

NEW-TECHNOLOGY TOOLS & MATERIALS

Using the right tool or material can make a big difference in how a project turns out. Here's a brief look at some new and interesting products that might make your next job go a little easier.

SITWORK & FOUNDATION

Rip-Proof Poly

If you're plagued by rips and tears in poly vapor barriers on walls or under slabs, *Tu-Tuf* will save you hours of tedious patching. The extraordinary strength of the high-density, extruded polyethylene sheeting comes from its "grain," which is created through a stretching process that aligns the molecules. Two sheets are then "cross-laminated" with the grain positioned at 90-degree angles. According to tests performed for Sto-Cote, the product's distributor, Tu-Tuf has twice the permeating of ordinary 6-mil poly and 3.6 times the tensile strength of 4-mil poly. Two thicknesses are available: a 3-mil sheet in white or black, and a black 4-mil sheet for underground use. A micro-perforated version called Air-Seal is also available for use

as a housewrap. Prices for standard rolls range from 8 1/2¢ to 10 1/2¢ per square foot; custom-sized sheets up to 100 feet wide are also available.

Sto-Cote Products, Drawer 310, Richmond, IL 60071; 800/435-2621.

Combo Footing Form and Drain

Anything that makes site work easier is a plus for builders anxious to get to the framing. The *Form-A-Drain* footing form speeds dirt work by doubling as a perimeter drain tile. Each hollow, rectangular PVC section is 2 1/4 inches wide and 12 feet long, and matches common footing heights of 4, 6, or 8 inches. The sections fit snugly together without the use of glue or fasteners, and are pinned in place with the company's 19- or 30-inch steel grade stakes (conventional wood stakes work, too); inside and outside forms are held together by PVC spreaders designed for 16-, 20-, and 24-inch-wide footings. The result is a perfectly level stay-in-place perimeter form on both sides of the footing, with no sags or high spots.

Once the walls are poured and the *Form-A-Drain* is covered with stone and a filter fabric, underground water finds its way inside the rectangular forms through a series of slots along the outer wall of each section. A complete line of fittings is available, including 90- and 45-degree angles, vertical drops, and rectangular-to-round transitions.

Certainteed Corp., Pipe and Plastics Group, P.O. Box 860, Valley Forge, PA 19482; 610/341-6950.

Foam Form Folds Flat

The unique feature of the *Folding Lite-Form* stay-in-place foam forming system is polypropylene ties that allow preassembled wall sections to fold flat. The folding ties, which are spaced 8 inches on-center, provide proper spacing between the 2-inch-thick, 2x8-foot inner and outer foam sheets. The ties are dense enough to hold fasteners for drywall or exterior sheathing and siding.

The manufacturer claims that the hinged ties save on delivery costs, because wall sections can be pre-assembled at the factory, then folded flat for easy transport. Preassembled components also save labor on site and take up less storage space. Special corner bracing and accessories for custom angles and curved walls are also available.

Lite-Form Inc., P.O. Box 774, Sioux City, IA 51102; 800/551-3313.



STO-COTE



CERTAINTEED



LITE-FORM

Sealant Swells to Keep Out Water

If you've been searching for a miracle sealant, you may want to check out Adeka *Ultra Seal P-201*. This polymerized rubber caulk performs as well as or better than leading brands of urethane caulk, but has one distinct advantage: It swells to twice its volume when it gets wet, making it ideal for sealing subgrade cracks and penetrations in foundation walls and slabs. According to the manufacturer, the caulk can withstand a 700-foot hydrostatic head at 50% compression.

P-201 has excellent chemical resistance, sticks well to common job-site materials (concrete, metal, glass, PVC), and can even be applied under water. Its life expectancy, according to the manufacturer, is 90 years. At around \$20 per 11-ounce cartridge, you won't be using Adeka as a general-purpose caulk. But for certain foundation leaks, it may be the least expensive and most effective remedy.

Unique Techniques Inc., RR 1, Box 154-0, Highmount Rd., West Coxsackie, NY 12192; 800/689-1722.



FRAMING

Bolt-Together Truss

The latest entry in Trus Joist MacMillan's family of engineered lumber products is the *FrameWorks SpaceMaker* truss. The ready-to-assemble truss components, made from TimberStrand laminated strand lumber (LSL), are precut, notched, and predrilled for nine bolted connections. A socket wrench is all you need to put a truss together — all hardware is included.

