

# Choosing, Using and Maintaining Paintbrushes

The right brush for the job and the right technique can make painting go more quickly and give you a better-looking paint job



**The best natural bristles have split ends.** Natural bristles with flagged tips, which are actually hairs with split ends, make the best brushes because they create a finer brush tip to spread oil-based paint more smoothly.

by Brian J. Doherty

The first time I met my friend Tom, he was doing the carpentry for a renovation, and I was repainting. I was instantly impressed by Tom's exacting standards and his attention to detail.

But several weeks into the job, I noticed a thin wedge of foam rubber glued to the end of a stick poking out of Tom's toolbox. I couldn't pass up the opportunity.

"Hey Tom. What's this for," I asked.

"That's, um, that's a paintbrush. I use it for back-priming," he replied.

"Isn't that kind of like me banging in nails with a big old rock?" I muttered half under my breath.

After we exchanged idle threats and slurs about our respective trades, I agreed to make amends by bringing in doughnuts and coffee the next morning. I also brought Tom one of my good brushes. The look of enlightenment on his face when he spread that first brushful of paint made my gift well worth it.


**A good paint job begins with a good brush**—Besides your choice of paint, a key ingredient to every successful paint job is using the right brush (photo facing page). Brushes consist of a handle, a ferrule (the metal band that surrounds the butt end of the bristles) and, of course, the bristles.

Handles are generally wood or plastic, and they come in a variety of lengths and shapes. Long-handled brushes seem to fit my hand better, and the extra length occasionally comes in handy for painting hard-to-reach places. Ferrules are pretty much the same from brush to brush, but ferrules on cheaper brushes are notorious for loosening up and falling off.

**Natural bristles from pigs with split ends**—In the general scheme of things, handles and ferrules aren't nearly as important as bristles, which make up the business end of every paintbrush. Brushes come with two types of bristles: natural and synthetic.

Most natural-bristle brushes carry the words "Chinese bristle" somewhere on the brush, which means the bristles come from Chinese boars. Natural bristles are either black or white, depending on the color of the animal they came from. According to Berj Martin of the Purdy Corporation (P.O. Box 83097, Portland, OR 97283; 800-547-0780), white bristles are typically finer than black bristles, making them more appropriate for fine finishes such as lacquers and varnishes. However, just because a brush has white natural bristles doesn't necessarily make it a good brush. Most cheap so-called disposable brushes with white natural bristles have no place around even a mediocre paint job.

Natural bristles used in paintbrushes are more than simple straight fibers. Bristles grow with a



**A bevy of brushes.** In addition to coming in various widths, paintbrushes are usually cut square or with a slight angle. The brushes on the right have natural bristles; white bristles are usually finer than black. The brushes on the left have synthetic bristles.

taper that gives body to the brush and lets the brush taper naturally to a sharp painting edge. The best natural bristles also have flagged tips, a condition analogous to split ends in human hair (photo facing page). Flagged tips mean that each bristle has several ends that help the brush to spread the finish more smoothly and evenly.

Natural bristles also have scales along the shaft of each bristle that let the brush hold more paint without dripping. Because natural bristles are hair, they absorb water and are therefore recommended for applying oil-based products only. A natural-bristle brush used in a latex or water-based product is usually ruined permanently.

**Synthetic-bristle brushes are for all paints**—Synthetic bristles can be either straight or tapered to simulate the shape of natural bristles. Also, synthetic bristles can be flag-tipped or straight-tipped, stiff or flexible, and heavy or light gauge. They come in different lengths and different formulations of nylon and polyester. Most good brushes combine many bristle types.

Brush companies are protective of the formulation of their brushes, but you can tell a lot by feeling and looking at the bristles. Just as with natural bristles, softer flagged tips will give you a smoother, finer finish. More flexible brushes with less body also help with a finer finish.

