

## Green Toilet

**A**s water resources grow scarce and expensive, water-efficient water closets have become must-have green fixtures for coastal homes. Toto, the company that has set the de facto standard for low-flush toilets in both the residential and commercial markets, offers a dual-flush toilet that ranks as one of the most reliable and most water-efficient units available. The **Toto Aquia** offers two flush options: a stan-

dard 1.6-gallon flush for solid wastes and a 0.9-gallon flush for liquid wastes and paper. The manufacturer estimates that a typical family of four will save approximately 7,000 gallons of water per year with this toilet, compared with a standard 1.6-gallon-per-flush toilet. Toto toilets are known for reliably removing solids and keeping the bowl clean. For more information, contact Toto USA, 888/295-8134, [www.totousa.com](http://www.totousa.com).



TOTO AQUIA

## Cool Roof

**S**everal research projects — by the Florida Solar Energy Center, by Oak Ridge National Laboratories,

and by the Lawrence Berkeley Laboratories — all substantiate that the single most effective way to cut cooling



FOLLANSBEE TERNE II

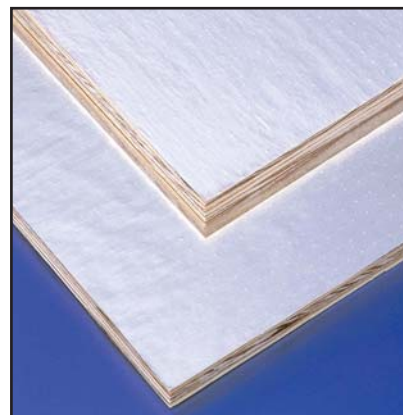
loads in a warm climate is to make roofs reflective. The coating on **Follansbee Terne II steel panels** is formulated with tiny reflective pigments. The percentage of reflectivity depends on the color, but with this coating, even a brown panel can reflect 25% of the sun's radiation. Lighter panels reflect more, reaching a high of more than 70% with white panels. (By com-

parison, black asphalt shingles reflect less than 5% of the sun's heat, meaning the roof is absorbing 95% of the solar radiation it sees, while white-colored asphalt shingles reflect about 25%.) Follansbee Terne II metal roofing panels consist of a base sheet of steel coated with ZT (zinc/tin) alloy, which the manufacturer claims makes these panels one of the most salt-resistant metal roof options for coastal homes. Under extremes, the panels reportedly withstand up to 17,750 hours without visible rust. For more information, contact Follansbee Steel, 800/624-6906, [www.follansbeeroofing.com](http://www.follansbeeroofing.com).

## Cool Attic

**F**alling short of reflecting heat away from the roof surface, the next best defense against heat gain is to reduce radiant emissions. When any warm mass heats up, it discharges radiant energy. In this case, the warm mass is the roof assembly, which emits radiant heat into the attic. Adding a "radiant barrier" — a shiny surface under the roofing — can substantially reduce radiant heat gains and Georgia-Pacific's **Plytanium Thermostat** radiant-barrier roof sheathing

offers an easy way to get this done. These plywood panels have a Kraft-paper and foil laminate on one side that gets installed facing *into* the attic, shiny-side down facing into the air space. For more information about radiant barriers, see the *Radiant Barrier Attic Fact Sheet* ([www.ornl.gov/sci/roofs+walls/radiant](http://www.ornl.gov/sci/roofs+walls/radiant)). For more information about Plytanium Thermostat roof sheathing, contact Georgia-Pacific, 800/284-5347, [www.gpweatherbuilt.com](http://www.gpweatherbuilt.com).



PLYTANIUM THERMOSTAT ROOF SHEATHING

## Steel Driving Gun

As standing-seam metal roofs have gained market share as durable performers in high-wind regions, installation tools are catching up, making installation faster and easier than the old-school method using bulk screws and a screw gun. **Simpson Strong-Tie** has launched the first auto-feed system specifically designed for driving collated screws into the pre-existing hole of a standing-seam panel clip. With collated screw strips, high-wire fumbling for bulk screws can be eliminated from the job,

saving time and minimizing screw waste. "We saw a 50% increase in speed when we used the tool with our 10-foot panels," said Lindoll Wallace, supervisor at Collis Roofing in central Florida. "Since the tool uses collated screws, the guys aren't bent over as far, which reduces back strain. Plus, they aren't holding individual screws in their mouths or slipping and driving the bit into their fingers." Simpson Strong-Tie offers a full line of pancake head self-



SIMPSON STRONG-TIE AUTOFEED SYSTEM

drilling and self-piercing fasteners for standing-seam metal roofing, as well as ultra-low-profile pancake fasteners for use with snap-and-seam profile metal panels. For more information, contact Simpson Strong-Tie, 800/999-5099, [www.strongtie.com](http://www.strongtie.com).

