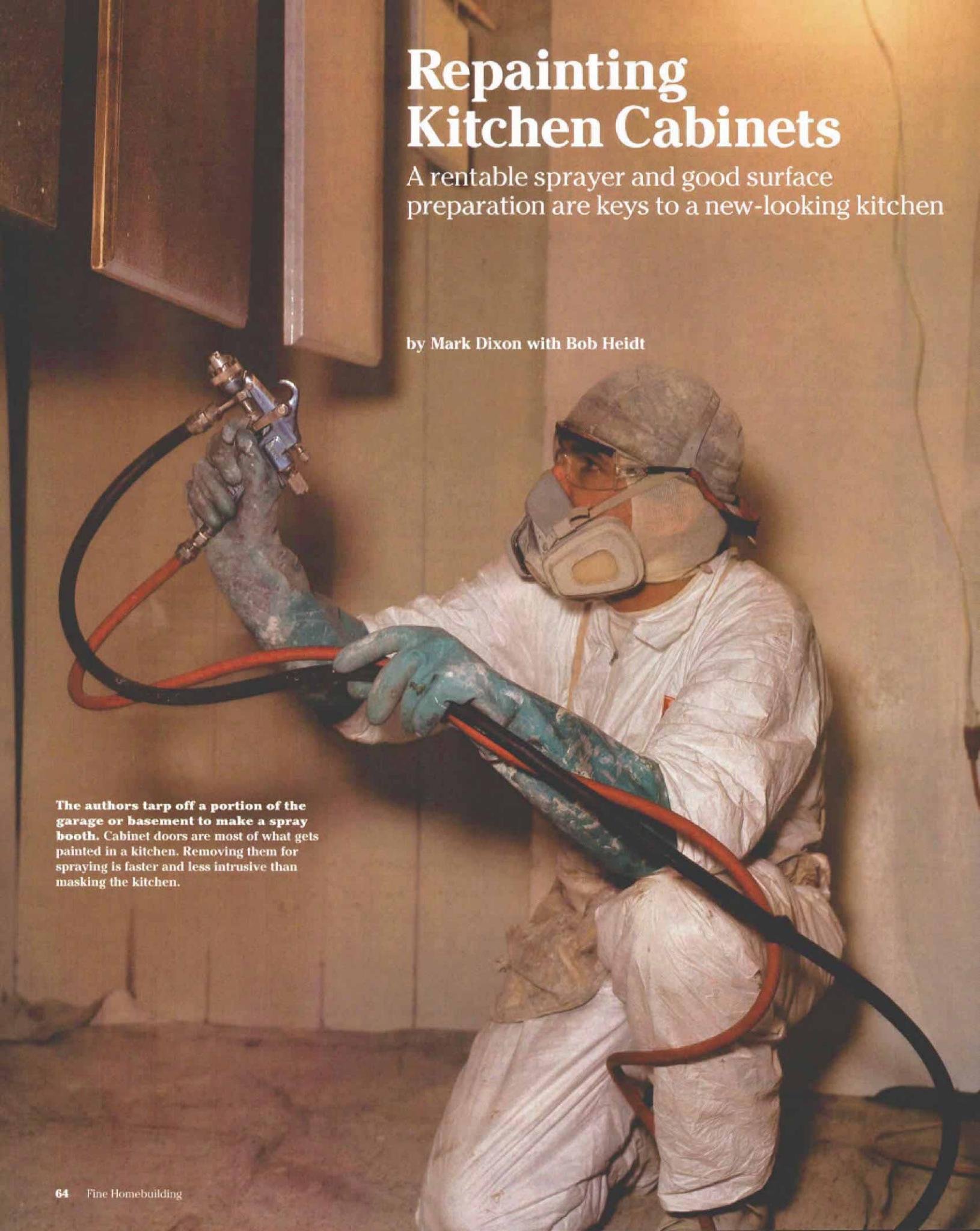


Repainting Kitchen Cabinets

A rentable sprayer and good surface preparation are keys to a new-looking kitchen

by Mark Dixon with Bob Heidt

A person wearing a full-body white protective suit, a respirator mask, safety glasses, and blue gloves is kneeling and using a spray gun to paint kitchen cabinets. The person is holding a black hose connected to a red spray gun. The background shows a kitchen with wooden cabinets and a wall.