A big factor in determining the stiffness and body of the brush is whether the brush is nylon, polyester or a combination of the two. Nylon bristles are generally more stable and have better memory than poly bristles, meaning that they will return to their original shape more readily after repeated usage and cleaning. Nylon becomes less stable in hot conditions, so a purely nylon brush is harder to use in 90° summer heat. Polyester bristles are stiffer and have more body, making them ideal for painting rough or textured surfaces such as roughsawn siding. But poly bristles are not as well suited for fine work.

The number of bristles in a brush, or bristle density, can vary between makes and models. A less dense brush with a slimmer profile is better for finer finishes. Denser brushes with thicker profiles hold more paint and are better for large production painting, such as exterior siding, when a fine finish isn't as important.

Synthetic brushes are labeled as being for all paints, and they are a must for latex or water-based finishes. Although synthetic brushes may be adequate for oil-based finishes, I still prefer a good natural-bristle brush for oil-based paint.

**An angled brush is more versatile**—Most brushes come in widths from 1 in. to 4 in., and the bristles are either cut square or angled (also

known as sash brushes). A smaller brush will give you more control for more intricate painting, and a large brush is better for painting large flat surfaces. A little common sense goes a long way here. Nobody wants to spend the day painting 6-in. siding with a 2-in. brush.

A professional painter can make a square-tipped brush do just about anything, but if you are going to buy just one brush to handle most of your painting needs, I recommend an angled one. An angle-tipped brush allows the painter to put the tips of the bristles on the work at the natural angle that the brush is held. Also, an angle-tipped brush puts slightly more bristle area on the work than a square-tipped brush of the same width.

Now comes the most important—and the simplest—fact by far when you're purchasing a paintbrush: Avoid buying cheap brushes. Besides making your job look like hell, three-for-a-dollar brushes lose their bristles, and the work will take much longer than with a good brush. On the other hand, a quality brush may cost \$10 to \$15, but it will give you the deep personal satisfaction of knowing that good painters aren't really anywhere near as talented as you may have thought.

The brushes that I use almost exclusively are made either by Purdy or by Wooster (Wooster



## Load your brush properly



**Slap, don't scrape.** Dip the brush into the paint about 1½ in. At this point excess paint should be dripping from the brush. Instead of scraping paint off the side of the brush, slap the brush gently against the side of the cut bucket. Slapping forces paint into the brush while keeping both sides of the brush wet.

Brush Co., 604 Madison Ave., P. O. Box 6010, Wooster, OH 44691-6010; 800-392-7246).

**A brush can hold more paint than you think**—Loading the brush is a crucial and often-overlooked first step in the painting process. The object is to load your brush with the maximum amount of paint that it can hold comfortably without dripping and to wet both sides of the brush so that both sides can be used for spreading paint.

A lot of people just dip their brush in and out of a full gallon of paint and start painting, which sends paint drops flying in all directions. Or they dip the brush in and sort of scrape off any excess paint onto the lip of the can, leaving them with a

brush that actually has little paint in it. A better approach to painting is working out of a cut bucket, a local term for a gallon paint bucket with the inner rim cut out (sidebar below).

Start by pouring 2 in. to 3 in. of thoroughly stirred paint into the cut bucket. Dip the brush straight down into the center of the cut bucket so that 1 in. to 2 in. of the bristles disappears, and raise the brush until the tip clears the surface (photo above left). At this point the brush is completely full, but it's most likely dripping, which you don't want.

Here's the trick. Gently tap or slap the broad side of the wet brush against the inside of the cut bucket, two or three taps on each side (photos above). Your wrist should remain centered

over the bucket while the bristle end of the brush arcs toward the inside of the bucket.

Tapping the brush forces paint into the bristles, where it should stay without dripping for the trip between the cut bucket and the surface to be painted. As you begin painting, the brush then dispenses the paint held inside the brush, roughly like ink flowing out of a fountain pen. The tap-loading method also keeps the sides of the brush saturated with paint so that you can use both sides of the brush to spread the paint.

