



Shop Smart Guide to Buying Concrete Finishing Tools

By Anne Balogh



Despite all the high-tech power trowels, screeds, vibrators, and other super-charged equipment available today to facilitate placement and finishing of concrete, simple no-frills hand tools for finishing are far from obsolete. To smooth and level small residential slabs, perform delicate detail work, blend in surface color, or maneuver in tight areas, such as step surfaces or next to walls, there is no substitute for a trusty handheld float or trowel. [*Continue >*](#)





While concrete finishing tools don't vary significantly in design from manufacturer to manufacturer, they can vary in quality. The finishing tools you choose will also depend on the type of decorative concrete you're placing (such as stamped concrete versus an overlay) as well as the characteristics of the concrete.



Photo courtesy of [Portland Cement Association](#).

In [*Bob Harris' Guide to Stamped Concrete*](#), the veteran decorative concrete pro says it's essential to match the tool to the job. "The work you do immediately following concrete placement is critical, since this is when you must create the perfect canvas for decorative stamping," Harris emphasizes.

For example, he notes that you're likely to need different tools for finishing exterior concrete that's air entrained because the high air content can make the concrete sticky. Harris finds that a magnesium bull float works best because it won't stick to the concrete. For non-air-entrained concrete, on the other hand, he recommends using a laminated wood bull float because it does the best job of smoothing and leveling the surface. The extra heft of the wood float makes it effective at cutting high spots, filling low-lying areas, and consolidating the aggregates to bring more paste to the surface. Harris also prefers to use steel trowels or fresnos for final finishing of exterior concrete flatwork prior to stamping because they produce a smoother, flatter surface.



Understanding these nuances and knowing which finishing tools work best under certain conditions should be the key factors guiding your purchasing decision. To get the results your new tools were designed to achieve, it's also important to hone your finishing skills so you wield the tools properly. Harris recommends that decorative concrete contractors get trained and certified by the American Concrete Institute as concrete flatwork finishers and technicians.

Following are brief descriptions of the basic finishing tools needed by most flatwork contractors and some buying tips for choosing top-quality tools that will perform well job after job.



Straightedge.

Photo courtesy of [Marshalltown](#).

Straightedges

Purpose: To strike off freshly placed concrete and make it as level as possible before finishing.

What's available: You can use a simple wood 2x4, or purchase hollow aluminum or magnesium straightedges. Metal straightedges are available in various lengths (from 6 to 24 feet) and cross sections. A recent innovation is an aluminum crowned straightedge (available from [Slip Industries](#)) that can be used to put slopes or swales in a slab to permit better drainage.



Buying tips:

- Wood straightedges should be straight and warp-free. Otherwise, they can leave undesirable ruts or crowns in the concrete surface.
- Magnesium and aluminum straightedges are lighter than wood and won't warp or bow. They also are easier to clean because concrete won't stick to them.
- Buy metal straightedges with capped ends to keep out wet concrete. Some tools have wooden or plastic plugs in the ends, but these can fall out and allow the concrete to enter. Tools with welded metal end caps are a better bet.
- For more comfortable grasping, look for straightedges with kerfed edges that won't dig into your hands during use. You can also find keyhole-shaped straightedges with flat bottoms and rounded tops for easier gripping.
- To help you gauge surface slope as you work, consider buying a straightedge with built-in or clamp-on bubble levels.

Average costs: The cost for a wood 2x4 will be nominal—and you might be able to use a piece of lumber you already have on the job. A 2x4 magnesium straightedge goes for about \$75 (6-foot length) to \$300 (24-foot length).





Floats

Purpose: To level ridges, fill voids, and smooth the surface in preparation for troweling. Floats also can be used to work in dry-shake color hardener. Unlike trowel finishing, floating won't close the surface, which is important at this stage to permit water to bleed out. A float also helps bring paste to the surface by pushing down the coarse aggregate.



Hand Float.

Photo courtesy of [Marshalltown](#).

What's available: The most common floats for decorative concrete work are made of magnesium, aluminum, or wood. Less common float materials include stainless steel, rubber, and laminated wood or canvas resin. Bull floats are used to work large areas of concrete and are typically 8 inches in width and 3 to 10 feet in length. Hand floats range in width from 3 to 5 inches and in length from 12 to 24 inches. Most floats are available with rounded or square ends. Round-end floats work more easily in tight corners and help to minimize lap marks.

Buying tips:

- Look for magnesium bull floats with top reinforcement ribbing, which adds strength and prevents distortion.
- You'll need to purchase bull float handles separately. They are typically offered in aluminum, magnesium, or fiberglass in 4- to 10-foot lengths, and often can be interlocked to create longer lengths. Buy fiberglass handles if you plan to work in areas with overhead power lines, because fiberglass won't conduct electricity.





Bull float.

Photos courtesy of [Marshalltown](#).