The authors tarp off a portion of the garage or basement to make a spray booth. Cabinet doors are most of what gets painted in a kitchen. Removing them for spraying is faster and less intrusive than masking the kitchen.

The kitchen can be the focal point of a house, and the cabinets are the focal point of any kitchen. But because of the expense and trouble of a kitchen remodel, people often live with dark kitchens whose weathered walnut stain or avocado-colored paint is way past its prime. Focal point, indeed.

I sometimes work with Bob Heidt, a painter who does a brisk business repainting kitchen cabinets. Repainting is much less expensive than a full-blown kitchen remodel. An average kitchen has 25 doors and 10 drawers. We can change it from dungeon to showplace (photos p. 69) with \$200 in tools, tarps and paint; about 60 hours of labor; and a high-volume low-pressure (HVLP) sprayer. Compare that with the thousands of dollars that new cabinets alone can cost. Here's how we do it.

We prefer latex to oil-based paint—Most older cabinets have an oil-based finish, a long-time favorite because of its hardness and durability. Now, though, there are acrylic-latex paints that rival oil-based paints. All latex paints contain acrylic resin/binders, and the best latex paints have 100% acrylic binders. Latex paint is faster drying, less toxic and easier to clean up. We use it almost exclusively. A good primer-sealer between an existing oil-based finish and a high-quality latex top coat brings excellent results. (See sidebar p. 69 for paint manufacturers we've had good results with.)

It's usually best to use the same brand of paint for every coat to ensure compatibility between the primer and top coats. Whichever paint you choose, however, don't skimp on quality. An HVLP uses about 1 gal. of paint to put four coats on 25 cabinet doors, and top-quality paint usually costs less than \$30 per gallon. It takes only a few extra dollars to buy quality paint that covers better and lasts longer.

Repainting well-maintained cabinets with a similar color requires one coat of primer and two coats of finish. But that's an unusual situation. A typical job involves applying a lighter-color paint over a darker paint or stain, or painting dinged and dented cabinets that require extensive patching. In these cases, figure on one primer coat and three finish coats.

Consider just how big the cabinets are before painting them in bold colors such as magenta or Key-lime green. Cabinets dominate most kitchens by virtue of their size, and painting them in bold colors will likely overwhelm the room. Bold colors usually work best as accents.

Gloss paint lasts longer on cabinets than does semigloss or flat paint because gloss paint has more resins and binders, the components that determine how well a paint holds up over time. Additionally, gloss paint reflects more light than

does flat paint, enhancing whatever natural light the kitchen receives.

If you still want to use a flat or semigloss paint, consider top-coating it with a protective sealer, such as a waterborne polyurethane, in the appropriate gloss configuration. It can be sprayed from the same HVLP sprayer you'll use for the paint. Even a gloss finish can benefit from top-coating. As with a deep automotive finish, a scratch can be buffed out of a sealer coat because minor scratches don't reach the layer of paint. Although the details are beyond the scope of this article, an HVLP can also be used to renew the finish on natural-wood cabinets (photo p. 67).

Remove the cabinet doors prior to painting—Before scheduling a job, we check the doors and hardware to see if either needs replacement. Look particularly closely at the doors around the stove; heat and moisture take a toll there. Replacements should be ordered early on so that the job isn't delayed.

We remove the doors and drawers to paint them. But before we do that, we clean the grease from them with detergent and water. For

especially grungy cabinets, we use trisodium phosphate (TSP), a strongly alkaline cleaner available at paint stores. TSP is strong enough to require skin and eye protection.

