Fiber Cement Tools

BY LARRY HAUN

The popularity of this durable, low-maintenance siding has bred a variety of tools to simplify and speed installation

Engineered building materials like I-joists, LVLs (laminated-veneer lumber), OSB (oriented strand board), and fiber-cement siding have become common ingredients in many of the houses we build nowadays. At times, though, I forget that engineered products are not new. Building materials like plywood and fiber-cement siding have been around longer than I have, if you can believe that. In fact, many of the houses built in the 1950s and '60s still have their original, old-style fiber-cement siding. This material stopped being manufactured when one of its ingredients—asbestos—was discovered to be a major health hazard. Over the years, though, the old-growth pine, fir, and redwood trees that pro-

Photos facing page: Krysta S. Doerfler (top-left blade, jigsaw blade, hole saw)

SAWS AND BLADES SHOULD BE DESIGNED FOR THE TASK

If you don't mind a fog of hazardous silica dust, any circular saw with a carbide blade can be used to cut fiber-cement siding. Makita sells a **7¼-in. circular saw** ($180) made specifically for working with fiber cement. The blade is designed to enhance the saw's dust-capturing ability, and there's a dust canister that can be used on its own or with a shop vacuum attached. I found that this saw can easily cut through five layers of siding in one pass, catching about 50% of the dust. When hooked up to a shop vacuum, it collects nearly 100% of the dust.

A number of **circular-saw blades** are made specifically for working with fiber cement. According to manufacturers, these blades outlast carbide-tipped blades about 150 times over. Each blade has four, six, or eight poly-crystalline diamond teeth, which are made by bonding a layer of tiny, tough-wearing diamonds onto an easily welded carbide substrate. They come in sizes of 7¼ in. dia. for circular saws and 10 in. or 12 in. dia. for miter saws. The lower tooth-count and deep gullets on these blades allow them to take out larger pieces of material rather than kicking up fine dust. If you're set on using a saw for cutting fiber cement, you should use these blades.

Jigsaw blades are invaluable for cutting holes to fit electrical boxes or dryer vents. Any carbide-tipped blade gets the job done, but some manufacturers make an aggressive blade designed for use on fiberglass, cementboard, and fiber-cement products. Be sure to wear a respirator—or work in a Wyoming wind that will blow away the dust.

A hole saw is still the best tool I've found for cutting holes for electrical boxes, dryer vents, or plumbing pipes. Choose a carbide-tooth version, though; bimetal hole saws won't last long cutting this tough siding.

BREATHE EASY

WEAR A RESPIRATOR

Cutting fiber-cement siding is a lot more hazardous than cutting wood siding. Prolonged exposure to the silica dust generated by cutting fiber-cement products can lead to the most-common occupational lung disease in the world: silicosis. When silica-dust particles become airborne, they are easily inhaled and become deeply embedded in the lungs, where they cannot be cleared by coughing.

Although many of the tools used to cut fiber-cement products do not produce much dust, it's still a good idea to have a properly fitting respirator on hand. Make sure to choose an N95 NIOSH-certified respirator if dust is likely to become airborne.

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Learn what tools go beyond straight cuts for fiber-cement siding, and how to use them effectively.

SHEARS HELP TO KEEP DUST AT BAY

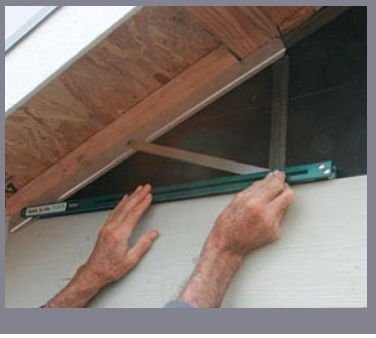
Many manufacturers (Black & Decker, Kett, Makita, Porter-Cable) have electric or pneumatic shears for cutting fiber cement. They don't cut as fast as a circular saw, but they also don't produce dust. Some shears can do things a circular saw can't. For instance, PacTool's **SnapperShear SS-414** ($279) cuts a quick, clean, curved line almost like a scrollsaw. In fact, I found it easy to make an inside square cut with these shears, which pretty much eliminates the need for a dust-kicking jigsaw.

If you don't install fiber-cement siding often, consider the Malco **TurboShear** ($124), which can be chucked into most drill/drivers to convert them into fiber-cement shears. Connecting these shears to a cordless drill can be a handy option, especially when you're up on a scaffold and need to make a quick cut.

In the old days, we used to have a hand-operated shear that resembled a paper cutter. This tool is still around today, but its hefty price tag ($650) makes it practical only for full-time professional installers. It cuts square or up to a 21-in. gable-angle cut, but it takes a lot of force to cut through even thin pieces of fiber cement, especially if it's a long, angled cut. Malco also has an **air-operated shear** controlled by a foot switch with a roller-feed table. Its square fence works well for making square cuts, but angled cuts must be done by eye. With a price tag of around $1200, this tool is aimed at professional siding contractors.

