

PROBLEM-SOLVING PRODUCTS

Our pick of new tools and materials designed to help you work faster, better, and cheaper

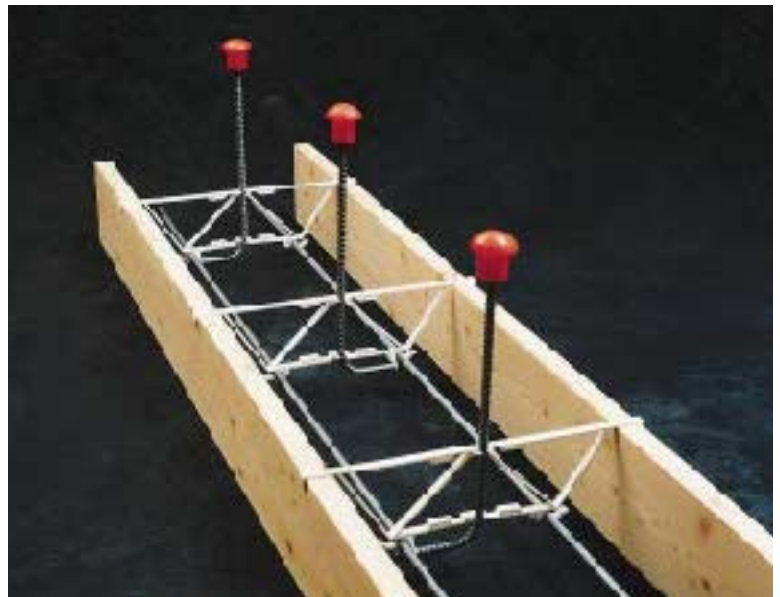
Conventional wisdom claims that builders are one of the slowest groups to change their ways. But if you look back at the last 50 to 60 years, you could argue that building

by JLC Staff technology has undergone a near total change. Traditional building methods and materials have been swapped out for new or modified ones, one after the other. The homes we build today are a product of the times and the initiative of manufacturers. With that in mind, here's a look at some current products developed to solve specific problems and change the way we do business.

Rebar Rig

Placing, tying, and supporting rebar in footing forms is made simpler and faster using *Rebar Buddy* form spreaders and clips for #4 and #5 rebar. Rebar snaps into clips on the spreaders in selected locations (center, outside, or inside). The spreaders nail to the edge of the form boards to secure the spacing, while integral rests for horizontal bars eliminate the need for chairs. Corner returns snap into extensions on the rests. The ABS plastic spreaders come in four sizes, for footings from 6x12 inches to 12x24 inches, and cost about \$1.50 each, sold in cases of 50.

Contact: Northwest Accessories, 14200 SE McLoughlin Blvd., Suite C, Milwaukie, OR 97267; 503/652-1984; www.rebarbuddy.com.





ICF Alignment Bracing

If you're planning to work with insulating concrete forms (ICFs) on a regular basis, you may be ready to plunk down some serious cash for equipment that helps the job go smoothly and predictably. Among the many products developed to work specifically with ICFs, Sea Systems scaffolding solves the problems of bracing, aligning, and staging the forms with a single setup. After securing the ICF blocks to the vertical alignment channels, they can be fine-tuned for plumb using the turnbuckle braces. The all-steel system is said to work with every ICF block currently on the market. For tall wall construction (where the manufacturer says the system shines), the scaffold comes in stackable 4-, 8-, and 12-foot channel lengths. An 8-foot two-section starter set costs \$883 — yeah, that's \$110 per foot.

Contact: West Arc, 212 S. Bullard, Silver City, NM 88061; 505/538-2671; www.sea-sys.com.

Quake Breaker

Building inspections following the 1994 Northridge quake in California turned up a lot of loose hold-down nuts in quake-damaged residences. In most cases wood shrinkage, not sloppy construction, was the culprit. Floor joists lose moisture and shrink over time, causing shearwall seismic connectors to loosen (top photo). When the hardware isn't loaded, up to 40% of its effectiveness is lost with as little as a 1/4-inch gap. The *AT Automatic Take-Up* shrinkage compensator has been load tested at 150% of the rated design load to continually and effectively take up the slack under the nut. The device installs in standard hold-downs and threaded rod systems, will compensate for a full inch of shrinkage, and may be stacked for greater capacity. Installation is as simple as dropping it over the threaded rod (from 5/8- to 1 1/4-inch diameters), snugging down the nut, and removing the activator screw. Take-up devices aren't recognized or required by any building code yet, but according to an official at the Los Angeles Department of Building and Safety, L.A. is eager to have them incorporated into city building codes. At about \$45 each, the device isn't cheap, unless yours are among the only buildings still standing after the big one hits.