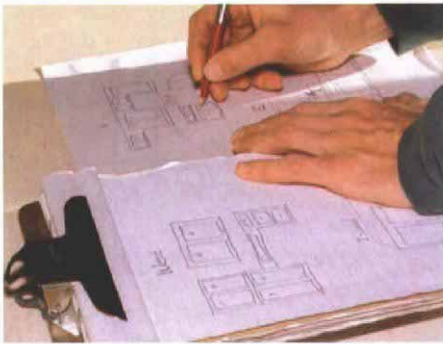
If TSP won't remove the grease, we use denatured alcohol. Be careful here: If the underlying paint is latex, alcohol will dissolve it. We wear respirators rated for organic solvents when working with alcohol.

To simplify reinstallation, we sketch the kitchen, numbering each door on the sketch (photo top left, p. 66). We remove the doors from the cabinets, and the hardware from each door. If the hinges are to be reused, we use a utility knife to score the doors along the horizontal edges of the hinges. This makes realigning the hinges easier. Each door is then numbered on its least-visible edge or behind a hinge with an electric engraver (photo bottom left, p. 66). The numbers must be bold enough to show through several layers of paint.

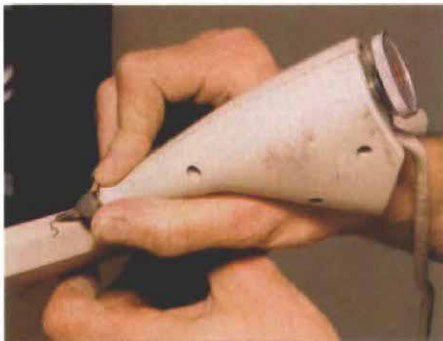
Paint highlights surface variations, so we spackle dents and dings in the doors, drawer fronts and cabinet faces. It's important to spackle carefully and to feather the patches to a smooth, flush surface (photo below). If the ex-



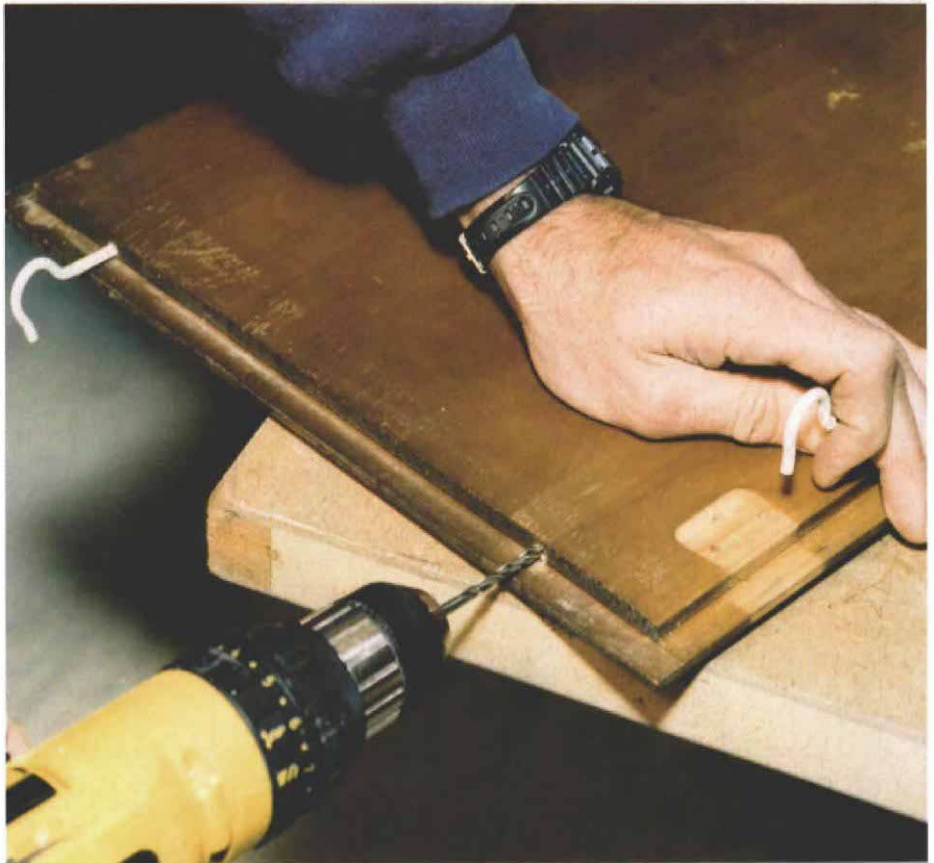
Spackling and sanding are crucial to a good-looking paintjob. Paint highlights surface imperfections, so the authors start sanding with 100 grit and progress to 220 grit before painting.