This loading technique works well for most painting situations. However, for more delicate painting (such as a shoe molding next to a finished wood floor or carpet), it may be easier to work with a brush that is not fully loaded with

## Making a cut bucket



**Removing the rim.** To make a cut bucket for holding the paint while painting, use a painter's 5-in-1 as a can opener to remove the inner rim from a paint can.

Besides brushes, two of the most useful tools a painter has at his disposal are the 5-in-1 (Hyde Tools, 54 Eastford Road, Southbridge, MA 01550-1875; 800-872-4933) and what we painters in Richmond call a cut bucket. The former is used to make the latter.

The 5-in-1 tool got its name because it can be used for scraping, cutting, cleaning roller pads, opening and closing paint cans, and so on. It is lightweight and inexpensive, and you won't find a professional

painter without one of these beauties in the side pocket of his painters' pants. I also use my 5-in-1 for making cut buckets.

Commercially made paper and plastic buckets are available, but it's less expensive and just as quick to make a cut bucket out of a used gallon-paint can. To remove the lip, put the bucket on the ground and place one foot on top of the bucket to stabilize it (photo left). Now plunge the pointed edge of your 5-in-1 into the bucket just inside the can wall. Rotate the can under your foot

and continue slicing the lip with the sharp edge of the 5-in-1 as you would with a jackknife can opener. But be careful: The final cut can leave a flesh-eating metal shard. After I've removed the lip, I use my 5-in-1 tool to fold this knuckle-ripper safely back against the interior wall of the can. I also check around the rest of the bucket perimeter and flatten out any other sharp edges. With a little practice, you'll be able to make a cut bucket with the 5-in-1 in about 30 seconds.—B. J. D.

paint. In these cases I dip the brush and tap it a few times as before. But then I scrape the paint off the outside of the bristles using the rim of the cut bucket. The outside of the brush is then drier and easier to manage in tight spots, but there is still plenty of paint to work with inside the brush.

When you're ready to start painting, hold your brush in one hand and pick up your cut bucket with the other. But instead of holding the cut bucket suspended directly below your grasp, hook your thumb in the handle and bring the handle down to the side of the bucket, locking your fingertips under the bucket for support (photo right). Your fist and the handle are now out of the way, and you should have full access to the top of the bucket for unencumbered dipping and slapping.

**A loose grip on the brush is best**—Just as with holding a pencil to write, there is no single right way to hold a paintbrush. Basically, I treat the brush like an extension of my hand or fingers, holding it like a dart. With the bristles pointed away from my hand, I grasp the ferrule of the brush between my thumb and fingers.

I also try to grip the brush loosely in my fingertips. A white-knuckle grip will tire your hand quickly, and you'll tend to put too much pressure on the brush. The more you paint, the more you'll develop your own comfortable grip.

One general rule of painting is to hold the brush properly oriented to your work. If you're painting in horizontal strokes, try to keep the wide side of the brush perpendicular to the ground or floor, and if you're painting in vertical strokes, keep the wide side of the brush parallel to the floor. It sounds complicated, but it just means that in most cases, you shouldn't apply paint with the skinny side of the bristles.

**Brush strokes should not be random movements**—Probably the most common problem in painting is brush marks left in the surface, which may be an indicator that you need a better-quality paint or at least another coat. But brush marks can also be caused by using an insufficiently loaded brush or by putting too much pressure on the brush. And brush marks can be another side effect of using a cheap brush that doesn't distribute paint evenly.

However, if you seem to have all those things under control and if you're still seeing brush marks, you may not be applying your final brush strokes correctly. When you bring the loaded

**The right finishing stroke minimizes brush marks.** After spreading the paint evenly over a small area, brush lightly in one direction, overlapping the section that you painted previously.

