffersonville, IN 47131; 812-288-9953.

**Trees and shrubs:** Weston Nurseries Garden Center, Box 186, Hopkinton, MA 01748; 508-435-3414.

**Veneer plaster, drywall and cementitious backer board:** Dana Wallboard Supply Incorporated, 6 Cummings Road, Tyngsborough, Massachusetts 01876; 978-649-4000.

**Wet saw:** MK Diamond Products Inc., 1315 Storm Pkwy., Torrance, CA 90509; 310-257-2800.

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**Joists:** Trus Joist MacMillan TJI, 800-338-0515.



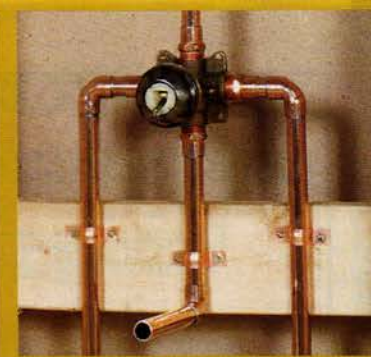
**Lighting:** Sylvania home lighting products, 800-544-4828.

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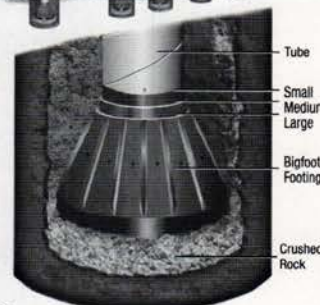


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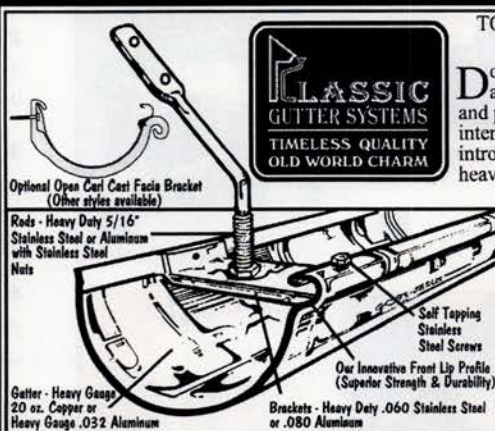


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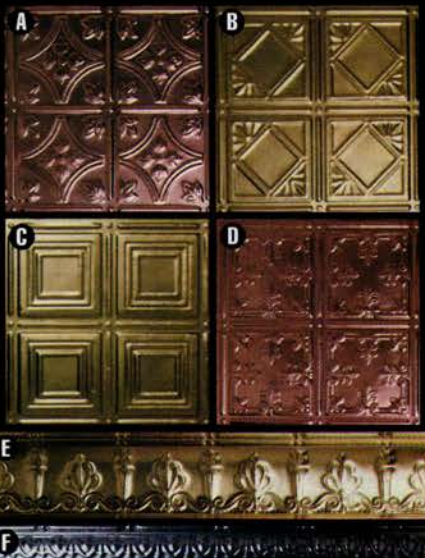
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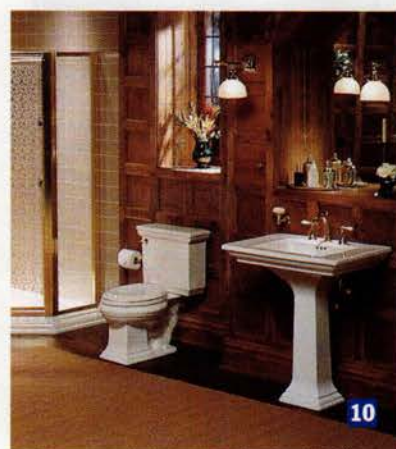