You've got to remember which doors go where. A good sketch of the kitchen is invaluable when the time comes to reinstall the cabinet doors.



An engraved number ties the doors to the sketch. The authors mark the doors in an inconspicuous spot, such as the top of the upper doors or the bottom of the lower doors.



Screw hooks suspend doors for spraying. The doors are hooked to half-inch electrical conduit hung from the spray-booth ceiling with twine.

isting surface is in poor condition, we sand any large, flat areas with an orbital sander and the edges with a sanding sponge. We start with 100 grit and work up to 220. Surfaces in good condition receive a light sanding with 220-grit garnet paper before priming. Sanding breaks the gloss, which improves the adhesion of subsequent coatings.

After sanding and dusting the doors, we caulk any long cracks or joints. When caulking into a corner, such as where the stile meets the rail of a raised-panel door, we stop $\frac{1}{4}$ in. or so shy of the corner. Then we wipe the excess caulk from the joint with a putty knife wrapped in a damp rag, pulling caulk into the corner in the process. This leaves a clean edge. If you caulk all the way to the corner, you'll have an excess of caulk and a rounded corner. White Lightning (an acrylic caulk with a silicone additive) is our favorite brand because it shrinks very little.

An on-site spray booth—We spray the cabinet doors in a booth that we make by hanging tarps from the ceiling of the garage. A basement also works, but a garage is easier to seal off from the house. The spray booth must be kept at least at 50°F, or the paint won't dry correctly. We heat the spray booth with electric or kerosene space heaters in the winter.

We suspend the doors with hooks from 10-ft. lengths of $\frac{1}{2}$ -in. electrical conduit (photo above right). The hooks thread into holes drilled in the bottom of the base-cabinet doors and in the top of the wall-cabinet doors, places that are rarely viewed. Most hardware stores sell threaded hooks that fit over the $\frac{1}{2}$ -in. conduit and are small enough not to split the doors. Plastic twine tied to the ends and middle of the conduit holds it from nails or hooks in the ceiling. We space lengths of conduit at least 4 ft. apart so that there is room to move between them.

We mask the drawers with paper and masking tape so that only the fronts will be painted. Then we stand them on their backs. The standing drawers resemble a row of dominoes, so we put them in a corner that's out of the way of dragging hoses and wayward feet.

After hanging the doors and standing the drawers, we check them for imperfections and spackle or caulk any areas we missed before. Some caulk can be painted within a half-hour of application. Check the label of your caulk for its drying time. Just before spraying, we wipe the doors with a dampened rag.

Use a sprayer for best results—Painting the doors and drawers with an HVLP sprayer is the key to a fast, quality finish (photo facing page).

The HVLP sprayer generates little overspray, gives a precise spray pattern and delivers little more pressure than a can of spray paint. Learning to use it is fast and simple. In addition to speeding up the process, a sprayer gives you a heavier coating than does a brushed-on coat. A heavier coat means more uniform color and better wear characteristics.