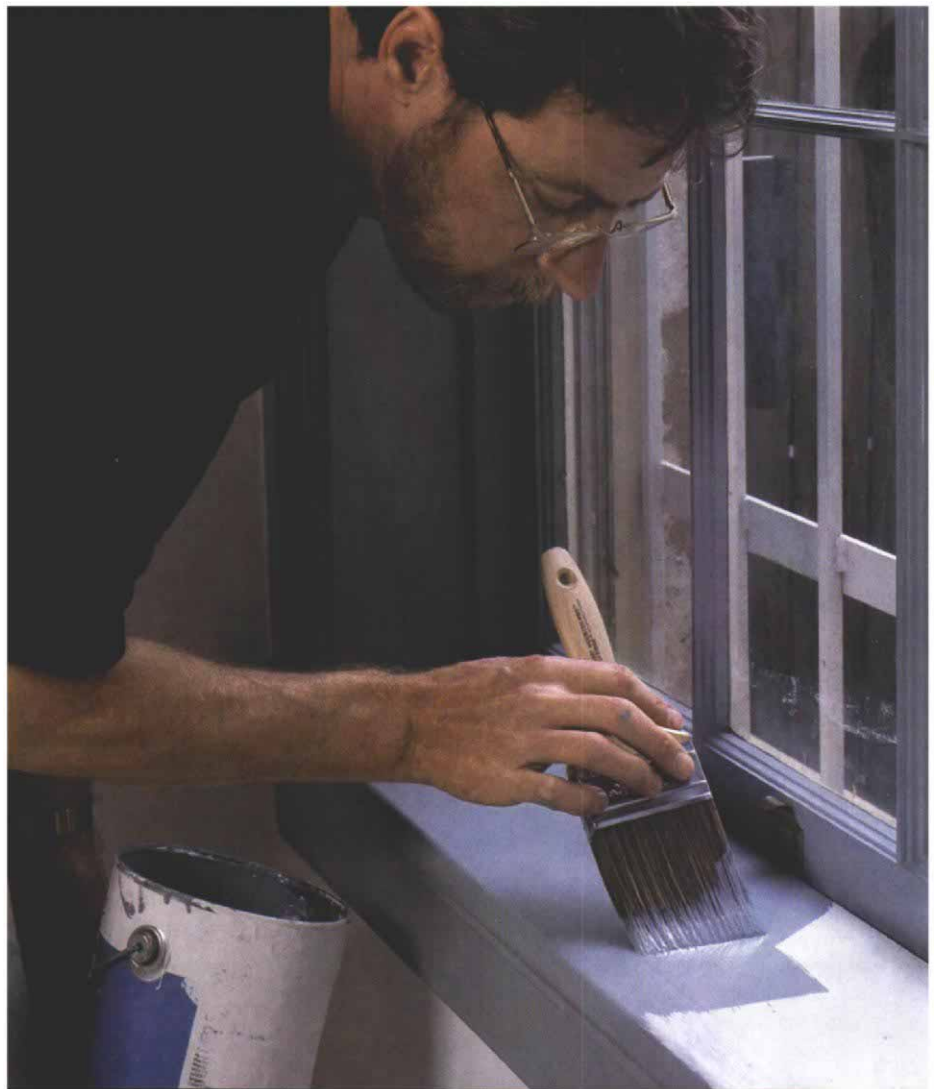
brush to the painting surface, spread the paint with a back-and-forth motion using both sides of the brush and expanding your brush strokes until the paint stops flowing evenly from the brush. When the paint is distributed uniformly on the surface, your final brush strokes should be light one-way strokes back toward the area you've just completed (photo below). For example, imagine that you're painting a windowsill left to right and that you've just finished the first foot or so. Apply paint to the next foot or so and then brush lightly in single strokes from right to left. The finish strokes should overlap the previous section slightly and blend the two together. A good finishing stroke is a basic painting technique that applies to all painting situations.

**It's not just a brush, it's a mop**—Drips, which occur when paint is not applied in a uniform thickness, are another painters' nightmare. Care taken in spreading the paint initially, a light touch on the brush and a good finish brush stroke will usually keep drips to a minimum.

