

EXTERIORS

FIBER-CEMENT SIDING

Fiber-cement siding is dimensionally stable, holds paint well and, unlike wood and wood-composites, won't cup, shrink, or swell.

TRIM AND SIDING PROFILES

Fiber-cement is available as lap siding (12-ft. lengths from 5 1/4- to 12-in. wide), shingle panels (16x48-in.), and vertical or stucco-like panels (4x8, 4x9, and 4x10). Manufacturers also make trim boards and soffit panels.

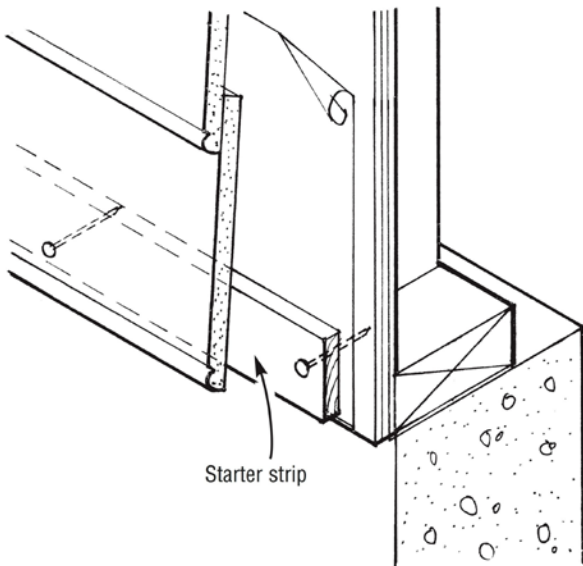
Fiber-cement is much heavier than wood. Although the lap siding is typically only 5/16-in.-thick, it weighs about 2 1/4 pounds per sq. ft., making solo handling difficult. It's also quite flexible, and full-length pieces can snap under their own weight. Always carry boards on edge rather than on the flat.

PVC trim is a good complement to fiber cement siding because of its rot-resistance. The 7/16-in. fiber-cement trim stock is not as good a nail-base for built-up exterior trim.

Aluminum/Cement Conflict

Portland cement is highly alkaline and can corrode most unprotected aluminum. The exception is anodized aluminum. Most manufactured aluminum window trim is anodized; most off-the-shelf aluminum flashings are not. As a precaution, prime the ends of fiber cement siding at field cuts near flashings or aluminum windows.

Fiber-Cement Siding Details

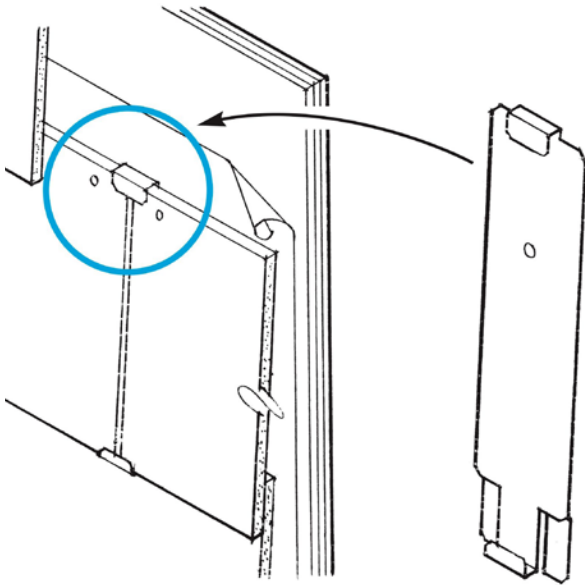


Starter Strip for Lap Siding: Install a 1/4 in. level starter strip under the first course of lap siding. Overlap courses at least 1 1/4 in.



Butt lap siding against vertical trim pieces at inside corners. Wood or PVC 2x2s can be used, but vinyl inside corner trim, similar in profile to a W valley flashing, is designed for use with fiber cement. The use of vinyl eliminates corrosion issues.

Trim and Siding
Profiles



Off-Stud Joiner Plates: If possible, join lap siding over a stud. Stagger each butt joint at least a stud or two from the one below. If a joint falls between studs, use an off-stud joiner plate.



Trim and Siding Profiles

Regardless of where joints fall, back them up with joint flashing splines. These can be made by cutting 6-in wide pieces of housewrap or aluminum coil-stock. If using coil-stock, bend the top edge 90-degree so it can hook over the top of the siding panel. This allows it to be installed without nails and to move with the panel.