Many paint stores rent HVLP sprayers and can quickly familiarize beginners with their use. Ask the paint store to give you a demonstration with the HVLP and the coating you'll be using. A rented HVLP usually comes with a multipurpose spray tip (ask for a latex tip), 15 ft. to 25 ft. of hose, a compressor and a 1-qt. paint cup called a cup-gun sprayer (photo facing page).

Short hoses keep you tethered too close to the compressor, so try to rent an HVLP with 25 ft. of hose. Although standard-issue HVLPs are usually cup-gun sprayers, some are available with detached paint containers called pressure pots. Pressure pots hold more paint than cups do and are separate from the gun. This makes the part that you hold lighter and easier to handle. If possible, rent an HVLP with a pressure pot.

If the job will require more than 1 gal. of paint, we mix paint from different containers together. After mixing the paint, we reserve about a quar-

ter of it in a separate can for brushing the cabinet faces. The rest of it is thinned with water by 25% to improve its sprayability. If in doubt about thinning ratios, we check with the paint dealer. Figure out how much paint you'll need by multiplying the square footage of the doors and the cabinet faces by the coverage rate of the paint and the number of coats you'll use, then add 10%. This is how much undiluted paint you should have on hand. It's better to have paint left over for eventual touching up than to have to run back to the paint store to finish the job.

If we're midway through a job and we realize that more paint is needed, we mix the additional paint with the first batch while there is at least a half-gallon of the old left to mix. We stir these batches by hand with a figure-eight motion, which mixes the paint more thoroughly than the circular pattern that comes naturally to most people.

Even though latex paint is less toxic than oil-based paint, we prefer to err on the side of caution. When spraying, we wear Tyvek painter's overalls, a cartridge-type respirator that has been rated for spray mist, a spray hood, safety glasses and gloves.

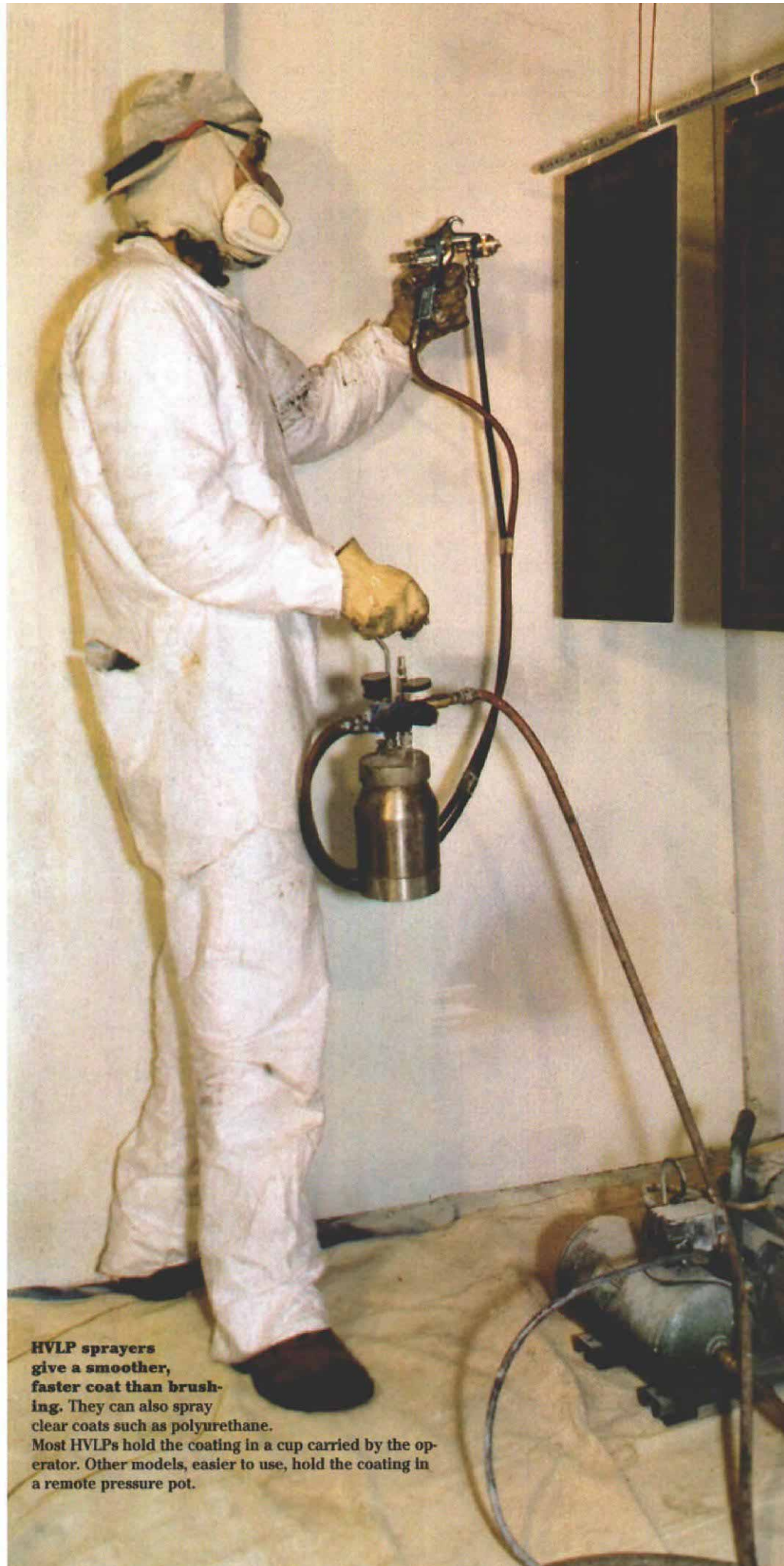
Spraying the doors—The two lines for the sprayer must be straight and clear of obstructions. We tape the lines together to keep things better organized. When the air compressor is up to pressure, we fill the cup with paint and pressurize the lines.