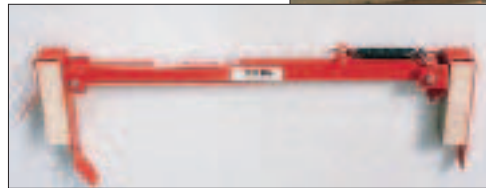
According to the manufacturer, the uniform dimensions, precise tolerances, and low moisture content of LSL resist the warping, twisting, cupping, and bowing common in sawn-lumber trusses. Truss components are also easier to store on site and can be assembled quickly as needed. The SpaceMaker truss is an LSL-version of a storage truss. The center section is free of panel points, allowing for extra storage or living space in the attic.

Trus Joist MacMillan, 200 E. Mallard Drive, Boise, ID 83706; 800/338-0515.



Ground Control for Trusses

A new product called the *TrussTamer System* enables builders to position and temporarily brace trusses efficiently and safely without having to leave the ground. The key to the system is the TrussLink, a spring-loaded steel arm that is attached to the top cord before the truss is lifted into place. Once the truss is craned into position, a worker on the ground pulls on the free end of the attached rope, pivoting the TrussLink down until it snaps into place over the top cord of the adjacent

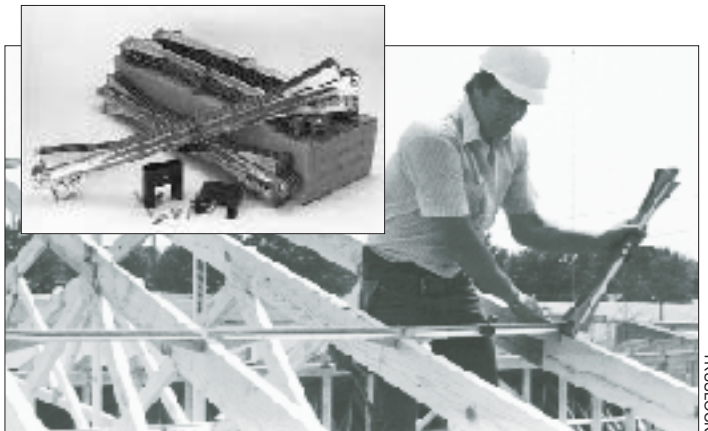


truss. The standard TrussLink is designed for 24-inch centers, but an adjustable model is available.

The company also manufactures the TrussTamer Gable Brace, a tempered steel fitting that braces the top cord of a gable end truss in a vertical position and incorporates a starter TrussLink. All of the TrussTamer hardware can be easily removed while the roof is being sheathed, then reused. A starter kit including enough spacers, braces, and accessories for a 30-foot-long run of trusses costs \$1,248.

Intec, P.O. Box 249, Sykesville, MD 21784; 410/795-1999.

Folding Truss Spacer



Another reusable truss bracing and spacing tool, the *Truslock*, comes in bundles that unfold like a folding rule. A single bundle of the 12-gauge galvanized steel segments can span trusses over distances of 8, 12, or 16 feet. Truslocks are designed for both 16-inch and 24-inch centers, and the manufacturer claims layout is accurate to within 1/8 inch over 100 feet. Once sheathing and permanent bracing are installed, the Truslocks can be removed for reuse, leapfrog-style, on another section of roof or on another job. A specially

designed clamp holds the first segment in position, and a spur in the end of each segment pins each truss into position, so no temporary nailing is required.

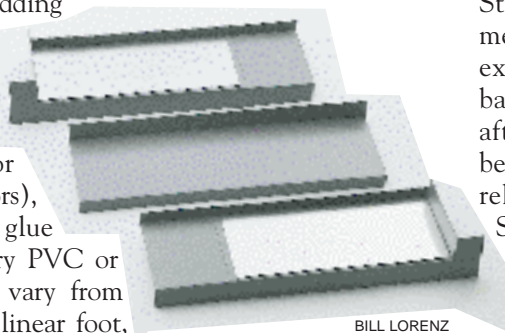
Originally designed for use with roof trusses, some builders have also used Truslocks to space joists before applying the rim joist. Prices range from \$19.90 (16-inch centers by 8 feet) to \$39.50 (24-inch centers by 16 feet). Quantity discounts are available.