## Have a Blast



MICRO-BLASTER II

Nothing incites the will to destroy more than a hunk of old concrete at the start of a job, a boulder in the (not quite) bottom of an excavation. Enter the **Micro-Blaster II** — a compact demolition tool that uses air-triggered cartridges to blast material apart. A user begins by drilling a deep (up to 16-inch) hole into the unwanted materials, dropping in one or two proprietary charge cartridges, and remotely triggering the charge with a pulse of 100-psi air from a small CO<sub>2</sub> canister. The power cartridges generate pressures up to 100,000 psi — enough force to split

apart several hundred pounds of rock. A manifold system and multiple heads can be configured to initiate up to six simultaneous blasts, allowing masses of up to several tons to be cracked apart in one shot. The Micro-Blaster can be used alone or to enhance the use of hydraulic hammers, without the need for a special blasting license. Or, if you just like watching things blow up, the video footage on the company's Web site will satisfy. Not quite as fun as The Beer Cannon (search "beer cannon 101"; [www.youtube.com](http://www.youtube.com)), but eminently more useful. For more information, contact 888/497-9970, [www.ezebreak.com](http://www.ezebreak.com).

## Starter Strip Marries Skirtboard

This is a simple but practical new product from Versatex: the **PVC Stealth Skirtboard** — a combo skirtboard with starter strip that is designed to receive all types of sidings but is particularly useful for fiber cement and composite sidings. The 5/4-inch-thick plank features an angled top ridge for the first course of siding to rest upon. This tapered edge also allows water to run off, and because it is

made from low-maintenance cellular PVC, it can come into direct contact with the ground or masonry. Stealth Skirtboard comes in 18-foot lengths sized at 5/4 x 6-inch and 5/4 x 8-inch widths with a smooth matte finish or with a textured wood-grained finish to match most fiber-cement sidings. For more information, contact Wolfpac Technologies, 724/266-7928, [www.versatex.com](http://www.versatex.com).



PVC STEALTH SKIRTBOARD



VOBB BLOCKS

## Precision Dry Stack

**T**aking the premise that the mortar joint is the weakest part of a concrete block wall, the **VOBB Block Wall System** eliminates it altogether. The system relies on interlocking plastic clips and shims to temporarily hold the blocks level and aligned until the grout cures to lock them permanently in place. The manufacturer claims this block system can be installed faster and with less skilled labor than conventional CMUs,

not only because a mason doesn't need to bed each block, but because much of the cutting can be avoided. VOBB blocks are made based on a grid of six inches, with blocks in 18, 12, and 6-inch lengths, conforming to typical wall lengths and door openings. In addition, all VOBB blocks are 6 inches high and 6 inches wide. For more information, contact Verott Oaks Building Blocks, 337/781-0705, [www.vobb.com](http://www.vobb.com).

## Self-Sealing Furring Nail

**F**or solving water-intrusion problems in stucco, the **Fasten Seal furring nail** not only furs out the lath so it's properly placed in the middle of the stucco, but it also seals the nail hole, so water can't leak into the framing. Each Fasten Seal nail consists of a 1<sup>3</sup>/<sub>4</sub>-inch ASTM-rated lath nail with a preassembled, bright-orange plastic "wad" — the cylindrical spacer that keeps that wire lath at a prescribed distance from the wall. When the nail is driven home, it's pushed through a sealant that squeezes out, filling the recesses in the bottom of the wad and

creating a uniform seal around the nail hole. Fasten Seal was invented by Kirk Anderson, a site supervisor for a stucco contractor in California whose responsibility included troubleshooting moisture damage following the heavy El Niño rains of the late 1990s. In many cases, the problems identified by building forensics pointed toward the lath fasteners that penetrated the water-resistive barrier. Anderson knew there had to be better way than caulking every nail hole, and Fasten Seal is his answer. For more information, contact Fasten Seal, [www.fastenseal.com](http://www.fastenseal.com).



FASTEN SEAL



STRANDGUARD

## Termite Treatment

**I**Level, the engineered lumber division of Weyerhaeuser, has introduced **StrandGuard** — a borate-treated engineered wood that carries a 25-year warranty against fungus and termites. StrandGuard uses a zinc-borate preservative that will not increase the corrosion of fasteners like conventional, copper-based pressure-treatments. Though not intended for exterior applications (such as decks or porches), StrandGuard can be used for above-ground, protected wall and floor framing applications (sill

plates, studs, headers, columns, beams, and rim board) in termite-prone regions, and may provide an added level of mold protection in flood-prone regions. The base material, TimberStrand LSL, offers long lengths of super-straight, very stiff framing that holds fasteners much better than dimensional lumber. The result is a framing material that helps eliminate nail pops and resists bowing and twisting. For more information, contact Weyerhaeuser Co., 888/453-8358, [iLevel.com](http://iLevel.com).