I always double-check my work before it has a chance to dry. If I notice drips or an uneven buildup of paint that could spell trouble, I go back over the area with a wet but unloaded



**Keep your other hand out of the way.** To hold the cut bucket, hook your thumb in the handle with your fingers locked under the bucket. This grasp lets you load the paintbrush without interference.





loaded paintbrush. For the beginner, cutting in can be like trying to edge a perennial garden with a backhoe.

One of the secrets to cutting in successfully is using a brush designed for finer work. When cutting in around windows, you are going to be using the skinny side of the brush, so begin by loading the brush, then scraping the sides. I try to work methodically through a divided-lite sash working top to bottom and left to right. I also follow the same pattern for each window pane.

I start with the brush angled toward the upper-left-hand corner, just a short distance out from the corner. Here is where a sash brush really shines because of the built-in angle of the bristles. I press the brush against the side of the muntin lightly and rotate the handle slightly toward the corner. If you're using a good brush, the bristles of the brush should spread out and fill the corner in a controlled fashion. When the corner is filled, immediately draw the brush in a straight line down along the edge of the glass. Just before the bottom of the pane, stop and press the brush into the bottom corner and work back up. Blend the top and bottom together with a light finishing stroke, and keep working your way around each pane.

If you can master painting divided-lite windows, other types of cutting in will be a piece of cake. For trim and baseboard, I work essentially the same way, pressing and rotating the brush until the bristles form a straight line along the particular edge I'm following (photo center).

The edges of walls that will be rolled are handled a little differently. In most cases I cut in with the broad side of the brush. Again, I start in the corner (photo above), but I draw the brush from the corner broadside. A careful painter doesn't need more than  $\frac{3}{4}$  in. of paint along a wall to roll to, but I always cut in with the full width of the brush to make the rolling go quicker.

Another type of cutting in that I do on rare occasions is around hardware, such as a sash lock or lift that can't be removed. In these cases I pull out an artist's brush and carefully paint the areas that are too tight to get with a normal paintbrush (bottom photo). I've seen many nonprofessional painters reach for the masking tape when doing finicky work such as painting divided-lite windows. But masking off every pane of a six-over-six window can take many times longer than painting it at even the slowest pace. Often, tape is removed prematurely, taking with it some of the paint on the wood. Or inexpensive tape is used, and paint seeps under it. The only time I use masking tape is along the top edge of baseboard to catch spatters from my paint roller. □



**Starting in a corner.** Start with the brush away from the corner slightly. Press the brush softly while rotating the handle just a little. The bristles should spread out to fill the corner and form the straight line.

brush and smooth out the paint. If the paint isn't too dry, the unloaded brush acts like a sponge, soaking up the excess paint and redistributing it.

Drips are also likely to occur at outside corners and edges. Always brush toward the corner. Brushing away from the corner causes the bristles to drag across a sharp edge and to scrape paint out of the brush. Excess paint is deposited on the opposite side of the corner.

Brushing toward the corner also applies to situations such as the long edge of a windowsill. Here, brush strokes are running parallel to the edge, so I make sure the strokes near the edge don't run in from the edge and create drips along the front of the sill.

If you discover a dried drip, scrape it off, sand the area and touch it up with fresh paint. Covering a dried drip can be difficult, and the fix may turn out as ugly as the original drip. So it's best to check your work to keep drips from happening.

**Mind if I cut in?** Cutting in, or painting along an edge such as this shoe molding, requires a drier brush. Press lightly on the brush until the bristles squeeze to the line.



**An artist's brush gets into tight places.** If hardware such as this sash lift can't be removed before painting, an artist's brush is the best tool for painting around the obstacle.