COMPLICATED CUTS MADE EASY

The PacTool Gable Scribe ($70) is a measuring gauge that also acts as a cutting guide. Capture the rake angle by adjusting the gauge where the last full siding course meets the gable. Once you've locked the scribe to the angle, you can place the tool on a piece of siding, where it guides the saw or shears.



vided builders with unlimited, inexpensive siding materials were sufficiently depleted to open the market for a new version of fiber-cement siding.

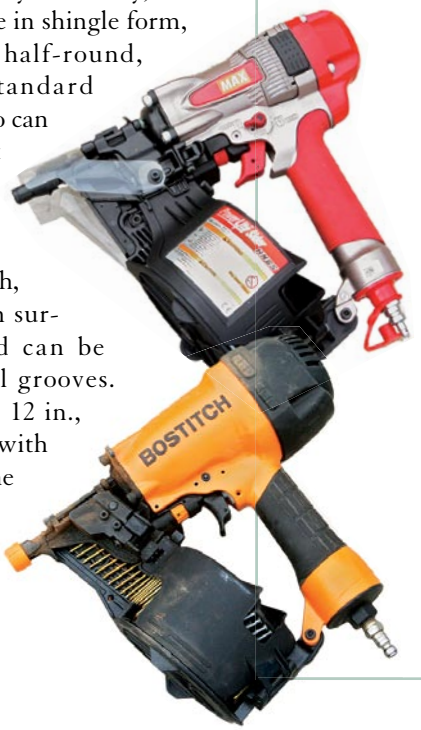
This latest product is still made from cement, but the main additives are now cellulose fibers, silica sand, and water. After these ingredients are combined and mixed into a slurry, they are formed into siding, dried, and cured using pressurized superheated steam.

The final product is cheaper and more stable than most wood siding available today, and this stability means that it won't warp, curl, rot, or split once it's installed. Fiber cement holds paint well, and it won't catch fire or attract termites. In fact, most fiber-cement manufacturers offer a 50-year warranty for their product. Even woodpeckers leave for softer, tastier morsels.

Just as many options as you get with wood siding

Today, fiber-cement siding comes in all the shapes and sizes that you would commonly find in wood-siding products. Clapboard-style fiber-cement siding is the most popular, and you can buy this material with a smooth or wood-grain finish, and with or without decorative grooves and beads. Clapboard planks are available in widths ranging from 5¼ in. to 12 in., and they are from 5/16 in. to ⅜ in. thick. A ½-in.-thick by 8¼-in.-wide by 12-ft.-long plank sells for about $8 at my local supply house here in Coos Bay, Ore.

If clapboards aren't your fancy, fiber cement is also available in shingle form, with your choice of half-round, octagonal, or the standard square shapes. You also can purchase fiber-cement panels that are 4 ft. wide and 8 ft., 9 ft., or 10 ft. long. These sheets come with smooth, stucco, or wood-grain surface treatments and can be ordered with vertical grooves. Soffit material that is 12 in., 16 in., or 24 in. wide with vent holes is also on the market. Fiber-cement trim boards for windows, doors, and corners complete the exterior package.



HAND TOOLS ARE SLOW BUT VERSATILE

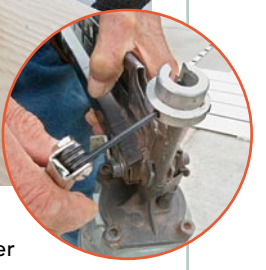
The fiber-cement hand-tool category is dominated by Malco, which makes a wide variety of snips, notchers, and cutters useful for trimming a piece of siding or making a hole a bit larger. **Hand snips** ($31) can cut straight or in a circle. Make sure you have the tool right side up, though: These snips leave a clean cut on the front side, but the cut on the back side is a bit ragged. It takes a pretty strong, sizable hand to operate this tool. **Hand-operated notchers** ($37) allow you to nibble out a square or a circle up to 4 in. deep along an edge. I keep a **carbide-scoring knife** ($5 to $10) in my nail bag. This tool can be used to rough-cut a siding board to length.

SIDING NAILERS ARE LIGHT AND ADJUSTABLE

DEDICATED NAIL GUNS

Although fiber cement can be hand-nailed, many installers use pneumatic alternatives. Bostitch, Max, Senco, and Hitachi all have **coil nail guns** designed specifically for installing siding (around $300). They are lighter than a framing nailer (about 5 lb.) and make it easy to adjust the depth of drive so that the nail isn't overdriven.

MODIFIED NAIL GUNS



If you don't want to spring for a siding nailer and already have a Hitachi framing nail gun, consider the **Flush Drive attachment** made by Big Foot Tools ($6). This little nose extender helps to keep nails from being overdriven.