Contact: Commins Design, 970A Guard St., Friday Harbor, WA 98250; 360/378-9484.



Decay-Resistant Jamb

How many rotten door jambs have you seen? Capillary draw, also called wicking, is the friend of wood-eating fungi and insects everywhere. All they need is a drink of cool water to help them digest the front entry. The *FrameSaver* door jamb spoils their party with a finger-jointed 1-foot-length of water-repellent wood-polyethylene composite at the bottom end of the side jambs. The jamb costs about \$35 more than an all-wood frame — how much does jamb replacement cost? The frame is available for Simpson prehung doors as well as your own custom door installations.

Contact: BMS, P.O. Box 631247, Nacogdoches, TX 75963; 800/599-9349; www.framesaver.com.



Glazed Fire Door

Building codes require that access from the house to an attached garage be via a fire-rated door, which usually restricts the selection to flush and solid-panel doors. The 20-minute *Fire-Rated True Divided Lite* door gives a stylish and unrestricted view of the other side. Alternatively, a full-view glazing option comes with a 45-minute rating. The doors are constructed of structural composite lumber with a wood veneer facing, and have solid hardwood bead and grillwork. The stiles feature 5/8-inch solid hardwood edges designed to match, or be compatible with, the face veneer. The doors are available in standard sizes up to 4'-0" x 9'-0", starting at approximately \$450.

Contact: Eggers Industries, P.O. Box 1050, Neenah, WI 54957; 920/722-6444.



Fast, Accurate Roofing

Measuring, marking, and snapping layout lines for asphalt roof shingle installation is tedious and prone to errors (try reading a black pencil line on roofing felt, or pausing to teach a new helper how to read a tape measure). Nearly foolproof single-use *Roofing Layout Tapes* fasten from eave to ridge, between dormers or skylights, and horizontally from end to end. Letter icons A, B, and C take the place of numbered position markers, and alternate between upper and lower case for clarity. A minus (-) sign separates A and B, and a plus (+) sign separates B and C, for making course adjustments in 1/8-inch increments (B to b to B gives the



nominal spacing). A new feature gives quick 3-, 4-, and 5-foot triangulation for eaves to ridge layout from a centerline, using dedicated tape icons. Using the tapes results in extremely accurate upper edge layout and guaranteed match-up around dormers and skylights with no measuring, coordination, or discussion needed.

The *Double Chalker* makes snapping lines between tapes all chalk and no walk with quick back-and-forth reeling and reloading. A 1-lb.-capacity chalk reservoir in each grip cuts down on refills. The line itself is hollow and holds enough yellow Magichalk for up to a dozen snaps before reloading. The tapes are available for 5- and 5 5/8-inch spacing, and start at \$20 for a 4-pack or \$425 per 100. The chalkline goes for \$20, and the chalk costs \$7 for a 2-lb. 6-oz. supply. A professional roofer we talked to confirms an 18% increase in production speed using the system.

Contact: Thor Systems, 127 Second Ave., Kingston, PA 18704; 800/398-0376; www.thor-systems.com.

Vinyl Vent Strips

Specifically developed to work with fiber-cement trim and siding, *EZVent*, *Snapvent*, and *CUV8V* old-style hat-shaped vinyl soffit strip provide intake air at the eaves to balance roof-ridge venting. The white PVC strip comes in 8-foot lengths and three basic configurations for soffit-center or edge installation options. Double-leg channels on the EZ and Snap strips conceal rough or irregular soffit edges, while the hat-shape installs with a hidden flange for a flush appearance. Strips are available for material thickness from 1/4 to 1/2 inch, and cost about \$4.50 each.

Contact: R. H. Tamlyn & Sons, 10310 Plano Rd., Suite E, Dallas, TX 75238; 888/416-9676; www.tamlyn.com.



Kickout Flashing Fix

Forming the starter-piece of a step-flashing course where the roof abuts a sidewall is tricky, because whatever you're using has to redirect water away from the wall to prevent a siding leak. The *Raintek Vortex Relief* solves the problem with a molded polyethylene profile that fits roof slopes between 3/12 and 12/12, and "slings" the water away from the wall, into the gutter. The flashing is compatible with silicone sealants, and comes in left and right profiles. The cost is \$13 each, with lower pricing for quantity purchases.