Truslock Inc., 2176 Old Calvert Rd., Calvert, KY 42029; 800/334-9689.

Leakproof Sills

Water that leaks behind window and door casings and under sills usually ends up inside the house. To avoid expensive callbacks, try *Jamsill*, an ABS sill pan that installs directly onto the rough sill. Each multipart pan comes with two end sections with seamless corner flanges and can be expanded to fit longer openings by adding open-ended sections between. Available for both 2x4 and 2x6 walls (plus a 3⁵/₈-inch version for aluminum patio doors), Jamsill sections glue together with ordinary PVC or ABS cement. Prices vary from around \$3 to \$9 per linear foot, depending on size and length.

Jamsill, P.O. Box 485, Talent, OR 97540; 800/526-7455.



BILL LORENZ

ROOFING

Innovative Roof Tile Hold-Down

When clay roof tiles are direct-nailed through the hole at the top of the tile, breakage tends to be high because the hammer blows fall right on top of the tile. The *Tile Nail* solves that problem by moving the nailing spike several inches away from the tile. This also allows the hole in the roof membrane to be patched, which is not possible with conventional direct nailing. A further benefit of the Tile Nail is the Wind Lock: The prebent bottom end of the fastener holds down the butt of the tile on top and automati-



NEWPORT FASTENERS



BILL LORENZ

cally gives the correct head lap (specify 3-inch or 4-inch lap when ordering).

A beefed-up version of the Tile Nail called the Hurricane Spike meets the Southern and South Florida Building Codes for wind speeds over 120 mph.

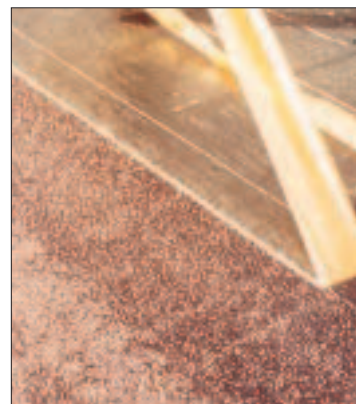
Newport Fasteners, 1300 Gene Autry Way, Anaheim, CA 92805; 714/385-1111.

Easy-to-Use Eaves Membrane

Did you ever try to install one of those gooey peel-and-stick eaves membranes and have it go down crooked or in the wrong place? If so, you'll appreciate Protecto Wrap's *Ice & Water Guard*. A "Zip Strip" at each edge of the membrane allows you to expose just a 2-inch-wide band of adhesive. Then, after the membrane has been properly positioned, you can remove the rest of the release film and stick the membrane down for real. The Zip Strip also provides a built-in seam guide for successive courses.

Ice & Water Guard is available in 12-inch, 30-inch, and 60-inch widths in 75-foot rolls. It must be installed on a dry surface when temperatures are above 40°F, though a primer is available that allows installation between 20°F and 40°F. The membrane remains pliable in service down to -55°F.

Protecto Wrap Co., 2255 S. Delaware St., Denver, CO 80223; 303/777-3001.



PROTECTO WRAP CO.

Solid Roof Staging

Building staging on pitched roofs is risky when you can't be sure the material you're fastening to is sound. A mason who was tired of guessing designed *Ultimate Ridgehooks*. The heavy steel brackets bolt onto 2x8s, then hang from the ridge. The 2-bys provide a sound, stable base on which to build the staging. No fasteners puncture the roof, so there's no patching to do after tear-down. A pair of Ultimate Ridgehooks sells for \$159.

Deer Hill Enterprises, 224 West St., Cummington, MA 01026; 800/588-9660.



DEER HILL ENTERPRISES



Roof Jack With Railing

One of the most convenient, simple-to-use fall-protection systems we've seen for roofers is the *E-Z Rail Safety System*. A standard set includes a pair of 2x4s that fit snugly into a special sleeve welded to the end of the two triangular steel roof jacks. Also included are six brackets and all the fasteners you need to attach a three-level 2x4 guardrail to the uprights. The heavy-duty jacks attach to the roof just like the ordinary kind, and adjust to pitches from 7/12 to 12/12. According to the manufacturer, the system meets OSHA fall-protection standards. Each set is designed for guardrails up to 8 feet long and sells for \$125.