PROPER **LAP AND LAYOUT** ARE KEY TO ANY SIDING INSTALLATION

PacTool has both **metal and plastic siding gauges** (metal, $79; plastic, $59) that slip under the bottom edge of a course of siding and are held securely in place with the flip of a lever. The next course is set on top of the gauge and nailed. The plastic gauge is great for use with factory-painted siding because it won't chip the paint.

The Labor Saver **lap gauge** ($30) is similar to the Malco version, but rather than sitting on the top edge of a previously installed course of siding, it attaches to the underside of the plank to be installed.

Malco has a **metal gauge** ($21) that is designed to sit on the top edge of a plank. You can use either two metal gauges to hold and space the plank, or one metal gauge to hold the far end of a plank and an **adjustable plastic spacer** ($10) to gauge the lap on the other end. Once the plank is nailed in place, the metal gauge is removed. Don't nail too close to the metal gauge, though, or it will be impossible to take out.

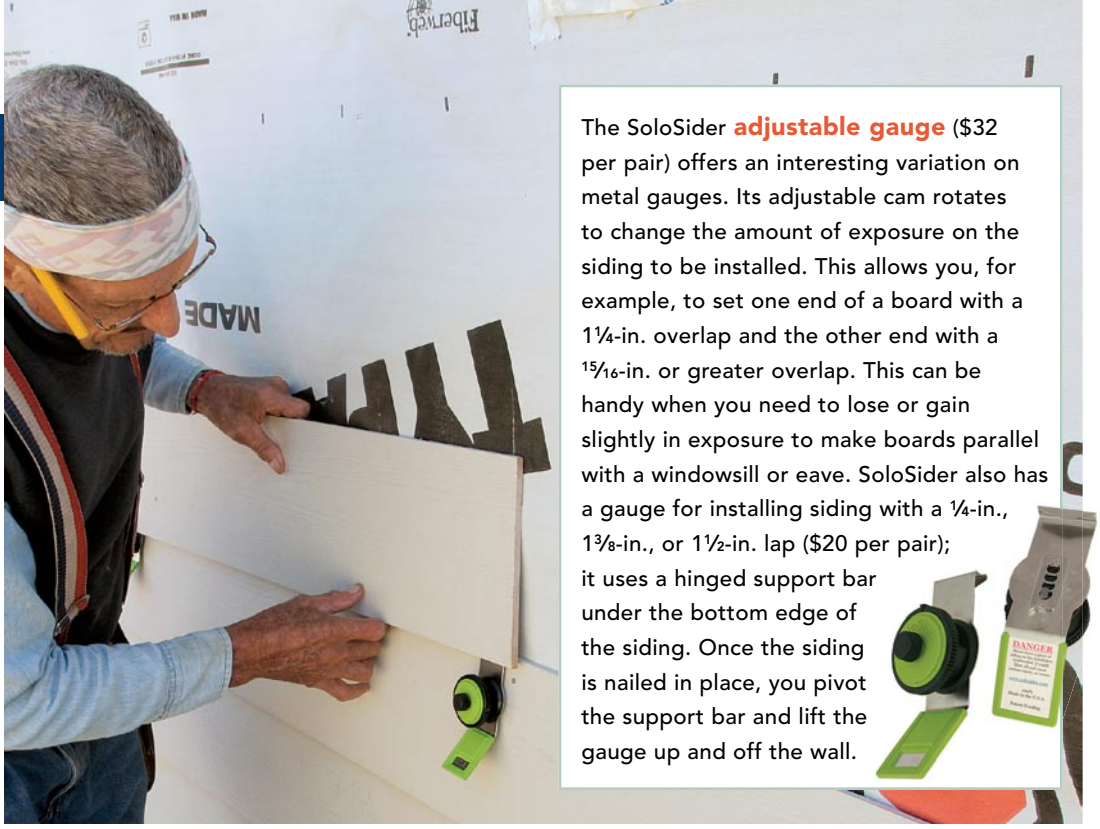
This simple **plastic clip** ($160 for 1000 clips) made by Bear Cub Products hooks onto the last course of siding nailed in place. The next board is then set on the bottom of the clip and nailed. Once the plank is up, you use a small tool with a wire hook to remove the exposed part of the plastic clips. One downside: The Bear Cub leaves a lot of plastic pieces that have to be picked up and recycled.

FLASHING BEHIND JOINTS IMPROVES WEATHER RESISTANCE

Fiber-cement siding can't rot. Water can get behind it, though, so it makes sense to flash behind the joint where two planks butt together. Even if this joint eventually is sealed with caulk, we all know what happens to caulk after it has been exposed to the hot sun for a few years. Most builders I know cut strips of #30 felt about 4 in. wide and 12 in. long. They carry these pieces in their nail bag and slip one behind every joint. Now you can buy this product in either aluminum or waterproof fabric. Simplicity Tool offers a piece of **24-ga.-metal junction flashing** ($26 to $50 for 50, depending on size of flashing) with a ¼-in. bend on one end. The bend rests on top of the board, and the metal flashing hangs down behind to seal the joint from water.