Contact: Demand Products, 1055 Nine North Dr., Alpharetta, GA 30004; 800/325-7540; www.demandproducts.com.

Engineered Exterior Corner

Handle two-story exterior cornerboards seamlessly with a 20-foot-long *PermaChoice* corner post. Made of PVC-based wood composite, the post won't rot or split, and the one-piece construction eliminates the vulnerable outside corner seam. The textured surface comes preprimed to accept stain or paint. The post's channel edges conceal irregular siding end cuts, while a pre-notched nailing flange provides easy, concealed fastening. The corner post can be used with any siding type, including cement board, vinyl, or wood. Corner posts are available in 10- and 20-foot lengths, for \$6 per foot.

Contact: Crane Products, P.O. Box 1898, Columbus, OH 43216; 614/449-0942; www.craneproducts.com



Gypsum du Jour

Some of the problems associated with gypsum board's performance have been addressed with the *Next Generation of Sheetrock*. Ragged-edged snaps, excessive flexibility, warping in storage, blistering and delamination of the paper facing, and failure of the installed panel to remain flat are all vanquished characteristics of yesterday's product. According to the manufacturer, the improvements should make the new board easier and therefore more economical to work with. There is no planned increase in price for the enhanced board, which will gradually replace the former product.

Contact: USG, P.O. Box 806278, Chicago, IL 60680; 800/874-4968; www.usg.com.



What's the DIFS?

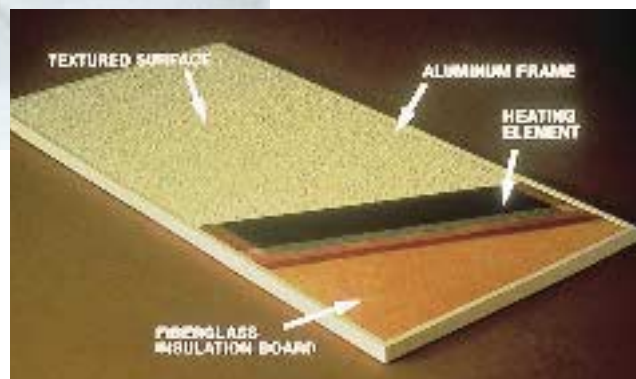
Integrally colored plaster has a unique depth and variegation in hue, offers a more durable surface than ordinary drywall, and might cut a chunk of time out of the painting schedule. The *Decorative Interior Finish System* consists of wallcovering primer, a plaster bonding agent, plaster, coloring agents, and a finishing sealer. The tinted plaster is trowel-applied by any skilled dry-wall or plaster contractor as a skim coating over new or existing gypsum surfaces. The coating provides a washable, paintable finish in two steps: coat and seal. The system is offered in 12 basic colors and can be custom tinted. The cost is between \$2 and \$3 per square foot, installed.

Contact: USG, P.O. Box 806278, Chicago, IL 60680; 800/874-4968; www.usg.com.

Overhead Heat

With fixtures, cabinets, and doors taking up precious wall space, a bathroom can challenge even the best heating system installer. To get around all of the obstacles, consider the *Bathroom Comfort Center*, which puts silent, electric radiant heat on the ceiling. Radiant energy warms solid objects including people, floor and wall surfaces, and fixtures, which reradiate heat to warm the air. The bathroom ceiling can be a pretty busy surface too, but the panel incorporates a low-speed fan and a compact-fluorescent or incandescent light combination. The system comes in several retrofit-ready sizes that range in price from \$350 to \$500.

Contact: SSHC, P.O. Box 769, Old Saybrook, CT 06475; 800/544-5182; www.sshcinc.com.



Builder's Edge

Getting rid of the black line on the edge of a plastic laminate countertop isn't an easy trick, especially with on-site fabrication. Unless you only work with black laminate, using a



made-to-order *Gem-Lock* countertop edge offers the best solution we've seen. Radiused solid-surface material borders both sides of a laminate-faced medium-density hardboard edgeband. The tongued profile of the back fits into a routed groove in the counter edge (custom bit available). The edge installs a hair higher than the counter's surface, unlike the merciless precision demanded by other treatments. A light touch-up with a file makes the transition flawless. A double-tongued version of the edge is available for capping backsplash; when ripped down the center, one 12-foot piece yields 24 feet of cap. The manufacturer works with all major solid-surface and laminate brands, and guarantees a five-day turnaround on stock colors from the date of order. The cost is \$36 per 12-foot length with no minimum purchase required.

