

by David Frane

NEW TECH TOOLS & MATERIALS



TOOLS & FASTENERS



NO-MAR VISE-GRIPS

Like most carpenters, I keep locking pliers in my tool bucket. But the serrated jaws can damage nuts and bolts and mar finishes on fixtures. An alternative is the recently introduced *Vise-Grip Locking Wrench*, an adjustable locking pliers with smooth jaws designed to clamp hex-head nuts and bolts firmly without damaging them. When activated, the lower jaw forces two facets of the nut or bolt against the sides of a V-shaped slot in the upper jaw. The wrenches are also equipped with wire cutters, and with knurled tips that grab like regular pliers. Three sizes are available, ranging in price from \$13 to \$18.

Contact: American Tool Companies Inc., 8400 LakeView Pkwy., Suite 400, Kenosha, WI 53142; 414/947-2440.

CORDLESS ROTARY HAMMER

There's no telling where you'll need to use a rotary hammer: Sometimes the work is at the top of a ladder; other times, it's in the bottom of a trench. And it's not unusual to spend more time finding and rolling out electrical cords than drilling holes. With the *1125VSR Boschhammer*, you can drill steel, wood, and masonry without having to drag cords around. According to Bosch, the cordless rotary hammer can drill 90¹/₄x1¹/₂-inch-deep holes in concrete on a single charge of its 24-volt 1.7 amp-hour battery. (The more powerful model 1125VSRH has a 2.5 amp-hour battery and will drill 130 holes per charge.) The 1125VSR takes SDS drive bits and can drill up to 3/4-inch holes in concrete and wood, and 1/2-inch holes in steel. The tool weighs 7.7 pounds, runs at 0 to 1,200 rpm, and can be adjusted to deliver as many as 4,400 blows per second. The 1.7 amp-hour version retails for around \$540; the 2.5 amp-hour version, for \$630.

Contact: S-B Power Tool Company, 4300 W. Peterson Ave., Chicago, IL 60646; 773/286-7330.



FULL-HEAD AIR NAILER

The fasteners you drive by hand may be true 16d common nails, but the ones your gun shoots probably aren't. This can be a problem when building codes mandate shear ratings that you can't achieve without using true common nails. The solution may be Hitachi's *NR90AC*, a strip nailer that drives 0.162-inch-diameter full-head nails. The new gun holds 2³/₈-inch to 3¹/₂-inch nails, has an adjustable depth of drive, and boasts a 360° vent that directs exhaust away from the operator. At 7.9 pounds, the new nailer is one of the lighter guns in its class. The *NR90AC* comes with a leather grip, and should retail for around \$450.

Contact: Hitachi Koki USA, 3950 Steve Reynolds Blvd., Norcross, GA 30093; 770/925-1774.

SELF-CENTERING DRILL BIT

Combination drill-driver bits have been around for years, but the *Hinge Bit* is the first one to match a self-centering drill bit with a screw tip. The *Hinge Bit* has a holder that chucks into your drill, and a drive shaft with a self-centering (Vix-style) drill bit on one end and a screw tip on the other. To switch from drill to screw tip, just pull back the quick-release collar on the holder, remove and reverse the drive shaft, and reinsert it. Bits are available for number 6, 8, and 10 wood screws. Both the screw tips and bits are replaceable. A bit and drive shaft setup sells for around \$15.

Contact: Vermont American Tool Co., P.O. Box 340, Lincolnton, NC 28093; 704/735-7464.



PNEUMATIC HAMMER NAILER

Carpenters who wouldn't dream of framing without nail guns still connect metal framing hardware by hand. Now a single pneumatic tool, the *Max CNV300J* multipurpose coil nailer, can be used both for standard nailing and to fasten metal connectors. At a compact 5 pounds, the nailer is as light as a finish gun. The *CNV300J* drives fasteners with multiple blows, so it's slower than standard nailers, but it gives the operator a strong sense of safety and control. The nailer takes both smooth and ring-shank nails as well as special gun-driven screws. Fasteners are galvanized and range from 1¹/₂ to 4 inches long. The larger model *CNV400* drives up to 5-inch fasteners and is useful for building boardwalks and connecting landscape timbers. The *CNV300J* is expected to sell for \$750.

Contact: Max Co., 585 Commercial Ave., Garden City, NY 11530; 516/222-2184.



SELF-PILOTING SCREWS

Without pilot holes, screws driven near the edges of softwood boards will cause splits; in hardwood, the screw heads are likely to snap off. *Fastap* self-drilling carpentry screws cut labor costs by allowing you to safely drive fasteners in softwood, hardwood, and composites without piloting. Flutes near the tip drill a pilot hole on the way in, and nibs on the underside of the heads set screws flush without counterboring. According to the manufacturer, the resin coating on the exterior-grade screws outlasts the coating on galvanized fasteners; a stainless-steel version is also available. The fasteners come with bugle, flat, or trim heads, and with Phillips or square-drive heads. *Fastap* screws are approximately twice the price of comparable size drywall screws.

