Pre-Fab Products for Site-Built Homes

Inside Information:
Factory-made products save time and money, but they may also be incentives for buyers.

A grab bag of manufactured components for interiors and exteriors

Most stick builders don't think they use many manufactured components in their homes. But when you add up the things once made on site that now come off the back of a truck, the list is surprisingly long. Stairs, fireplaces, sun rooms, and entries are just a few of the house ``parts'' that are often just installed at the site rather than crafted. And the list is growing.

The manufacturing process shrinks the amount of time required for field fabrication or installation, and that translates to dollars saved. Often, the pre-manufactured product is lighter weight, less bulky, or more efficient in its use of resources.

What follows is a grab bag of factory-made products. Some are new; others are newly conceived. Their manufacturers all claim you save over the site-built equivalents. Some are poor imitations of the real thing; others represent solid progress in building technology. How each fares will, in a large part, be decided by the marketplace.

Paul Spring

"Compact'' kitchen. Most of us at one time or another have either installed a classic white, porcelain-on-steel kitchenette, or hauled an old one off. But today's versions aren't always made of steel, and micro electronics allows even more to be packed into units that can be as narrow as 39 inches.

The Dwyer kitchen, shown above, is 60 inches wide, and includes a 6.4-cubic-foot refrigerator, a 3-burner range/oven, a ductless exhaust hood, a microwave oven, a porcelain sink with a disposal, and a surprising amount of cabinet space. Other options include an automatic coffee maker, dishwasher, and ice maker.

All of Dwyer's kitchens and office refreshment centers are offered in textured steel or wood in a variety of colors. They also make accessible kitchens for the handicapped and seniors market, and a portable, 115-volt, 20-amp unit.

Dwyer Products Corp., Calumet Avenue, Michigan City, IN 46360;219/874-5236, 800/348-8508

"Murphy" amenities. We are constantly reminded by real estate writers that move-up buyers are looking for amenities. But this doesn't always mean they want a gigantic master bath. Small built-ins like the ironing center and bathroom scale from Iron-A-Way are things buyers remember when they look at a new home.

The scale, shown above, is battery operated. It has a large LED read-out and carries a five-year warranty. It installs in a stud bay, and folds down to rest securely on the floor. The exterior of the cabinet comes unfinished.

The ironing center, shown above, uses a 46-inch, perforated steel ironing board that can be adjusted for height and comes with a pad and cover. The center is also equipped with a sleeveboard, spotlight, and outlet. The birch cabinet is finished on the inside, but left unfinished on the exterior.

Iron-A-Way, Inc., 220 West Jackson St., Morton, IL 61550; 309/266-7232.

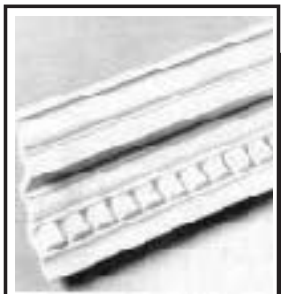
Outside Work:

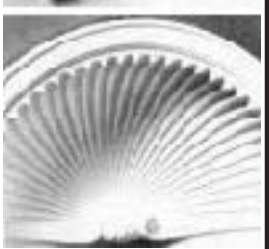
Alternative products often imitate the real thing but require on-site skill.

Pregrouted tile. American Olean's Redi-Set 100, shown above, has made a name for itself because it is a time-saver. The glazed, ceramic tile is manufactured in sheets that cover 2 square feet (4-1/4-inch tile) or 2.14 square feet (6x4-1/4-inch tile). The sheets are pregrouted with white silicone rubber grout. As soon as the tile is installed, the joints between sheets can be grouted to match. This eliminates the need for the tile setter to return to the site.

The pre-grouted tiles can be used on interior walls, vanity tops, residential floors, and around showers and tubs (these are made up as standard packages). The silicon grout has a mildicide in it, so Redi-Set sheets are not recommended for kitchen counters. They can be set with conventional mortar, dry-set, or adhesive over wallboard, concrete, masonry, plywood, or backer board. The sheets can be ordered with trim shapes attached.

American Olean Tile Co., Lansdale, PA 19446; 215/855-1111.





Hi-tech trim. Even if you don't have anything to do with historical restoration, it's worth seeing some of the cornice moldings, chair rails, niches, rosettes, medallions, and door and window treatments that were once run in plaster and now reproduced in polyurethanes, polyesters, and other strong but light materials.