Contact: Loti, P.O. Box 2780, Tualatin, OR 97062; 877/436-3343; www.loticorp.com.

Kitchen Computing

Home computers are often set up in the kitchen, where they eat up desktop or counter space. The *Downward Gaze Retrofit Kit* communication center mounts the CPU and monitor below the counter, at a natural reading angle. The kit includes the CPU holder and monitor support, pullout keyboard tray, and a choice of four



tempered-glass viewport sizes, from 18x18 to 21x24 inches. Special anti-reflective glare-reducing glass is available as an option. The kits cost from \$534 to \$720, depending on configuration — computer not included!

Contact: Nova Solutions, 421 Industrial Ave., Effingham, IL 62401; 800/730-6682; www.novadesk.com.

Wall Exhaust Ventilator

One of the rules of thumb for ventilation says that the shorter the duct, the better the airflow. For bathrooms with an exterior wall, a *Preventilator 2* through-wall ventilator cuts out the ductwork altogether and provides high-efficiency, 1.5-sone (quiet), 100-cfm air removal. The exterior insulating wallcap has a motorized cover, requiring a three-wire feed from the controls. Control options include humidity-sensing switches and timed operation. The ventilator retails through distributors for \$235; builders pay \$188.

Contact: Tamarack Technologies, P.O. Box 490, W. Wareham, MA 02576; 800/222-5932; www.tamtech.com.





Tile Backer Profiles

A tiled shower surround offers all kinds of creative opportunities, but lining curbs and niches with cement backerboard means lots of cutting, shaping, and nailing narrow, brittle pieces. Using *ProForm* single-piece curbs, door-jamb, and niches makes short and certain work of all the corners and transitions. The waterproof parts are made of cement-coated polystyrene, are

easy to cut, and can be fastened and tiled just like the abutting backerboard. An 8-foot curb section costs \$70, jamb, and niches cost \$50 each.

Contact: W.R. Bonsal, P.O. Box 241148, Charlotte, NC 28273-1148; 800/738-1438; www.bonsal.com.



Blocking Substitute

Adding a grab bar to an existing wall may not be so simple if there's no framing there to back it up. If you're the one who forgot to install the blocking, the *Winglts Grab Bar Fastening System* will save your butt. The expanding conical fastener makes it possible to perform an impressively rugged installation without blocking or framing. Made for bare 5/8-inch drywall, or 1/2-inch dry-wall with a tile or fiberglass surround, the fastener (\$40) and proprietary grab bar (\$12 and up) combination is claimed to exceed ANSI specifications for grab bar performance. Installation is as simple as measure, drill, insert, and tighten. Other applications include shower seats, towel bars, handrailings, and various wall-mounted accessories, all available from the manufacturer.



Contact: Winglts Innovations, 181 W. Clay Ave., Roselle Park, NJ 07204; 877/894-6448; www.Winglts.com.

Laundry Operation

The washer-dryer combo is a lot handier on the living level than it is in the basement, but the prospect of an accidental overflow remains a concern. The *Washer Wise* laundry enclosure provides a plumbed and wired waterproof base and wall, with a built-in overflow drain for worry-free placement on first- and upper-floor levels. Made from 1/8-inch-thick ABS plastic, the enclosure comes in washer-only (\$240) or side-by-side (\$295) sizes. Features



include a single-lever supply cutoff, a wire accessory shelf, and a removable back panel to make hookup and service easy. The dryer vent and overflow drain can be located to suit on-site rough-in conditions. An optional side panel adds \$90 to the tab.

Contact: CoCoMo, 1101 S. Main St., Hopkinsville, KY 42241; 877/426-2666; www.cocomoonline.com.

Space-Saver Toilet

Inches make a difference in a small bathroom. By concealing the tank within 2x6 wall framing, the *Tessera* toilet saves up to nine inches of floor space. The wall-mounted bowl can be installed between a 15- and 19-inch rim height, while the



floor underneath remains clear for easy cleaning. The high-density 1.6-gallon polyethylene tank is insulated for quiet operation, and has a wall-mounted actuator and access panel above for system maintenance. In white, the toilet costs \$695, and \$745 for color. No tank, huh — so where do you put the magazines?