The paint store should have set the sprayer to the best settings for your paint. HVLP sprayers have a two-stage trigger. The first stage releases only air, and a full trigger pull releases the paint. We make practice passes on a piece of cardboard to check the fan width and spray texture. Give the practice coat 10 min. to level, then check it with a work light held at a low angle. The coat should be smooth, with no orange-peel texture or paint spatters. If the coat isn't smooth, raising the air pressure to the sprayer or thinning the paint will usually help.

To use an HVLP sprayer, start moving your arm before triggering the spray, and trigger the spray before reaching the edge of the door. Keep the spray nozzle about 10 in. from the surface. Follow through, and stop the spray only after passing the other edge of the door. Coat all angles and corners evenly, overlapping the spray pattern by one-half of the fan width.

We spray the backs of the first five doors and give the paint 10 min. to level out. As with the practice coat, we check for runs, for missed areas and for the texture of the coat (photo bottom left, p. 68).

Take your time. An evenly sprayed coat that has no runs minimizes between-coat sanding. If you see runs immediately, you can blend them



HVLP sprayers give a smoother, faster coat than brushing. They can also spray clear coats such as polyurethane. Most HVLPs hold the coating in a cup carried by the operator. Other models, easier to use, hold the coating in a remote pressure pot.

in by dabbing the runs with a brush dampened with paint. If you're getting a lot of runs, you're probably coating too heavily. It takes less time to spray on thinner coats, even if it means an additional coat is needed, than to sand out runs.

Once you finish spraying a coat, keep temperature and humidity constant. Sealing the spray booth off for the first hour lets the paint set and keeps dust out. You don't need to clean the HVLP between coatings. Just turn off the air compressor and leave the sprayer pressurized.