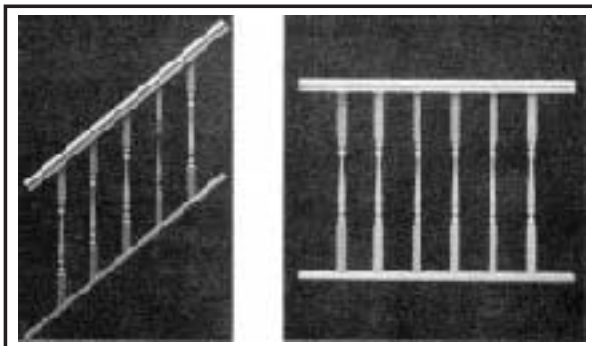
The forerunner in this field is Focal Point. The niche cap, shown above, shows the kind of detail possible in high-density polyurethane. This material can be sawn, glued, nailed, stained, or painted like wood. But it is flammable, which keeps it out of commercial work that requires a Class A rating.

This prompted Focal Point to develop a glass-reinforced gypsum, called Classacast, that carries a Class A rating, and will still support the same level of detail. Classacast is also used to produce moldings like the dentil cornice, shown above, in 10- and 12-foot lengths. The material will not burn, shows no appreciable fuel contribution, and has zero flame spread. However, it can be worked with job site tools, and it can be attached to almost any interior surface.

Focal Point Architectural Products, P.O. Box 93327, Atlanta, GA 30377; 404/351-0820, 800/662-5550

Instant arches. Lately, more curves are showing up on drawings, and arched doorways are a part of this trend. It's possible to frame one on site, but it's easier to buy one made in the shop. Insta-Arch, shown above, is a fiberglass arch that comes in five widths: 32, 36, 42, 48, and 60 inches. The arch is butted up against the drywall of the perpendicular walls and nailed in place. The fiberglass doesn't require predrilling, and you can tape and mud it just like drywall. Arches can be trimmed or you can create a half arch with a jigsaw and a fine-toothed blade. They are priced from around $50 for the smallest size to $120 for the largest.

Insta-Arch, 17 Hamden Park Drive, Hamden, CT 06517; 203/288-2734.



Pre-fab stair rail. Assembling open stair railings takes time, even when you aren't making the parts. So, Morgan Products came up with a pre-assembled balustrade called Rail Easy, shown above. Sections of rail join to newel posts (starting newels, landing newels, half newels, and intermediate newels) with a shoulder screw that creates a tight, secure joint tested for loads of over 250 pounds.

Sounds great. Except how do they deal with all of the pitches that are possible with residential stairs? The answer is a sloped section of rail (3, 4, 5, 6, or 7 feet long) that can be racked to any angle between 33 degrees and 43 degrees before installation.

Straight rails come in increments from 3 to 9 feet, and the entire system is produced in unfinished hemlock that can be stained or painted.

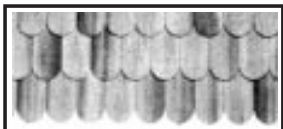
Morgan Products, Ltd., P.O. Box 2446, Oshkosh, WI 54903; 414/235-7170.

Roll-out ridge vent. If builders have learned one thing in the last decade about energy-efficient homes, it is the necessity of venting attics with soffit and ridge vents. But clients are not wild about the raised hump of shiny aluminum on many ridge vent systems. They dent easily, too.

Roll Vent, shown above, has borrowed a page from the rising popularity of geotextiles by combining a stiff, compression-resistant, nylon matrix with a non-wicking, nylon-polyester fabric that is rolled out over the top of the ridge slit and nailed beneath the ridge shingles. Roll Vent claims a net free area of 18 square inches per linear foot minimum with a 1 1/2- to 2 1/2-inch opening in the sheathing at the ridge.

Rolls come in 20- and 50-foot lengths of 10-1/2-inch-wide fabric, and nails are included. Because it is fabric, Roll Vent fits any roof pitch and doesn't require end caps or other fittings. It has received recognition from all the code bodies as well as FHA and HUD.

Roll Vent, Benjamin Obdyke, Inc., John Fitch Industrial Park, Warminster, PA 18974; 215/672-7200, 800/446-8996.



Shingle panels. Although pattern shingles have become a popular accent on both residential and commercial structures, sidewall shingling is labor intensive work. One way to speed up the process is to panelize it. Both Shakertown Siding and Cedar Valley Shingle Systems, shown above, offer 8-foot-long panels with varying specs for courses and thickness. For example, Cedar Valley Shingle Systems offers panels that are 4-1/2-inch-wide, 18-inch-long, Western red cedar Perfections that can be cut in one of nearly a dozen traditional or contemporary patterns and mounted 60 to a panel. These panels, which cover 14 square feet, require just 14 nails and interlock vertically with neighboring panels.