ASC Plus, P.O. Box 388059, Cincinnati, OH 45238; 800/585-5641.

MECHANICAL & ELECTRICAL

Ventless Plumbing Vents

When water flows through a drain pipe, it creates negative pressure that can break trap seals on adjacent fixtures. Open-air vent stacks prevent this by providing makeup air to the drainage system. But attaching all plumbing fixtures to a vent stack is often difficult and costly, especially in kitchen island or peninsula fixtures, or where fixture groups are spread far apart in the building. Fortunately, special fittings — called air admittance valves (AAVs) — supply makeup air without requiring penetration through the roof.

The *Mini-Vent* and *Maxi-Vent* from Studor (left) and the *Durgo Air Admittance Valve* from Enerjee all operate by the same basic principles: A disk-shaped flapper seals the vent pipe under neutral pressure, preventing the escape of sewer gases into the living space.

When a fixture drains, the pressure differential in the fitting's air chamber causes the flapper to rise, allowing makeup air into the waste line. When the pressure is neutralized, gravity pulls the flapper back into a sealed position.

Both products are designed to use the packaging material

to insulate the fitting from cold attic air, preventing freezing of condensation that might otherwise render the AAV inoperable. In addition, Studor's vents have a mesh screen that keeps insects from nesting inside the air chamber and a cone-shaped cap that directs any condensation to the center of the vent pipe. Durgo's vent comes in two sizes, 1½ inches (\$19.95) and 3 inches (\$29.95), and is designed to be glued with pipe cement. (The clear plastic vent shown is for demonstration purposes only; the actual Durgo vent is made from black ABS.) Studor's vents range in size between 1¼ and 4 inches and can be threaded or solvent welded; prices range from \$25 to \$35.

Though these products meet the standards of the American Society of Sanitary Engineers (ASSE), codes vary, and many local inspectors may not be aware of AAVs. Check with your code official before designing a system that relies on AAVs. And remember: Air admittance valves may only be used in conjunction with a vent system that is attached to an open-air vent stack.

Enerjee, 4 S. Lafayette Ave., Morrisville, PA 19067; 215/295-0557.

Studor Inc., 2030 Main St., Dunedin, FL 34698; 800/447-4721.



BILL LORENZ

Air-Sealed Recessed Lights

Insulation compatible (IC) recessed light fixture housings are designed to be completely covered with insulation with no risk of overheating or fire. But air can still escape through seams and small openings, introducing moisture into joist or rafter bays and causing loss of conditioned air. Juno Lighting claims to have solved this problem with its new *Air-Loc Ready* housings, which have no perforations and are completely sealed against air leaks. An optional *Air-Loc Gasket* can be added behind the trim ring during installation to form an airtight seal to the ceiling. The *Air-Loc Ready Remodel* housing can be installed through a round hole in the ceiling.

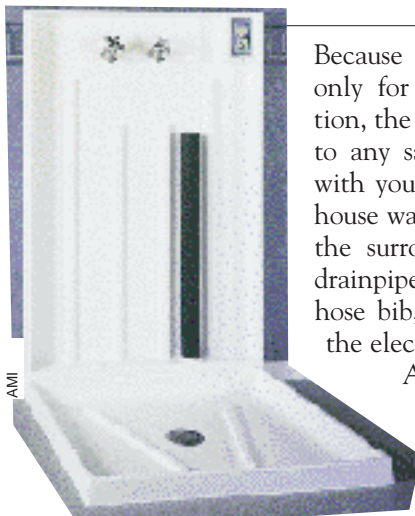
Juno Lighting, 2001 S. Mt. Prospect Rd., Des Plaines, IL 60017; 847/827-9880.



JUNO LIGHTING

Laundry Room Liner

Next time a client asks you to move the washer/dryer into a closet upstairs, don't worry about leaks and water damage from the inevitable leaks and overflows. Just pick up the phone and order a *Floodsaver*, a high-impact plastic washing machine surround with a built-in drain hole that accepts a shower drain.



Because the Floodsaver is intended only for emergency backup protection, the 2-inch drain line can be run to any safe outside location (check with your local inspector), or to the house waste line. The wall portion of the surround provides two possible drainpipe locations, an area for the hose bib, and a dedicated recess for the electrical outlet.