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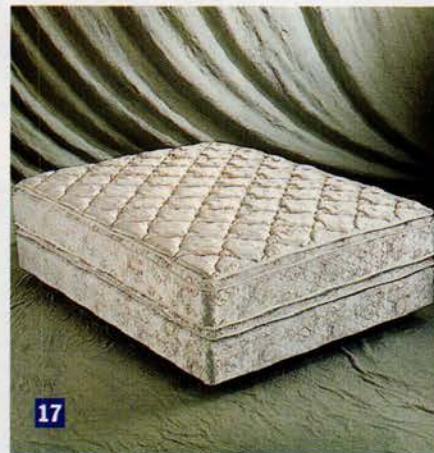
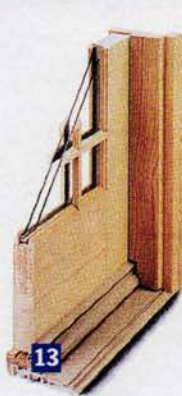
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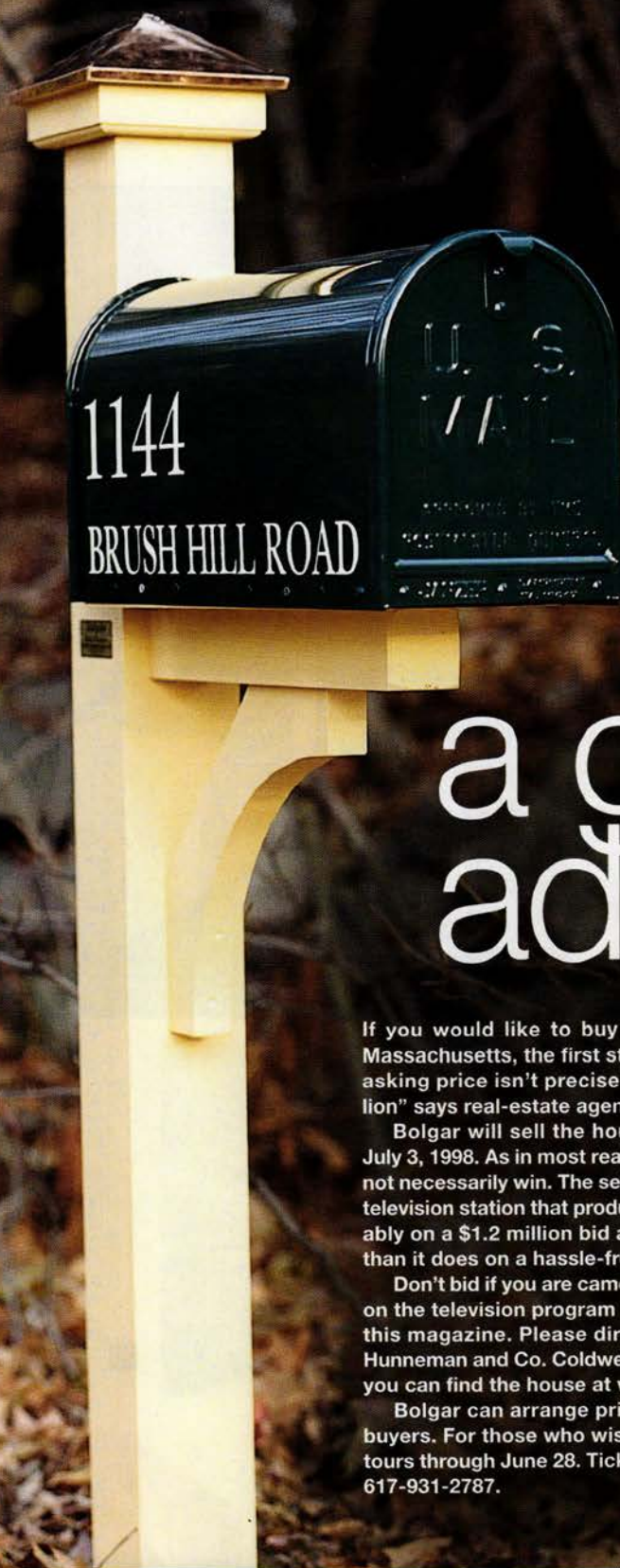
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Don't bid if you are camera- or press-shy. Purchasers must appear on the television program and be interviewed and photographed by this magazine. Please direct serious inquiries to Susan Bolgar of Hunneman and Co. Coldwell Banker at 617-696-4430. On the Internet, you can find the house at [www.hunneman.com](http://www.hunneman.com).

Bolgar can arrange private tours for prospective dream-house buyers. For those who wish to visit just for fun, WGBH will conduct tours through June 28. Tickets are available through Ticket Master at 617-931-2787.

—Brad Lemley

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