Leave a 1/8-in. gap between the siding and the edge of wood trim to accommodate dimensional changes in the wood. Seal the joint with caulk.

NAILING CHECKLIST

Nailing Checklist

- Narrow and regular siding panels - up 9 1/2 in. wide - should be blind nailed by hand or with a nail gun. Use wide-head roofing nails (.121-in.-shank with a .371 head diameter) or siding nails (.09-in. shank with a .221-in. head diameter). Place nail between 3/4 and 1 inch from the top of the panel.
- Wider panels must be face-nailed at the bottom edge with siding nails. Do not nail closer than 3/8 in. from edge of a panel.
- Use only corrosion-resistant roundhead nails (not clipped-head nails or staples).
- Fasteners must penetrate 1- to 1 1/4-in. into framing.
- Do not overdrive fasteners. The siding is only 5/16 in. thick, so setting nail heads below the surface decreases holding power and voids the warranty.

Note: Dimensions may vary from product to product. Be sure to check the manufacturer's ESR for the particular fiber-cement siding product you are installing.

FIGURE: BLIND NAILING FIBER-CEMENT SIDING

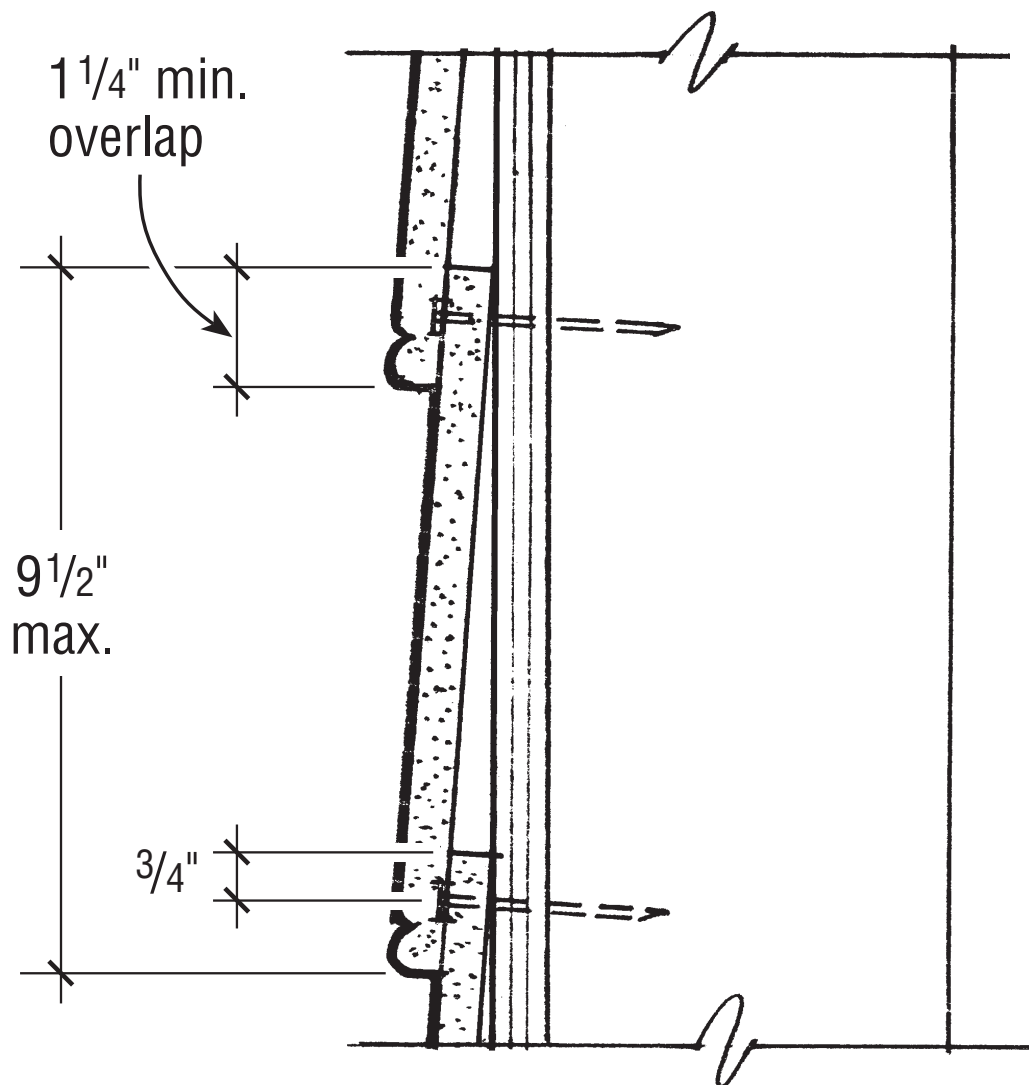
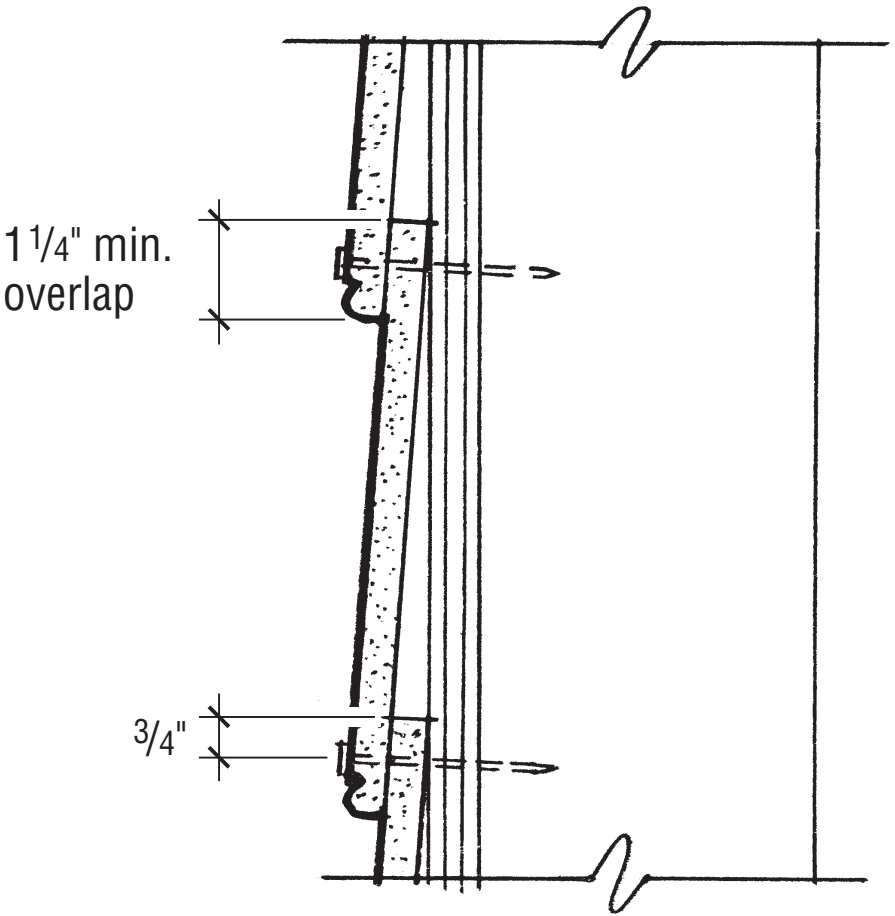