Contact: Faspac Inc., 13909 N.W. 3rd Court, Vancouver, WA 98685; 800/847-4714.





AIRTIGHT INSULATION

The R-values assigned to insulation systems are based on lab tests, but in the real world, air leaks can diminish the effectiveness of insulation. *Icynene*, a modified urethane foam, solves this problem because it expands to fill gaps when sprayed into building cavities. Since virtually no air can move through walls and ceilings insulated with *Icynene*, many inspectors permit the use of the code-approved foam without the need for air or vapor barriers, even in unvented cathedral ceilings. According to the manufacturer, the cured foam, which has the consistency of angel food cake and has an R-value of 3.6 per inch, cuts energy costs 30% to 50%. The low-density foam repels water, won't support combustion, and contains no formaldehyde, CFCs, or HCFCs. Installed by certified subcontractors, the cost is about 2.5 times more than fiberglass batts.

Contact: Icynene Inc., 376 Watline Ave., Mississauga, ON L4Z 1X2, Canada; 800/758-7325.

STAIR-STRINGER COMPONENTS

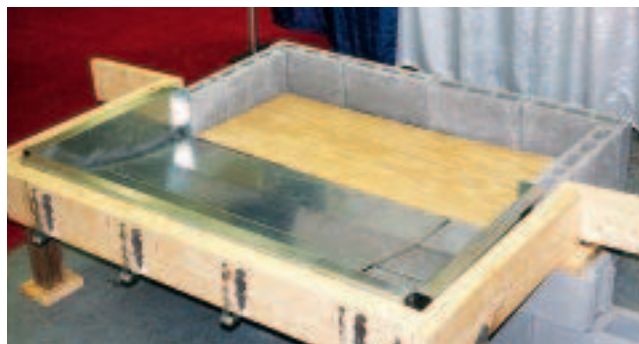
Applying finish treads and risers to notched 2x12s that have shrunk, checked, and twisted is no picnic. To avoid the resulting squeaks and to speed construction, try using the *Easy Riser* stair-stringer system. The solid-lumber triangles are sandwiched between OSB gussets that can be screwed to 2-by stock to form a ready-made stringer. Layout marks stamped onto the gussets make it easy to set the rise and run, and if you make a mistake or the clients change their minds, you can reposition the blocks. According to the manufacturer, three stringers for a 14-riser stair can be framed in about 45 minutes, and the finish work goes faster because every block is a perfect 90 degrees. Blocks for interior stairs cost about \$3 each; pressure-treated blocks for exterior use cost about \$4.

Contact: Building Components Manufacturing Inc., P.O. Box 9328, Minneapolis, MN 55440; 800/475-9304.



PREFAB HEARTH FORM

If you're tired of building hearth forms out of plywood and lumber, only to tear out your work after the concrete has cured, consider using *Hearth Form*. The prefabricated 18-gauge steel forms are nailed to the rough opening headers and temporarily supported with a 2-by post. Once the concrete cures, you can take out the post, but the forms stay in place. Adjustable to hearth depths between 20 and 24 inches and widths between 48 and 84 inches, the metal forms sell for \$95, and are said to install in about 15 minutes.



Contact: Hearth Form, 9331 Old Burke Lake Rd., Burke, VA 22015; 800/233-1999.

EGRESS SKYLIGHT

Skylights are an inexpensive alternative to dormers for increasing light and ventilation in attic rooms. But most skylights don't meet building code egress requirements. The *GPL Egress Roof Window* was designed with both clients and building inspectors in mind. The operable skylight not only brings in plenty of light and air, it also opens wide enough to satisfy egress requirements. GPLs are available in two sizes: 30x55 inches (\$639) and 44x46 inches (\$720).



Contact: Velux-America Inc., P.O. Box 5001, Greenwood, SC 29648; 800/283-2831.

SIMPLE MEMBRANE ROOFING

Most residential contractors think nothing of having their own crew install asphalt shingles, but few are as confident about single-ply roofing. That may change with *Kwik Ply*, a self-adhering, fiberglass-reinforced membrane that resembles the peel-and-stick materials used to keep water from backing up under shingles but is designed to be left exposed to sunlight. To install, nail the base sheet to the roof and coat it with the fast-drying primer. Then position the membrane over the base material, peel off the release sheet, and press the membrane onto



EMERGENCY ROOF REPAIR

Roofs don't leak when it's dry, so for emergencies, you need a repair material that works in the rain. *Roof Proof 6281* is a rubberized, fibered roof cement that adheres to wet or dry surfaces. Formulated to apply easily in cold weather but to resist running when it's hot, the material is said to remain flexible and provide a waterproof seal much longer than standard plastic cements. *Roof Proof* is recommended for building or repairing flashing, and for stopping leaks at vents, valleys, gutters, and skylights.

