



# Make Your Mark

A look at the best marking tools for a wide variety of building materials and applications

BY JUSTIN FINK

**T**here's an old saying that a good carpenter never blames his tools. Well, whoever said that clearly never tried to mark accurate joinery work with a soft pencil, or lay out plates with a brittle lead, or write on wet lumber with either. Some carpenters may take pride in the fact that they use the same carpenter's pencil for every task, but I'm a little different. I

take comfort in knowing that whatever I might encounter on the job site, I have the right marking tool in my arsenal. There's a whole wide world of options beyond the carpenter's pencils and Sharpies many tradespeople limit themselves to, and it's a world worth looking into. □

---

Justin Fink is builder-at-large. Photos by Melinda Sonido.

## CARPENTER'S PENCILS

Carpenter's pencils are a perfect example of form following function. Their wide, flat cross sections make them equally easy to grab in a normal writing grip or grasp in the palm in line with the pointer finger, which is common when marking framing layouts. The large lead—available in soft, medium, and hard—is also rectangular in cross section, making it ideal for both thin and wide lines. And of course, a flat pencil can't roll away, or off the edge of a scaffold or roof deck. The flat faces of the pencil also make it an ideal shim or scribing block in a pinch. European-style carpenter's pencils are also available, and come in extra-long lengths.

## MECHANICAL PENCILS

Always in need of a sharp point, many finish carpenters have relied on the refillable lead of mechanical pencils to avoid the need to stop and sharpen during work. The catch, of course, is that the thinner the lead, the more likely it is to break in use. Lead sizes are measured in millimeters, and can be found down to 0.20 mm in art supply stores, but 0.7 mm is about as thin as is feasible for a tradesperson—even that will likely break often during use. Leads sized 0.9 mm and larger are favored for their balance of accuracy and durability. Much larger leads are also available. Heavier-duty 2.8-mm pencils (around \$15 to \$20 apiece), often called "dry markers," feature a deep-reach design—ideal for reaching into recesses to make marks—and some come with plastic holsters. Wider leads, like those found in the Fastcap FatBoy pencil shown below (\$18), can be used with a regular sharpener.



### Soft, hard, or somewhere in between?

Pencil leads use a mixture of clay and graphite, and the ratio determines how the pencil marks the surface. More clay creates a harder, lighter-marking pencil, while more graphite makes a softer, darker mark. The softer the lead, the easier it is to make a bold mark, but it will be more prone to smudging and will need to be sharpened more often. In Europe, the grading system relies on letters and numbers, while the U.S. system uses just numbers, but there is some overlap. For example, the #2 pencil is equivalent to the European HB, and is a popular compromise between ease of use and longevity.

## PERMANENT MARKERS

For most carpenters, the permanent marker comes into action when a carpenter's pencil can't do the job. Although the felt tip can wear out quickly and doesn't appreciate any sawdust, permanent markers are versatile and cost effective, and I can't imagine not having one in my tool belt. They excel at marking everything from the insulation on electrical cables to the waxy surface of an LVL, and are available in a variety of different-sized points so you can match the precision of the task to the right-size marker. Although black ink is by far the most common, don't overlook the utility of other colors. Silver and gold Sharpies, for example, are ideal for marking dark surfaces like asphalt shingles, self-adhered flashing membrane, and felt paper.

## RAILROAD CHALK

Although similar in appearance to sidewalk chalk, railroad chalk is softer and creamier in consistency. Its specialty is bold, highly visible markings—it was originally used by railroad workers to mark routing information on the sides of boxcars. On job sites, railroad chalk is useful for making large signs; highlighting areas where caution is needed; marking up concrete for layout, cuts, or trenching; and other rough work where a wide scrawl is acceptable. To me, its biggest benefit compared to something like a lumber crayon or paint stick is that its marks can be removed easily, making something like working out a plumbing layout on a subfloor or slab a more forgiving task. Because of its relative softness, railroad chalk tends to transfer to your hands, so it's worth picking up a purpose-made holder. Railroad chalk comes in a lot of colors, but you won't find especially dark ones or black.



**A forgiving formulation.** Leaving a brighter, bolder mark than sidewalk chalk, but still relatively easy to remove from most surfaces, railroad chalk is the go-to for roughing out potential layouts or marking concrete and asphalt.

## WAX PENCILS

These pencils are sometimes called “grease pencils” or “china markers,” the latter name stemming from their use to mark the hard, glossy surface of fine china.