FIGURE: FACE NAILING FIBER-CEMENT SIDING



Nailing Checklist

Removing Fiber-Cement

REMOVING FIBER-CEMENT



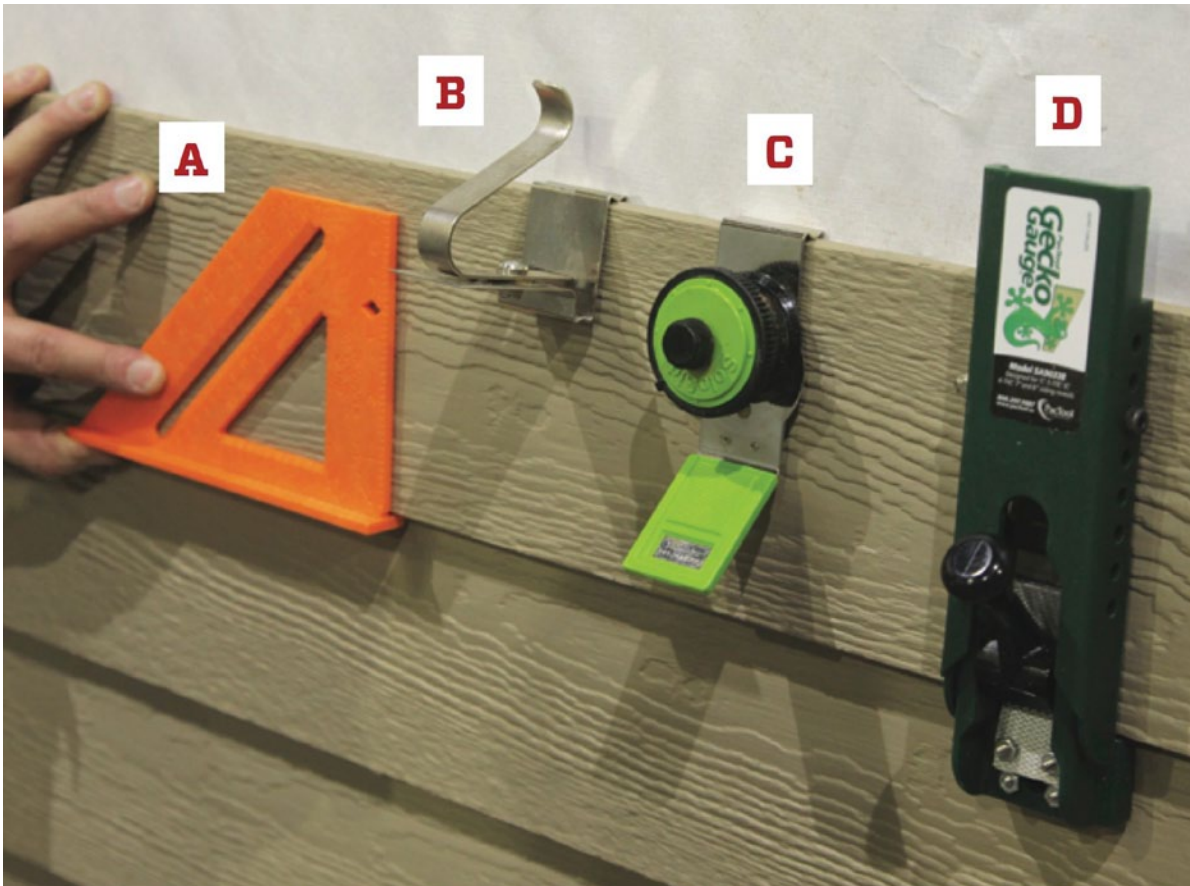
Malco Products

Hidden-nail clippers are available for cutting the nails behind boards so they can be removed. You can also use a metal blade on a reciprocating saw, but you risk damaging the housewrap. Replacement panels must be face-nailed.

Removing Fiber-Cement

GAUGES FOR INSTALLING SIDING

Gauges for Installing Siding



Roe Osborn

There are dozens of different gauges; four are shown in the photo above. Gauges can be as simple as a plastic framing square cut to the size of the siding reveal (A). (We label ours with their size and store them in a bucket for future projects.) The second gauge (B) is preset to the size of the overlap and slips over the top of a siding course to hold the board above in place, allowing one person to install long lengths. The third one (C) also slips over the top and lets you dial in the size of the reveal. The fourth gauge (D) clamps to the bottom of the course below. It adjusts to the size of the reveal and locks in place with a lever.

CUTTING FIBER-CEMENT

Cutting Fiber-Cement



For cutting fiber-cement siding, it's best to use a polycrystalline diamond-tipped (PCD) blade designed specifically for fiber-cement.

Toothed carbide blades can work. They cut faster and produce less dust than abrasive blades, but the carbide tips dull fairly quickly.



James Hardie

An alternative is electric shears, which work like motorized tin snips. While they are slower than a circular saw, they can make straight and curved cuts without much dust.

Silica Dust Warning

Cutting fiber-cement with a circular saw produces serious clouds of dust. This dust has a 15-30% crystalline silica content, making it a serious health hazard. The MSDS of one popular fiber cement product warns that repeated inhalation may lead to lung damage, and the National Institute of Occupational Safety and Health (NIOSH) links the inhalation of silica dust to a deadly lung disease called silicosis.

When cutting fiber cement, it's critical to wear a respirator and/or use a dust-collecting circular saw attached to a shop vac. NIOSH recommends:

- A saw with a built-in dust collection container or shroud that partially encloses the saw blade.
- A shop vacuum with an air-flow rate of 30 CFM or higher.
- A hose that's at least 1.25-inch in diameter with few or no bends.
- Use of a high efficiency disposable filter bag or a pre-filter in the shop vac.
- Use of PCD blades.

Cutting Fiber-
Cement