Available in white and white-almond, the unit costs \$84 plus shipping (discounts for quantity available) and takes three to seven days for

delivery, depending on your location. The one size —27½ inches square on the inside — fits most washing machines, according to the manufacturer.

AMI Inc., 1346 E. Juniper Beach Rd., Camino Island, WA 98292; 800/929-9269.

EXTERIORS

Exterior-Grade Sheet Flooring

Pool decks, exterior balconies, and patios often need to be waterproof to protect the finish materials and equipment underneath. One solution is *Duradek*, a PVC traffic membrane that looks and installs like sheet flooring but is



ENSURCO DURADEK

designed to withstand exposure to water, sunlight, and temperature extremes. Nine different patterns are available, varying in thickness from 32 mils to 60 mils, and including several textured, slip-resistant surfaces. Unlike most liquid-applied surfacing systems, Duradek coverings are typically installed in one step under a wide variety of conditions, from below freezing to hot direct sunlight, and can be used immediately. According to the manufacturer, the material bridges cracks and expands and contracts with the substrate. Installed costs for a 60-mil membrane vary from about \$3.50 per square foot for jobs of 1,000 square feet or more to about \$8 per square foot for jobs of 100 square feet or less.

Ensuro Duradek, P.O. Box 8195-127, Blaine, WA 98230; 604/591-5594.

One Tough Coating

A urethane-based technology is at the heart of a liquid-applied coating that may provide the most versatile waterproof membrane for roofs, decks, balconies, and other exterior surfaces. Called *Tufflex*, the material is a single-component urethane prepolymer that mixes with water and cures evenly and quickly, no matter what the thickness. After a prime coat (solvent-free, odorless primers are available), the material can be applied to almost any surface, including wood, concrete, and metal, and at virtually any thickness. According to the manufacturer, the material cures quickly and evenly, even in extremely hot or near-freezing temperatures, and can be applied in a single coat. For a nonskid surface, the company supplies rubber granules that are broadcast over the surface before the material sets up; top coats in seven standard colors seal the granules in place (custom colors available by special order).

The material is popular with ski areas, which use it to protect floors from heavy ski-booted foot traffic. According to one ski area builder we talked with, Tufflex appears to be nearly indestructible. Tufflex expands up to 800%, is repairable, and resists breakdown from UV exposure. It is also available in fire-rated and odorless formulations.

Tufflex, 14722 Spring Ave., Santa Fe Springs, CA 90670; 800/238-5186.



TUFFLEX



TUFFLEX

INTERIORS

Drywall for Curves

To deal with round corners, drywallers usually wet down standard wallboard sheets until they are flexible enough to make the bend. Now there's ¼-inch *High-Flex Wallboard*, a gypsum product made specifically for curved applications. The material can handle a 15-inch-radius bend when dry; wet it down and you can get a 7-inch-radius bend. Typically, High-Flex is applied in a double layer and comes in 4-foot widths and lengths of 8, 9, 10, and 12 feet.

National Gypsum Co., 2001 Rexford Rd., Charlotte, NC 28211; 800/628-4662.



NATIONAL GYPSUM CO.

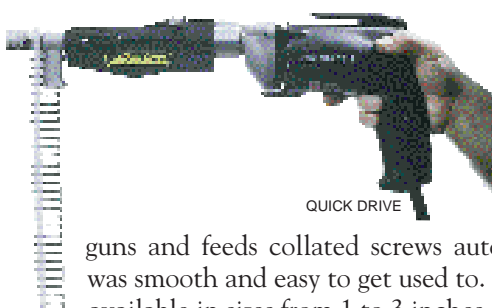
Bendable Backerboard

Cement backerboard is an ideal substrate for tile on flat surfaces like countertops and floors. But what do you do with a curved wall in a tub enclosure? Enter *Uniflex*, a polymer-modified concrete board that can be bent to conform to a radius as small as 5 or 6 inches (depending on thickness) — without wetting or kerfing. The 3/8- or 1/2-inch-thick material is available in standard sheets 3 feet wide and 8 feet long (longer lengths are available by special order).