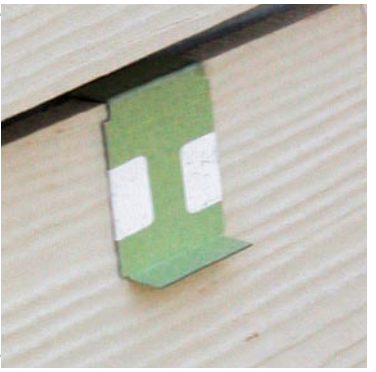
Bear Cub sells what they call **Bear Skins** in packets of 100 that clip to a tool belt for easy use. These 6-in. by 12-in. pieces of 4-mil plastic ($40 per packet) have adhesive at the top like a Post-it note. You slip one piece behind each butt joint, and attach the sticky top to the housewrap. Trouble is that the glue holding all the skins at your belt isn't strong enough. About five seconds after this photo was snapped, 80 Bear Skins fell off the packet. Bear Cub tells me they are increasing the amount of adhesive to hold the skins in place.

PacTool, Malco, and SoloSider product photos: Krysta S. Doerfler

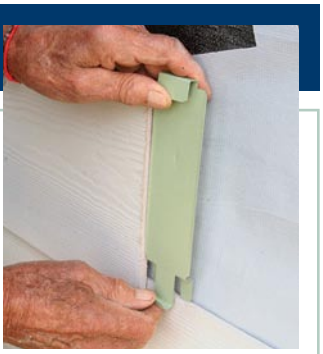


The SoloSider **adjustable gauge** ($32 per pair) offers an interesting variation on metal gauges. Its adjustable cam rotates to change the amount of exposure on the siding to be installed. This allows you, for example, to set one end of a board with a 1¼-in. overlap and the other end with a 15/16-in. or greater overlap. This can be handy when you need to lose or gain slightly in exposure to make boards parallel with a windowsill or eave. SoloSider also has a gauge for installing siding with a ¼-in., 1⅜-in., or 1½-in. lap ($20 per pair); it uses a hinged support bar under the bottom edge of the siding. Once the siding is nailed in place, you pivot the support bar and lift the gauge up and off the wall.

The simplest gauge or aligning clip ($45 for 500 clips) is made by Simplicity Tool. This small **24-ga. metal clip** hooks over the top edge of the preceding course and stays there. The next board sits on a small ledge hanging down 1¼ in. That's it. A small piece of metal is left showing on the bottom edge and is nearly invisible once the siding has been painted.



The **off-stud jointer** from Simplicity Tool is great because it offers the water-shedding characteristics of the products at left and the 1¼-in. lap of the products above. It also speeds installation in general. Normally, butt joints in plank siding must land over a stud, but these 24-ga. pieces of galvanized metal (60¢ to $1 apiece, depending on size) hold the ends of two abutting planks securely in place. Besides saving you the trouble of marking and cutting planks to land on a stud, and risking splits in the material by nailing so close to the plank edges, the off-stud jointer saves you from having to haul a pile of cutoffs to the landfill. Not bad results from a product that leaves only a small piece of painted metal at the bottom of the plank.



One of the biggest labor-savers with this siding is that it comes primed and ready for a finish coat of paint. Some manufacturers have even gone a step farther and offer painted fiber-cement siding products in about 20 different colors, with a 10- to 15-year warranty on the finish. Color-matched touch-up kits conceal nicks or scratches that can occur during installation.

What is there to dislike about fiber-cement siding? In my opinion, not much. I would like to see it in lengths longer than 12 ft. so that there would be fewer butt joints on a long wall. Also, the nature of the material makes it somewhat fragile until it is nailed on a wall. Like wood siding, it should be stored flat and covered on a job site so that it doesn't absorb too much moisture. None of these limitations is a deal breaker for me, though.

When it comes to installation, this siding goes up pretty much like wood, but it does require some special tools and protection against harmful dust if you are cutting the material. □

Larry Haun, a longtime *Fine Homebuilding* author, still builds houses with Habitat for Humanity in Coos Bay, Ore. Photos by Justin Fink, except where noted.

SOURCES

TOOL MANUFACTURERS

Bear Cub Products
www.bearcubproducts.com
866-360-2547

The Labor Saver
www.thelaborsaver.com
800-315-1575

Malco Products
www.malcoproducts.com
800-596-3494

PacTool International
www.pactool.us
800-297-7487

Simplicity Tool
www.simplicitytool.com
503-253-2000

SoloSider
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