- Not all bull floats come with bracket assemblies for attaching handles, so you may need to purchase those separately as well. For better control, buy an adjustable tilt-action bracket that lets you change the float pitch with a simple turn of the handle.
- On hand floats, look for handles that are screwed to the blade so the handle can be replaced if it splits or breaks. The handle also should be positioned for good balance, allow adequate knuckle clearance, and have a comfortable grip.
- Wood hand floats are available in variety of types, including teakwood, bodark wood, and redwood. Each type may produce a different surface texture, so it's always wise to experiment.
- Rubber floats are good choices for producing textured or slip-resistant finishes because they bring more sand to the surface.

Average costs: You'll pay about \$100 to \$125 for a 4-foot magnesium bull float with bracket, and \$18 for a 14-inch magnesium hand float. The price of wood floats varies, depending on the type of wood used, but will generally be lower than the cost of magnesium.

Steel trowels

Purpose: Used after floating to produce a smooth, hard, dense slab surface.



What's available: Steel trowels look similar to hand floats, except the blades are thinner and the handles are open rather than closed. The key difference among tools is the type of steel used for the blade. The most common types are blue, stainless, and high-carbon steel. Blue steel is thin and lightweight, so it flexes slightly under hand pressure. Stainless steel blades will not rust or stain concrete surfaces. Trowel dimensions range from 3 to 5 inches wide by 10 to 24 inches long.

Buying tips:

- Be sure to purchase an assortment of trowel sizes. Generally, a 14 x 4-inch or 16 x 4-inch trowel can tackle most decorative finishing jobs. But on large projects or when you need to cover more area faster, then a larger fresno (see description on page 8) will be the most efficient. For small patching jobs or when working in tight areas (such as corners, steps, and around floor pipes and drains), you'll need a smaller tool, such as an 8x3-inch midget trowel.
- Trowels are less likely to gouge the surface after they're broken in because the blades become slightly curved and the edges beveled. If you want to fast forward past the break-in process, you can purchase trowels that have been "broken in" (the edges are pre-ground) at the manufacturing plant.



Steel Trowel.

Photo courtesy of [Marshalltown](#).





- Most trowels come with a choice of camel-back or straight wood handles or more resilient comfort-grip handles. Camel-back handles have a slight upward curve that provides more knuckle clearance. Choose the handle type you find most comfortable to grip and gives you the best control. Also look for handles with sturdy aluminum shanks that are securely riveted to the blade.

Average costs: For a 14x4-inch trowel, the cost ranges from about \$24 to \$40, depending on the type of steel used. Stainless steel trowels usually cost a few dollars more than trowels made of blue or high-carbon steel.



Fresno.

Photo courtesy of [Marshalltown](#).

Fresnos

Purpose: Fresno trowels are designed to attach to long extension handles so finishers don't have to walk out on the slab. They permit rapid work over large areas, such as driveways, but do not achieve the same degree of compaction possible with hand trowels. However, that can be an advantage when you must trowel slabs early for decorative work because you can create a smooth finish without premature sealing of the surface.

What's available: Like hand trowels, fresnos are available in blue, stainless, or high-carbon steel and with rounded or square ends. But they come in longer lengths than hand trowels, ranging from 2 to 4 feet.



Buying tips:

- You can purchase fresnos with or without brackets for handle attachment. For easier maneuvering, some manufacturers offer swivel brackets that rotate 360 degrees so you can work at any angle, or easy-tilt brackets that eliminate bending and lifting.
- If you want to cut shallow safety grooves in flatwork surfaces, some tool manufacturers offer fresnos with evenly spaced V-shaped blades that cut shallow grooves 1/4-inch deep.
- Average costs: Expect to pay \$35 to \$50 for a 3-foot fresno (without bracket).



Edger.

Photos courtesy of [Marshalltown](#).

Edgers

Purpose: To produce a clean edge along joints in concrete and along the slab perimeter (before forms are removed). Edging consolidates the concrete while creating a neat, rounded edge that's less prone to chipping or spalling.

What's available: Hand edgers range in size from 1 1/2 to 6 inches wide and 6 to 10 inches long. A lip on one side of the tool, which forms the edge, comes in various radiuses (from 1/8 inch to 2 inches) and depths (from 3/8 inch to 1 1/2 inches).



Buying tips:

- Bronze edgers are usually heavier, thicker, and more expensive than steel edgers although some manufacturers offer heavy-gauge stainless steel edgers that are said to be stronger than traditional bronze. These tools tend to last longer and produce a smoother, denser edge, often making them worth the extra investment.
- Edgers are available with front and back ends that are either flat or curved upward. Curved ends help prevent the tool from gauging the concrete.
- Edgers with comfort-grip handles cost slightly more than models with wood handles, but the softer grip helps reduce hand fatigue.
- To minimize bending and kneeling, you can buy walking edgers that attach to wood handles. Two types of handle brackets are common. One allows flipping of the handle from one side to the other for easy two-way use, and the other swivels to allowing locking of the handle at any point in a 360-degree radius.

Average costs: Prices for edgers can vary significantly, depending on the quality of the blade. You'll spend a mere \$5 or \$6 for a 6x3-inch blue-steel edger and as much as \$25 for a bronze or heavy-gauge stainless steel tool.