Wax pencils will leave a clear, durable mark on glass, metal, rubber, plastic, coated cardboard, and just about any other surface that’s smooth. The marks are waterproof, won’t dent or damage the surface being marked, and can be removed with a rag and solvent. The classic variety of these pencils includes a wax core with a string running along it that’s wrapped in paper. As the core wears down from use, the paper is peeled back to reveal fresh wax. Mechanical versions are far easier to use, though, and cost about the same. In general, wax pencils can be purchased in all the standard colors of the rainbow for about \$1 apiece.



**The best by far for glass.** Wax pencils make clear marks on glass that are durable but also easily removed with solvent.

## LUMBER CRAYONS

Sometimes referred to as a “keel,” the lumber crayon is the sidekick to the carpenter’s pencil, used when precision is less crucial, the writing surface is rough or wet, or the marks need to be more visible. Lumber crayons are made from wax or clay mixed with ground pigments, and can be found in lots of colors (one company, Amark, sells 24 different hues), but red, blue, yellow, and black are the most commonly available and popular. One of the perks of a crayon compared to a permanent marker or paint stick is that sawdust and dirt won’t stick to the tip. On the flip side, temperature will have a greater effect on a crayon than other marking tools, which is why some manufacturers offer crayons in a variety of formulations. The relative softness and hardness of the wax and clay will make a big difference in the feel and finished markings, and also what surfaces the crayon marks will stick to. (Hint: The more clay, the better it marks.) Expect to pay about \$1 to \$2 apiece, depending on brand and level of quality.



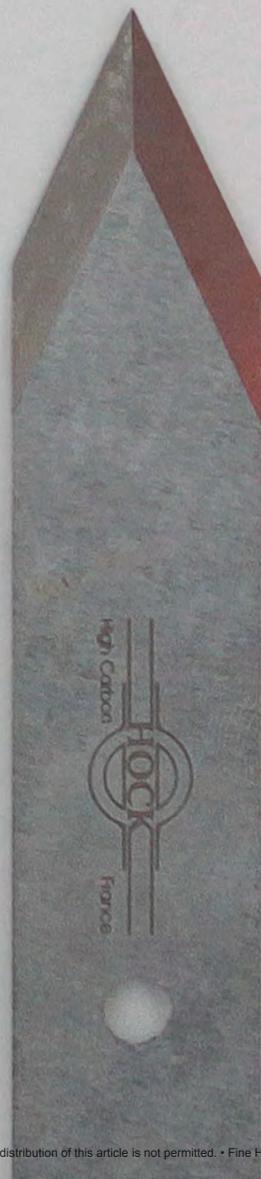
## SOLID-PAINT MARKERS

Unlike regular paint markers, which have a reservoir of liquid paint, solid-paint markers are sort of like writing with a big lipstick. They will leave their mark on virtually any surface, making them the most versatile option you can keep in your arsenal, and once dry, those marks are permanent. Some can be wiped off with solvents while they're still wet, but after a few minutes they won't wash off or fade in the sunlight. They're soft in consistency, similar to a glue stick, so they're quickly spent when marking rough surfaces, and although they will mark rusty and dirty surfaces, you can expect them to pick up some debris in the process. Solid-paint markers are most typically seen in jumbo versions—the kind of tool you'd choose for big letters, numbers, and layout marks—but you can also get relatively finer-tipped versions, and any of them can also be shaved with a utility knife to create a sharp point.



## MARKING KNIVES

When you scribe a razor-thin line into the surface of a piece of wood with a sharp, metal marking knife, you make it easier to register a chisel for a mortise, or make a saw cut without risk of tearing out the grain. These knives come in a lot of shapes and sizes, but the best ones have a beveled cutting edge backed up by a flat face. This allows the back of the marking knife to ride on a reference surface—a piece of wood or a combination square, for instance—with the bevel on the waste side of the cutline.



## INVERTED SPRAY PAINT

No collection of contractor marking tools is complete without a couple cans of inverted spray paint.



Specially designed to spray in an upside-down position and sold in a variety of bright colors, these cans of spray paint are the best option for outdoor markings, especially on rough surfaces or dirt. They're also handy for interior work, especially marking trench cuts on a slab or plumbing drain locations, or transferring stud locations to the subfloor before the drywall is installed. Expect to pay about \$6 per can. Also, a new discovery for me is spray chalk paint. It operates the same way as inverted spray paint, but shoots liquid chalk, which can be removed with water.