Contact: Gibson-Homans, 1755 Enterprise Pkwy., Twinsburg, OH 44087; 800/433-7293.



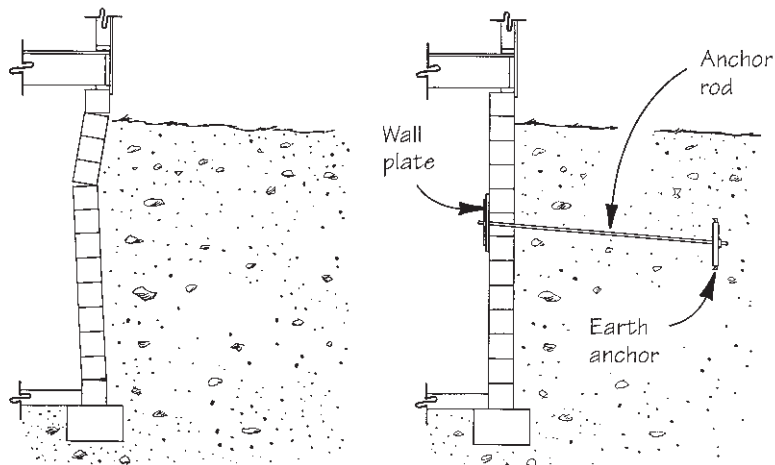
the roof. A 3x34-foot roll of *Kwik Ply* weighs about 40 pounds and can be handled and installed by one person. The material comes with a limited 10-year warranty and costs around \$3 per square foot.

Contact: Hyload Roofing Systems Inc., 9976 Rittman Rd., Wadsworth, OH 44281; 800/457-4056.

FOUNDATION WALL REPAIR SYSTEM

Sooner or later, every remodeler works on a house with foundation problems. When a basement wall buckles, the *Grip-Tite Wall Anchor System* can stabilize or even pull back damaged walls without the expense of full-scale replacement. Installed by trained authorized dealers, the system consists of a steel rod driven through a hole drilled from the basement side of the wall. Support plates are bolted to either end (the exterior connection requires a small excavation), then periodically tightened to keep tension on the rod. Anchors are generally set 3 to 5 feet apart; installed cost is around \$400 per anchor.

Contact: Grip-Tite Manufacturing Co. Inc., P.O. Box 111, Winterset, IA 50273; 515/462-1313.



ILLUMINATED COVER PLATES

Every home could use permanent nighttime lighting for children or older adults who get up during the night. The *PathLite Limelite* combines a light with a switch plate that installs in seconds with no wiring. Built-in contacts



automatically connect when the cover plate is installed on a standard two-wire switch in a single-gang box. PathLite produces a fully adjustable soft green glow across its entire surface. The device relies on a phosphorescent coating rather than a bulb, so it uses only pennies of electricity

per year. Pathlite is expected to retail for around \$15.

Contact: Austin Innovations Inc., 2222 W. Rundberg Lane, Austin, TX 78758; 512/339-6765.



OUTDOOR WATER HEATER

Floor space is at a premium in small homes, and there isn't always room for a full-sized storage heater. The *Targa HGW-T150FS* tankless water heater is designed to be installed indoors or out. The heater is said to be 96% efficient and to continuously produce five gallons per minute of 125°F water. Although the heater can be installed indoors and is intended for use in warm climates, an antifreeze mechanism designed to automatically cycle the burner when there's danger of freezing has been tested successfully to -22°F, according to the manufacturer. A Targa heater costs about \$1,000.

Contact: Targa Energy Company, 3265 Fortune Dr., North Charleston, SC 29418; 800/301-8084.



RADIANT HEAT PANEL

In most bathrooms, a ceiling-mounted combination heater-ventilator unit compromises comfort, because the powerful blower used to push heated air to the floor creates quite a draft. One solution is the *Enerjoy Bathroom Comfort Center*, which consists of a light and an exhaust fan set in a ceiling-mounted radiant heat panel that warms floors, fixtures, and people directly, without uncomfortable drafts. According to the manufacturer, Enerjoy provides a similar level of comfort at the same installed price as electric baseboard heat, but only uses half as much energy. The 1-inch-thick panels use copper heating elements embedded in mylar and attached to fiberglass panels. Ranging in size from 2x2 to 4x8 feet, the panels come with a textured finish, fan, light, and timer; an optional thermostat is also available. A 2x5-foot panel with a light and fan costs between \$350 and \$400.

Contact: SSHC Inc., 146 Elm St., P.O. Box 769, Old Saybrook, CT 06475; 800/544-5182.