Uniflex, 35 Rue Uniflex, Bromont, Que., J0E 1L0, Canada; 514/534-0955.

TOOLS & FASTENERS

Autofeeder for Screw Guns



Last winter, we had the chance to try out an early prototype of Quik Drive's newest tool, the QD2000. It attaches to most popular brands of screw guns and feeds collated screws automatically. The action was smooth and easy to get used to. The collated screws are available in sizes from 1 to 3 inches and come in a stiff plastic collation stick, which holds about 31 screws. Loading the stick is simple — just push it into the back of the mechanism until the feeder pawl inside clicks, then you're ready to drive. An optional coil feeder attachment, which holds 167 screws, is good for subfloor work. The QD2000 sells for about \$99.

Quik Drive USA, 436 Calvert Dr., Gallatin, TN 37066; 888/487-7845.

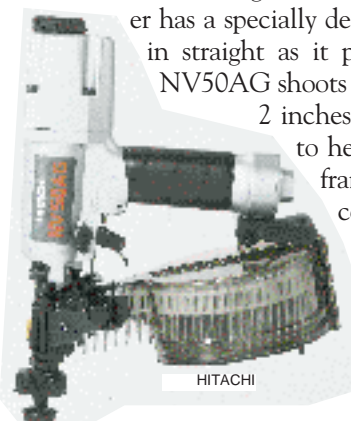
Pneumatic Drywall Nailer

Air-nailing drywall sounds like a great idea. But if you've ever tried it with a conventional nail gun, it doesn't work so well. When the air pressure is set low enough not to blow through the drywall, the nail tends to drive cockeyed.

According to Hitachi Power Tools, power-nailing drywall has been an accepted building practice in Japan for years — no doubt because of guns like the Hitachi NV50AG. This coil nailer has a specially designed front end that guides the nail in straight as it passes through the nose piece. The

NV50AG shoots collated ring-shank nails from 1 1/4 to 2 inches long and includes a wide rubber tip to help you push the drywall tight to the framing. This helps on walls, but for ceilings, you still have to push the drywall up to the joists: The nail won't suck the board up as well as a screw.

Hitachi Power Tools, 3950 Steve Reynolds Blvd., Norcross, GA 30093; 800/706-7337.



Five Guns in One

A new pneumatic gun from Duo-Fast will fire five different types of 5/8-inch-long fasteners — with no adjustments to the gun. Three are 20-gauge staples (1/2-, 11/32-, and 3/16-inch crown); the fourth is an 18-gauge brad; and the fifth is an 18-gauge headless pin.

The gun weighs just two pounds and will hold either 140 staples or 120 brads. The tool comes with a carrying case and one box of each type of fastener. The *Pro5* sells for about \$155.

Duo-Fast, 3702 River Rd., Franklin Park, IL 60131; 708/678-0100.



DUO-FAST

Classic New Twist

Two new fasteners from ITW Buildex promise to live up to the reputation of the company's Tapcon line of concrete fasteners. The *Maxi-Set* Tapcon has a 1/4-inch shank, a 5/8-inch-diameter flange, and a hex head for increased stability and torque. It uses the company's familiar "hi-lo" thread configuration for

extra holding power. The screws are available in lengths of 1 3/4 and 2 1/4 inches, and are coated with a silver Climaseal finish to resist corrosion. Like the company's other Tapcon screws, the Maxi-Set cuts threads into a pilot hole drilled in concrete, masonry, or brick



BILL LORENZ

and can be screwed in and out repeatedly without losing its holding power. In cured concrete (3,145 psi), the Maxi-Set Tapcon has a pull-out rating of 1,059 lb. (with 1 3/4-inch embedment) and a shear strength of 1,604 lb. (1 1/4-inch embedment).

A new hammer-in fastener called the *King-Con* is designed for light-duty attachment of window and door bucks, 2-by nailers, and 1-by furring strips to concrete, hollow block, or brick.

Available in lengths from 1 1/8 to 10 inches, the King-Con's knurled cutting thread is said to provide exceptional holding power when driven into a 7/32-inch pilot hole. The heavy-duty nails are treated with a blue Climaseal coating for corrosion resistance, and come in boxes of 100.

ITW Buildex, 1349 W. Bryn Mawr Ave., Itasca, IL 60143; 800/888-1513. ■



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