Groovers

Purpose: Used to tool control joints in plastic concrete (as an alternative to sawcutting)





What's available: Groovers are usually made of bronze or stainless steel and have a V-shaped bit that cuts the groove. Like edgers, they come with wood or comfort-grip handles. The most common groover size is 6 inches long and 4 1/2 inches wide, but many other sizes are available, ranging from 2 to 8 inches wide and 3 to 10 inches long. However, more important is the dimension of the bit, which can be anywhere from 1/2 inch to 2 inches deep and 1/8 to 1 inch wide. Bi-directional groovers are also available and have double-end bits that give you the flexibility to cut forward or backward.



Groover.

Photo courtesy of [Marshalltown](#).

Buying tips:

- As with edgers, bronze or heavy-gauge stainless steel groovers will often deliver the best durability and performance. Some stainless steel tools come with highly polished finishes so they glide more easily through the concrete.
- The bit depth of the groover should be at least one-fourth the slab thickness to create a sufficient plane of weakness along which the slab can crack. So if you plan to groove a 4-inch-thick sidewalk, be sure to buy a tool with a 1-inch bit depth.
- For stand-up use, walking groovers are available with features similar to those of walking edgers. Or you can simply buy a special groover attachment that secures to your metal bull float or fresno trowel with thumb screws. Using more than one of these attachments on a float or fresno lets you cut multiple grooves in one pass.





Average costs: For a 6x4 1/2-inch groover, you'll pay about \$25 or more for bronze and as much as \$35 for heavy-gauge stainless steel.

Miscellaneous tools

Decorative border tools

These combination edging and grooving tools make it easy to create simple decorative borders along slab edges and joints. They come in a variety of configurations, depending on the look you want to achieve. Examples include double-sided edgers, double-sided edgers with a center grooving bit, and single-sided edgers with one or more grooving bits at 9-inch spacings.

Step edgers

For steps, you'll need special hand edgers that come in matched sets (an inside tool for the cove and outside tool for the step nose) to produce various edge radiuses and riser batters.

Rubber Magic Trowel

This versatile tool, from [TexMaster Tools](#), looks similar to a rubber squeegee and comes in blade lengths ranging from 12 to 22 inches. It's ideal for producing silky smooth surfaces when finishing trowel-applied overlays. It also comes in handy for erasing trowel lines in concrete and applying knockdown textures.

Tampers

When imprinting concrete with texture mats or skins, this tool will help you firmly tamp down the mat and ensure a good impression. Look for a tamper with a urethane base or cast iron base coated with rubber to prevent tearing or marring of the texture mat. Some tampers have shock-absorbing composite handles to minimize impact to your arms.



Sherpa info

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SUMMIT DATE

This document reached the summit (was created) on August 28, 2006 and is based on the best information available to the Sherpa at that time. To check for updates please click here <http://www.ConcreteSherpa.com/finishtools>.

NAVIGATION & USER TIPS

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| | PC | MAC |
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| Zoom in (Larger) | [Ctrl] [+] | [⌘] [+] |
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ABOUT THE CONCRETE SHERPA

The Concrete Sherpa is a team of people that represent the experience, teaching and learning of our team members and other industry leaders *on a mission to make life better for the concrete contractor*. We are an idea center striving to deliver thought provoking ideas based on “Concrete Advice for Business and Life” to stimulate you to reach new heights. As a user, you should remember to consider all information you receive, here at the Concrete Sherpa or elsewhere, not as a *cast in concrete* recommendation, but rather as an idea for you to consider and ponder.

Sherpa info

THE JOURNEY LEADING TO THE CONCRETE SHERPA PROJECT

The Concrete Sherpa Project (A [Sherpa](#) is a “guide”) was born at The Concrete Network in mid 2004. Here is how it happened:

The biggest surprise, or gift, since starting The Concrete Network in 1999 has been the concrete contractor friends from around the country we’ve made and witnessing the passion they have for what they do. These people include Dave Pettigrew, up in the San Francisco Bay Area, or the Verlennich brothers in Minnesota, or Bob Harris in Georgia, the list goes on and on. It’s quite inspiring.

We were once asked, “How are you so excited every day about concrete?” Well the answer is simple, it is impossible to not be excited about concrete when you have the job we do—interacting with hundreds of concrete contractors from every state in the country.

The thing we’ve learned about concrete contractors is that most are passionate *craftsmen*—they are often less passionate and experienced in the “office stuff”. Human nature channels us to do what we are most comfortable with; learning how to use a new saw-cutting tool is comfortable; learning and implementing a new estimating strategy, or job management tool, is not so comfortable.



Sherpa info

THE JOURNEY CONTINUES...

So Sherpa was born to provide FREE and easy to use information on topics many contractors are not too comfortable with.

- Concrete Sherpa is here to provide help to contractors who are often 'Lone Rangers' and don't have anyone to get solid business advice from.
- Concrete Sherpa is here to provide help for contractors who have to work too hard and too many hours in their business, and one day realize they need to work *on their business, not in their business*.
- Have fun with Concrete Sherpa and go faster towards reaching success than you might have on your own.
- To skeptics who think something free can't be valuable, or there must be a trick- visit Concrete Sherpa and decide for yourself.

We hope you make great use of the Concrete Sherpa and it helps you to become an awesome success for yourself, your family, your church, and your community.

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