Contact: Geberit Manufacturing, 1100 Boone Dr., Michigan City, IN 46360; 800/225-7217; www.us.geberit.com.

Wireless Light Switching

Just by substituting the switches on the wall with *RadioRA* wireless central home lighting controls, flexible whole-house lighting control from up to 12 separate locations is now possible. One-touch master controls can be set to capture and recall user-variable lighting “scenes” for different rooms,



functions, and time of day, without altering existing wiring. An LED indicator next to the scene button tells you which lights are on or off. Lights are controllable from any room, or even a car remote, so you can turn on lights as you pull into the driveway. The system accommodates up to 32 switches, and costs anywhere from \$1,500 to \$5,000, depending on the options chosen and local distributor's pricing.

Contact: Lutron Electronics, 7200 Sutter Road, Coopersburg, PA 18036; 800/523-9466; www.lutron.com.

Hand Protection

If you work in construction, you probably spend too much time under the influence of vibration-inducing tools like recip saws and hammer-drills. Continued exposure can lead to hand-arm vibration syndrome (HAVS), with symptoms that include tingling, numbness, painful spasms, blanching, and possible loss of finger control. The 9002 full-fingered, anti-vibration gloves contain proprietary vibration-adsorbent Nu^2O_2 (pronounced “noo-2 oh-2”) polymer in the palm, fingers, and thumb past the last joint, as well as the side palm. The glove is designed to be thin and flexible, in order to eliminate the tendency to grip harder when wearing heavily lined gloves. Sold through distributors as left hand or right hand singles for \$29 each; a recommended add-on wrist support costs \$31.

Contact: Ergodyne, 1410 Energy Park Dr., Suite One, St. Paul, MN 55108; 800/225-8238; www.ergodyne.com.



All-Terrain Horse

On a construction site, level ground is about as common as a purple cow. By putting the stability of a tripod to work, a *Bronco* scaffold will get you set up fast, firm, steady, and level on the roof or down below.



Two of the three legs adjust in 6-inch increments, and the third leg fine-tunes the setup in 1½-inch increments. Adjusted to its maximum 68-inch height, the rugged 23-pound aluminum horse extends your working height up to 13 feet (assuming 6-foot-tall workers), and supports 600 pounds. A set of horses costs 369 bucks, but don't let that throw you — they're available singly. Start with a pair, then build your herd one at a time.

Contact: ReechCraft, 2001 1st Ave. North, Fargo, ND 58102; 888/600-6160; www.reechcraft.com.

Keeping in Touch

You forgot something important, and your gofer's already on the road to the lumberyard? Not a problem if key people are equipped with an *i700plus* phone, combining digital cellular, text/numeric paging, two-way radio, and even a web browser (for future access) in one device. On the dedicated *Builders Network*, "fleet" members reach other members in their market via two-way radio at the touch of a button. This is especially handy if your suppliers are on the network, too. For example, if you're in the Atlanta, Ga., market and you're not on the network, you're out of the loop, claims a carrier spokesperson. The suggested retail price of the phone is \$249. Monthly rates (posted on the website) vary according to the plan chosen. Not every area currently has coverage, and the service doesn't transfer calls to any other carrier to cover "blackouts." Check with Nextel for service in your locale.

Contact: Nextel Communications, 2001 Edmund Halley Dr., Reston, VA 20191; 800/639-6111; www.nextel.com.



Heavy-Duty Ladder

Unlike the pretzel ladder seen on late-night TV, the *Little Giant Ladder System* is a rugged and versatile professional tool. The 300-pound capacity, Type 1A ladder meets OSHA's highest rating. Available in four mod-



els, from a 7- to a 23-foot working height, the aircraft-quality aluminum ladder converts from straight to a strut-free A-frame. The legs are flared for improved stability, and can be adjusted asymmetrically for stair work and irregular surfaces. Each model breaks down quickly into two matched A-frames to support a scaffold plank. Handy options include a folding paint-tray work platform capable of supporting 300 pounds, a wall standoff, and a leg-leveler with 12 inches of travel. Ladder prices start at \$427, and the options cost \$55 each. Telescoping aluminum scaffold planks capable of supporting 250 pounds are available in three lengths, and adjust from 6 to 16 feet, at prices from \$221 to \$318.

Contact: Wing Enterprises, P.O. Box 3100, Springville, UT 84663; 800/542-9464; www.wingladders.com.