We scrutinize the dried primer coat under a work light. If it is smooth, a light sanding with 320-grit no-load paper followed by a dusting is all that is needed to prepare the doors for the next coat. Be careful not to sand through the paint, particularly at the edges where the paint tends to be thinnest. If the coat isn't smooth enough, you'll need to sand it more aggressively and practice using the sprayer.

You may notice spots that you missed with spackle or caulk. Go ahead and fill them. We fill

large dents with Minwax 2-Part Epoxy Wood Filler. If you're using a high-end paint with good hiding, the second coat should cover any minor applications of spackle, as long as you sand them smooth.

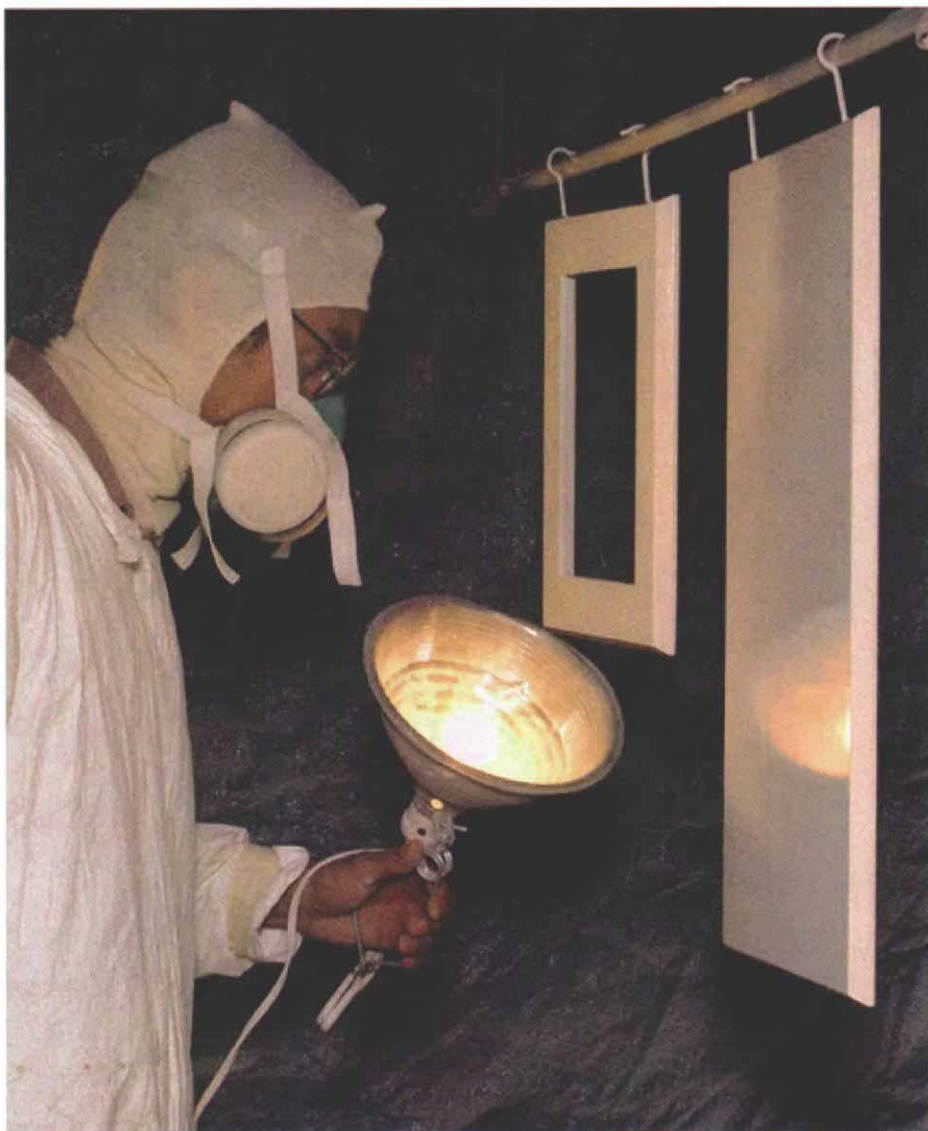
The succeeding coats are simply repeats of the first coat. Let the final coat dry before you return the HVLP sprayer. After the last coat dries, you may find some areas that need touching up.