Shakertown Siding, P.O. Box 400-S87, Winlock, WA 98596; 800/426-8970. Cedar Valley Shingle Systems, 943 San Felipe Road, Hollister, CA 95023; 800/521-9523.

Plastic balustrade.

Carpenters and jointers may never prefer high-density polymer over wood, but it has several distinct advantages: it can be molded, it's very stable, and it won't rot. Like wood, it will take stain or paint and can be finely detailed. The baluster, shown above, which is molded around a steel pipe, is an example of this hi-tech craft.

Made by Fypon Molded Millwork, it's part of a balustrade system that can be attached to a bottom rail or concrete deck by drilling 1 3/4-inch holes, and inserting the protruding pipes of the balusters into them. The balustrade is completed by a polymer top rail that comes in 8- and 10-foot sections. It can be drilled on the correct centers for the balusters and is also held in place by a proprietary adhesive.

The balusters themselves are 24 1/2 inches high, and weigh 7 1/2 pounds. Handrails and balusters have a center pipe that can serve as a conduit for electrical wiring. Fypon makes a huge variety of other traditional architectural ornaments in high-density polymer.

Fypon Molded Millwork, P.O. Box 365, Stewartstown, PA 17363; 717/993-2593.

Unit block retaining walls.

One of the realities of building these days is that few remaining lots are flat. Whether it's an upslope or downslope lot, that means retaining walls. Reinforced concrete is frequently used, but it requires experienced labor to form and pour. Even when it doesn't crack or honeycomb, it isn't much to look at.

A newer answer is unit blocks. These blocks are engineered by concrete block companies. For instance, Hokanson Building Block Co. makes the EarthStone Wall System, shown above. It features two different size interlocking blocks that can be closely laid or spaced in straight lines or curves, and require no mortar or reinforcement. A footing is typically required.

Made of 4,000-psi concrete, the blocks are capable of retaining tremendous slopes in both commercial and residential settings. The two sizes of block weigh 66 and 90 pounds, and measure 14 and 26 inches in length. Hokanson claims significant cost savings over poured walls.

EarthStone Wall System, Hokanson Building Block Co., 4751 Power Inn Road, Sacramento, CA 95826; 916/452-5233.

Metal roof panels.

A proven way to reduce labor costs on pitched roofs is to increase the size of each unit. But large panels are impractical in all but one material - metal - and that field has long been dominated by standing seam.

Met-Tile is a new metal alternative, shown above, that imitates Spanish tiles. It comes in 3-foot-wide panels in lengths up to 20 feet. It weighs just 120 pounds per square (tile can run up to 1,000 pounds a square).

Available in seven colors, the hot-dipped galvanized steel sheets are fastened with self-sealing screws and warranted for 20 years. Matching valley and flashing material is also available.

Met-Tile, Inc., P.O. Box 4268, Ontario, CA 91761; 714/947-0311.

Traditional touch.

Cupolas offer a historical touch for period homes and some substantial attic ventilation. The Richmond from Webb Manufacturing, shown above, is tall and narrow - scaled for a large, steep-roofed home. It's 28 inches wide and 68 inches high, and it can be cut to fit roof pitches up to 20/12. It offers 150 square inches of ventilation area.

The Richmond is built of treated Ponderosa pine and primed with oil-base paint. The fixed louvers are fitted to corner dados. One of three historical styles offered by Webb, the Georgian roof is thermoformed polymer capped with copper.

Webb Mfg., Inc., P.O. Box 707, Conneaut, OH 44030; 216/593-1151.

Brick veneer system.

To folks who have attended past Builders' Shows, U.S. Brick will always be the company that covered every inch of an old Airstream trailer with their product, shown above, to demonstrate its versatility. The brick itself is 1/2 inch thick; and yes, it's real, kiln-fired, severe-weather-rated, clay brick. It comes in 12 color variations, and special corner and cap bricks are available.

The bricks are mounted with adhesive on 4x8-foot polystyrene (Foamular) panels that are channeled to accept the masonry units. The joints are filled with latex mortar from a grout bag and then tooled.

The panels are easily cut, and can be installed over wood, steel, or masonry. Their tongue-and-groove edges help keep air infiltration down at joints, and they are fitted with a drip edge at the bottom for overlapping multi-stories.

U.S. Brick claims their systems have an R-6 rating and are absolutely waterproof, but they also stress that the panels can be used for interiors. With the brick in place, the panels measure 1 1/2 inches thick, weigh 6 pounds per square foot, and are covered by a limited 50-year warranty.

U.S. Brick Systems, P.O. Box 907, Owosso, MI 48867; 517/723-8380,800/447-7440.