**Cutting in takes a steady hand**—For many people, the most frustrating part of painting is cutting in, or following a sharp line with a

*Brian J. Doherty is a full-time painter and part-time musician who lives, works and plays in Richmond, Virginia. Photos by Roe A. Osborn.*

## Thorough cleaning prolongs brush life

Spending a lot for a tool is the best incentive for keeping that tool clean and sharp, and a paintbrush is no exception. But unlike a saw or a plane, all a paintbrush needs to keep it in shape is a good cleaning after each use. No matter what type of paint you've been using, the four steps for washing a brush are dissolving the paint and rinsing the brush, wire-brushing paint from bristles, combing clean bristles and replacing the brush in its wrapper.

**Getting the paint out**—The first step, dissolving the paint, varies depending on whether you are washing water-soluble or oil-based finishes out of the brush. When cleaning water-soluble finishes such as latex or acrylic,

put the brush directly under running water (photo top left). Don't be afraid to squash the brush against the sink. Some brush companies recommend using a little soap if the brush isn't going to be used for a while.

The process for cleaning oil-based paint out of a brush is a little more involved than that of latex because a petroleum solvent is used to dissolve the paint instead of water. Working with a solvent is a more messy proposition, so people often just stick the brush in a can of solvent to let it soak overnight. A week later, their \$15 brush either is stiff or has bristles bent permanently from standing in the can.

Cleaning a brush with solvent isn't that bad if you work deliberately and reuse the

solvent. I prefer paint thinner (mineral spirits) because it's inexpensive, it doesn't leave an oily residue, and it isn't as strong smelling as some other solvents.

I keep thinner that's already been used for brush-cleaning in a specially marked container, and I begin every cleaning by pouring a couple of cupfuls of the used thinner into my cut bucket. Using the soiled brush as a scrub brush, I clean the inside of the bucket so that it is ready for future use (photo top center). At the same time the paint in the brush is being dissolved. The cut-bucket contents are then returned to the used-thinner container.

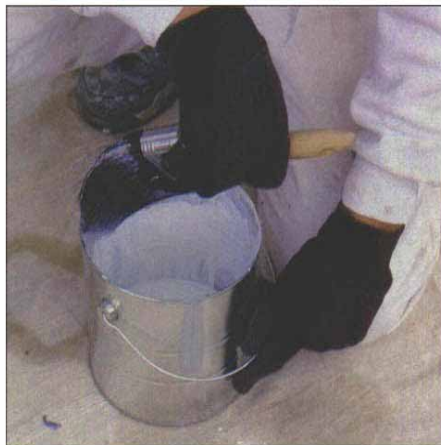
**Putting your brush to bed**—When most of the paint has been rinsed out, I set the brush on the

edge of my cut bucket and scrape off any paint residue from the bristles with the wire brush (photo top right). Then I give the brush a final rinse. With my latex brushes I rinse until the water from the brush runs clear. For my oil-paint brushes I hold the brush by the bristles over the used-thinner bucket and pour a little fresh thinner into bristles (photo bottom left) until the thinner running out of the brush is clear.

When the brush is clean, I shake out the excess water or solvent and run a brush comb through the bristles a few times (photo bottom center). The final step is replacing the brush in its wrapper, which not only protects the bristles but also helps the brush to keep its shape (photo bottom right).—*B.J.D.*



**Latex paints are cleaned with water.** Don't be afraid to squeeze the brush against the sink under a stream of water to force the paint out.



**Paint thinner cleans up oil-based paints.** Thinner from past paintbrush cleanings is used first to clean the bucket and the paintbrush at the same time.



**A wire brush removes paint residue.** After most of the paint has been washed out of the brush, a wire brushing removes any hardened paint left on the bristles.



**A final rinse removes the last of the paint.** New thinner is poured into the bristles to remove the last oil-based paint. Water does the final rinse for latex paint.



**A brush comb straightens out the bristles.** When the brush is completely clean, comb the bristles to straighten them out before putting the brush in its wrapper.



**Wrapping it up.** The final step in brush cleaning is always putting the brush back in its wrapper. The wrapper protects the brush and helps it to maintain its shape.