HORIZONTAL VENT WATER HEATER

Most side vent heaters have to be located within a few feet of an exterior wall, but you can install a *Select Power-Vent* water heater almost anywhere, because the exhaust pipe vents sideways with an allowable run of up to 35 feet. An integral draft-inducing fan cools combustion gases enough to vent through PVC, CPVC, or ABS pipe. Models are available with 40-, 50-, or 75-gallon capacities, and come with either five- or eight-year warranties on the tank. A 75-gallon 75,000 Btu Power-Vent heater retails for around \$800.

Contact: State Industries Inc., 500 Bypass Rd., Ashland City, TN 37015; 800/365-8170.

FINISHES

PREPRIMED CEDAR SIDING

Since old-growth lumber is hard to come by, mills are cutting cedar siding from smaller trees. As a result, the boards are less likely to stay flat and are more likely to have knots that bleed or fall out. Some builders try to head off problems by prepriming, but find that it's messy and expensive when done on site. A convenient alternative is *StepSaver Siding*, which is sealed before it leaves the mill. Knots in each cedar clapboard are treated so they won't fall out, then all surfaces are coated with Olympic Alkyd-Oil Lo-Sheen Primer. Unlike materials that are primed at independent prepriming plants, StepSaver comes with a 5-year warranty; the warranty extends to 15 years if the siding is top-coated with 100% acrylic latex, and can be extended to 30 years if recoated within the first 15 years. According to the manufacturer, there's a 60% labor savings over priming in the field. Expect to pay around \$1 per foot for 1/2x6-inch clapboards.

Contact: Skookum Lumber Co., P.O. Box 7309, Olympia, WA 98507; 888/756-6586.

ACRYLIC BLOCK CASEMENT WINDOW

Glass block windows look good, but they're expensive to install and provide no ventilation. Now there's a cheaper way to let in both light and air without compromising privacy. *Prestige Casement Windows* are glazed with acrylic blocks that are 6 to 8 inches square and 2 inches thick, set in a mildew-resistant sealant. Usually installed over tubs and showers, these vinyl units are available as casements or awnings, and in frosted blocks, which provide more privacy. A unit that fits a 24x40-inch rough opening lists for \$275.

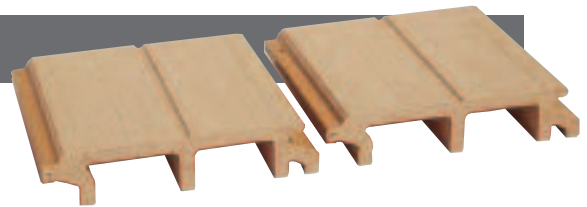
Contact: Hy-Lite Block Windows, P.O. Box 2007, Beaumont, CA 92223; 800/827-3691.



CUTOUT LOCATOR

If you hang a sheet of drywall every now and then, you know how hard it can be to get cutouts for electrical boxes in the right place. Next time, try clipping a *Panel Pal* electrical box locator to the boxes before making a dry fit. The templates stick to the back of any material laid over them, making it easy to trace the outline of the cut. And because the gummy adhesive lasts a long time, you can use the templates over and over again. A set sells for between \$2.50 and \$4, and includes templates for four singles, two doubles, and one round junction box.

Contact: Poly-Tex Inc., P.O. Box 458, Castle Rock, MN 55010; 800/852-3443.



COMPOSITE DECKING

Wood decks look great when they're new, but the elements quickly take their toll. *TimberTech* deck boards are ribbed extrusions made from a composite that's 70% wood fiber and 30% plastic resin, with a tongue-and-groove design that hides the fasteners. Surface channels allow water to drain quickly, while the textured surface prevents slipping. According to the manufacturer, TimberTech deck boards won't rot, splinter, or absorb moisture. They can be cut and fastened with standard carpentry tools and never need painting, staining, or sealing. The boards come in lengths of 12, 16, and 20 feet, have a 10-year warranty, and cost about \$5 per square foot.

Contact: Crane Plastics Co., P.O. Box 1047, Columbus, OH 43216; 614/443-4891.

THIN SOLID-SURFACING

After a bad experience fabricating solid-surface countertops, I began to wonder why no one made the material in a thickness that can be



applied like laminate. As it turns out, someone does. Early last year, Wilsonart introduced *Solid Surfacing Veneer (SSV)*, a 1/8-inch-thick acrylic material that is designed to be glued to a substrate. Once installed, the veneer looks and wears like 1/2-inch-thick solid-surfacing, but costs about 40% less. You can use SSV for countertops, backsplashes, and tub or shower surrounds, and it's light enough to use to face cabinets. The installed price for a 24-inch countertop is between \$45 and \$75 per running foot.

Contact: Wilsonart International Inc., 2400 Wilson Place, Temple, TX 76504; 800/433-3222.