A rented HVLP will need to be cleaned before it's returned. To clean an HVLP, keep the air pressure in the compressor, and empty the cup or pressure pot. Use a small piece of cardboard or plastic to scrape out as much paint as possible. Rinse the cup or pot, and fill it with warm water. Spray the water through the gun, and repeat until it runs clear. Use a rag and water to clean the outside of the gun, the cup and the hose. They're a breeze to clean if you spray them with a nonstick baker's coating, such as Pam, before painting.

Brushing the cabinet frames—Most often, we brush the cabinet face frames, a process that takes about one day of work per coat of paint (photo bottom right). Spraying them requires that both inside and all around the perimeter of the cabinets be masked, which takes more time than brushing. We will spray the cabinet faces if the interior is to be coated, but that is the exception.

The right paint viscosity is key to getting a smooth brush stroke. Most top-of-the-line latex paints brush well with no thinning. But occasionally, we'll get a batch that's too thick out of the can. In that case, we use Flood's Floetrol; not water, to thin the paint for brushing.

When we are brushing cabinet face frames, we paint from the inside out, starting at the inner edge of the frame and moving from the top to the bottom. Our favorite brush to use on frames is a premium-quality, polyester-bristle, 3-in. angled sash brush. For more information on brushing paint, see *FHB* #112, pp. 80-85, or



Brushing the cabinet-face frames while the doors dry. The authors start at the inner edge of the frames and work out. The frames are sanded between coats, as the doors are.

A light shown on the doors from the side highlights finish flaws. Finding and fixing flaws while the paint is still wet minimizes sanding between coats.

our recent Taunton Press book, *House Painting: Inside and Out*.

Reassembly—After all the coats are dry, it's time to reassemble the kitchen. We refer to the drawing we made earlier and bring the cabinet doors in one at a time to avoid clutter and damage to the doors. Before reattaching the old hardware, we break off round toothpicks in the screw holes to give the screws extra bite.

Our clients are so thrilled with the transformation of their old, dark kitchens into bright and inviting places that Bob and I talk about branching out into the countertop-replacement business: "You know, that orange laminate on your countertop doesn't look so hot now that you can see it..." □

Mark Dixon is a writer and painter from Missoula, Montana. Bob Heidt is a painter from Bozeman, Montana. Photos by Mark Dixon, except where noted.



What a difference a coat of paint makes. A couple of gallons of paint and about a week's labor brighten this kitchen.

Sources of paint products

We've had good results with these companies and products:

Benjamin Moore Paints, (201) 573-9600, www.benjaminmoore.com. Paints and primers.

Bondex International Inc., (800) 225-7522, www.bondex.com. Spackle.

Bruning Paint Co., (800) 852-3636, www.quicksolution.com. Stain-killing primer.

Dap, (937) 667-4461, www.dap.com. Spackle.

The Hood Co., (800) 321-3444, www.floodco.com. Floetrol paint additive.

Minwax, (800) 523-9299, www.minwax.com. Epoxy filler.

Muralo Co., (201) 437-0770. Spackle.

Pittsburgh Paints, (800) 441-9695, www.ppgaf.com. Paints and primers.

Pratt & Lambert (a division of Sherwin Williams), (800) 289-7728. Paints and primers.

Red Devil Inc., (800) 247 3790, www.reddevil.com. Spackle.

Sherwin Williams, (800) 336-1110 ext. 1079, www.sherwin.com. Paints and primers.

William Zinsser and Co., (732) 469-8100, www.zinsser.com. Primer-sealers.

White Lightning Products Corp., (770) 682-7500. Caulk.

